Permit to which these conditions relate: DA SPA – Material Change of use, Stage: Preliminary Approval varying the effect of the planning scheme for Material Change of Use and associated Carrying out of Building Work.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Proposed Condition</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Transfer Land for Environmental Purposes and Drainage</td>
<td>A subsequent Reconfiguration of a Lot, Material Change of Use or Operational Work is to include the provision of land for environmental purposes and drainage required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land.</td>
<td>The applicant has concerns in relation to the wording of this condition. It is acknowledged that the signed Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014 will require amending with every DA approved for reconfiguration of a lot, to remove the newly created lots from the balance parcel. As the intention of the IA is to provide an ongoing management of the conservation land in the balance undeveloped portion of the site, until such time as a DA for reconfiguration is approved. Therefore the date of the applicable IA will continually change, and therefore the wording of this condition needs to provide the flexibility for this to occur without creating a non-compliance issue. As such we provide the following suggested wording for this condition, enabling the necessary updating of the IA throughout the life of the Preliminary Approval without requiring amendments to this condition.</td>
</tr>
<tr>
<td>2 Transfer Land as Park</td>
<td>A subsequent Reconfiguration of a Lot, Material Change of Use or Operational Work is to include the provision of land for park required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land.</td>
<td>The applicant has concerns in relation to the wording of this condition. It is acknowledged that the signed Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014 will require amending with every DA approved for reconfiguration of a lot, to remove the newly created lots from the balance parcel. As the intention of the IA is to provide an ongoing management of the conservation land in the balance undeveloped portion of the site, until such time as a DA for reconfiguration is approved. Therefore the date of the applicable IA will continually change, and therefore the wording of this condition needs to provide the flexibility for this to occur without creating a non-compliance issue. As such we provide the following suggested wording for this condition, enabling the necessary updating of the IA throughout the life of the Preliminary Approval without requiring amendments to this condition.</td>
</tr>
<tr>
<td>3 Undertake Works in Park</td>
<td>A subsequent Reconfiguration of a Lot, Material Change of Use or Operational Work is to provide works for the embellishment of park infrastructure that meets the requirements of City Plan.</td>
<td>This condition does not deal with the applicant being granted permission to enter the corridor following the sealing and registration of the titles, placing the Parkland in the ownership of the Council. It has been recognised and discussed throughout the assessment process that access would be granted through the OPW process to undertake the works within the dedicated parkland areas. This needs to be reflected in the wording of this condition for certainty, for both parties, during the OPW process and delivery.</td>
</tr>
<tr>
<td>4 Stormwater Infrastructure</td>
<td>A subsequent Reconfiguration of a Lot, Material Change of Use or Operational Work is to provide stormwater infrastructure that meets the requirements of City Plan.</td>
<td>This condition refers to the requirement of City Plan, but does not make reference to which City Plan. The Preliminary Approval was sought and assessed against the now superseded City Plan 2000. As such it is considered appropriate that subsequent ROL, MCU or OPW are assessed in accordance with this Preliminary Approval and the requirements of City Plan 2000. We therefore seek the following changes to this condition.</td>
</tr>
<tr>
<td>5 General Compliance Requirement</td>
<td>Development of the Subject Site must comply with the following:</td>
<td>A subsequent Reconfiguration of a Lot, Material Change of Use or Operational Work is to provide stormwater infrastructure that meets the requirements of City Plan 2000 in accordance with the provisions of this Preliminary Approval.</td>
</tr>
</tbody>
</table>
### Proposed Condition

#### General Compliance Requirement

Development of the Subject Site must comply with the following:

- a) the Approved Plans;
- b) the Conditions of this Preliminary Approval;
- a) subsequent Material Change of Use and Reconfiguring a Lot of the Subject Site including other plans and documents approved by subsequent development approvals; and
- b) the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014.

**Comment**

We seek administrative changes to the wording of this condition to avoid the need to amend the condition in order to achieve compliance with the referenced Infrastructure Agreement.

#### Proposed Condition

**Non-Trunk External Intersection Upgrades**

Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide the following non-trunk external roadwork:

- a) Prior to the completion of the development in Stage 1 or 180 lots which ever is the earliest: Works for the upgrade and signalisation of the intersection at Upper Kedron Road / Cemetery Road;
- b) Prior to the completion of the development in Stage 1 or 180 lots whichever is the earliest: Works for the upgrade and signalisation of the intersection at Upper Kedron Road / Hogarth Road;
- c) Prior to the completion of 500 lots: Works for the upgrade at the intersection of Ross Road / Cedar Creek Road to a priority controlled T-intersection.

**Comment**

Point c) of this condition relates to the timing of the identified non-trunk external roadworks. We seek amendments to the wording of this condition to reference the intersection with Mount Nebo Road as the secondary access point to the site, as proposed in the application provided to Council for assessment.

There are a number of reasons why the Mount Nebo Road connection is important:

- The connection is foreshadowed in the Infrastructure Agreement;
- It will provide a vital entry and exit point for emergency services and a secondary evacuation point in the event of a bushfire;
- It allows Upper Kedron residents a secondary access and egress point when the existing road network becomes compromised in the event of an accident; and
- The connection creates an opportunity to improve the connectivity of local public transport networks, specifically by linking The Gap Park and Ride with Ferny Grove train station.

It is considered that the opening of the intersection with Mount Nebo Road should be tied to the completion of the 500th lot. There is no certainty in the wording prior to the completion of 500 lots. As such changes to the wording are sought as per below.

#### Proposed Condition

**Non-Trunk External Intersection Upgrades**

Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide the following non-trunk external roadwork:

- a) Prior to the completion of the development in Stage 1 or 180 lots which ever is the earliest: Works for the upgrade and signalisation of the intersection at Upper Kedron Road / Cemetery Road;
- b) Prior to the completion of the development in Stage 1 or 180 lots whichever is the earliest: Works for the upgrade and signalisation of the intersection at Upper Kedron Road / Hogarth Road;
- c) Prior to the completion of 500 lots: Works for the upgrade at the intersection of Ross Road / Cedar Creek Road to a priority controlled T-intersection.

**Note:** This condition is imposed under Section 665 of the Sustainable Planning Act 2009

#### Prescribed Period

The prescribed period for this preliminary approval is 120 months from when the preliminary approval takes effect.

**Note:** If the development or an aspect of development relating to this preliminary approval is not completed within the prescribed period, the preliminary approval lapses.

#### Compliance Statement

An application for a development approval for a Material Change of Use or Reconfiguration of a Lot must be supported by information which states the following:

- a) The total number of lots for the Subject Site;
b) The number of lots that have been applied for as part of the development application, and the number of lots applied for in any other development application for the Subject Site that has not yet been decided by Council; and

c) That the development application complies with the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014.

Comment
We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced infrastructure agreement.

9 Non-Trunk External Road Upgrades
Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide the following non-trunk external roadwork upgrades with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

a) Prior to the completion of the development of Stage 1 or 180 lots whichever is the earliest 1 Works for the widening of Canvey Road on the south approach to Charolais Crescent roundabout;

b) Prior to the completion of the development of Stage 1 or 180 lots whichever is the earliest 1 Construct pavement and kerb and channel in Hogarth Road on southern approach to McGinn Road.

c) Prior to the completion of the development of Stage 1 or 180 lots whichever is the earliest 1 Land and works for the widening of Canvey Road along the full site frontage to achieve an overall road width of 24 metres.

d) Prior to the completion of Stage 1D 1 Land for the widening of Levitt Road along the full site frontage to achieve an overall road width of 24 metres.

e) Prior to the completion of 500 lots - Upgrade Ross Road from the Subject Site to the Ross Road / Cedar Creek Road intersection to an 11m wide pavement with 4.25m wide footpaths including concrete kerb and channel both sides of the road.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

Comment

Point a) seeks works for widening the south approach to the Canvey Road / Charolais Cres roundabout. We seek clarification on what works are sought in this location as the south approach to this roundabout on Canvey Road already appears to be appropriately formed including a shared pedestrian and cycle path within the road reserve. Any widening on this approach would need additional land from outside of the road reserve. Unless Council were seeking the alignment of the Canvey Road arm of the roundabout within the existing road reserve, to use the balance of the unformed portion on the eastern boundary. The aerial image overlaid with the cadastral information provided illustrates this matter.

We therefore seek clarification from Council on this condition, and following this will then provide amended wording to replace point 9a) above.

In relation to Point 9b) which seeks the applicant to construct pavement and kerb and channel in Hogarth Road on the southern approach to McGinn Road, we note that this upgrade work has been previously conditions by BCC for the recent ROL application (and subsequent roadworks approval) for the site at 26 Hogarth Road (Council Reference Number: A003978858), and a subsequent roadworks application has been granted. As such we seek the deletion of item 9b) from the approval.

Point 9d) relates to road widening of Levitt Road along the full site frontage to achieve an overall width of 24 metres. The proposed development will not contribute sufficient traffic to justify a district access classified road standard (allowing direct lot property access). The existing road reserve is approximately 20.1m which is sufficient for a district access road with no property access provided. As such we consider that point 9d) should be removed completely.

Whilst we recognise that there may be some localised widening of the road to accommodate entry turns into the convenience centre, this would be dealt with as part of the future MCU for that use, where land dedication can be considered in more detail and incorporated into the design. As such we seek the deletion of item 9d) from the approval.

Point 9e) relates to works required prior to the completion of 500 lots to upgrade Ross Road from the Subject Site to the Ross Road / Cedar Creek Road intersection. An intersection and connection to the existing road network is not anticipated in this location as has been demonstrated on the proposal plans provided as part of the application during assessment. As such it is considered unreasonable and unnecessary for works in this external location to be imposed on this development. It is on this basis that we seek to delete this item from the condition.

Proposed Condition
Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide the following non-trunk external roadwork upgrades with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:
It is recommended that the limitations on the number of lots permitted and the triggers allowing the phasing of the development are articulated in the application and supporting material submitted for assessment.

Note: To ensure safe vehicular access the development cannot exceed 500 lots until such time an alternative road connection is constructed i.e. Ross Road connection (total 980 lots).

Restricted Emergency Access Connection to Mt Nebo Road

Prior to the completion of 500 lots construct a 4.5m wide Type A standard pavement driveway for emergency services from Mount Nebo Road to the northern boundary of the Category 1 Corridor generally in accordance with Plan 41 Road Hierarchy & Access, Dwg No. CDW01_45A, dated 7.10.2014 (as amended in red).

Comment

Given that the proposed road use will be for emergency vehicle access only with minimal traffic generated until the ultimate intersection with Mount Nebo Road is constructed, it is proposed that Council accept a reduced standard of service for the access track. It is proposed that a 150mm compacted gravel track with primer seal/chip seal would be sufficient to serve as all-weather access.

Additionally as there is no emergency access provided at this time to the rural land through this access location, it is considered inappropriate to link the provision of the access requirement to the 500th lot being created. Given the access constraints placed on achieving a yield greater than 500 lots requires the access to Mount Nebo Road to be completed, development in the vicinity of this emergency access is generally limited.

It is our recommendation that the construction of the access track for emergency purposes is tied to the closest stage of development, being Stage 5 (as amended in red on the approved Staging Plan), and therefore the applicant has suggested the following amendments to the wording of this condition. The proposed wording includes a redundancy note, should the applicant have already completed 500 lots within other stages prior to commencing works in Stage 5, which would have ensured the opening of the ultimate intersection and access/egress onto Mount Nebo Road.

Proposed Condition

Prior to the completion of 500 lots construct a As part of the works associated with the Stage 5 ROL construct a 4.5m wide Type A standard pavement driveway comprised of 150mm compacted gravel with primer seal/chip seal to create an all-weather access for emergency services from Mount Nebo Road to the northern boundary of the Category 1 Corridor generally in accordance with Plan 41 Road Hierarchy & Access, Dwg No. CDW01_45A, dated 7.10.2014 (as amended in red).

Note:

The emergency access is only required as part of Stage 5 works, if the applicant has not already completed construction of 500 lots within the overall development.

Development Plan

The Applicant must:

a) submit with each development application for any part of the Subject Site a development plan or plans that contain the following:
   - the boundary of the Subject Site;
   - the boundary and layout of the proposed reconfiguring of a lot;
   - the proposed staging of development;
   - the Land Contributions as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron for the Category 1 Corridor, Category 2 Corridor, Category 3 Corridor and Category 4 Corridor to be provided for the whole of the Subject Site on a cadastral basis.

b) at the same time it makes a development application for the development of any or all of the Subject Site which is adjacent to any Category 2 Corridor, Category 3 Corridor or Category 4 (Park) as shown on Plan 3 Open Space & Environment, make a development application for the reconfiguring necessary to create the lot or lots for the relevant corridor.

Development Entitlements

Development of the Subject Site cannot exceed 780 lots. Development for additional 200 allotments maybe considered if the Ross Road connection is constructed (total 980 lots).

Note: To ensure safe vehicular access the development cannot exceed 500 lots until such time an alternative road connection is constructed i.e. Ross Mount Nebo Road connection.

Proposed Condition

Development Entitlements

Development of the Subject Site cannot exceed 250 1,350 lots. Development for additional 200 allotments maybe considered if the Ross Road connection is constructed (total 1,580 lots).

1. Development of 500 lots is permitted with access provided off Canvey Road.

2. On completion of the secondary access (Mount Nebo Road intersection), a further 850 lots are permitted, with access from either the primary and/or secondary accesses. For additional 200 allotments maybe considered if the Ross Road connection is constructed (total 1,980 lots).

Note: To ensure safe vehicular access the development cannot exceed 500 lots until such time an alternative road connection is constructed i.e. Ross Mount Nebo Road connection.
13 Limitation to Commencement of Use

No Material Change of Use may commence until the plan of subdivision (for each stage as shown on Plan 7 _ Development Staging Dwg No. CDW01_45 Revision A dated 7.10.2014 (as amended in red)), generally in accordance with approved drawings created pursuant to a development permit for Reconfiguring a Lot component, has been registered with the relevant State Government Authority.

Comment
In order to allow for the commencement of construction of dwelling houses (particularly the display villages) we seek amendments to the wording of this condition, that will allow for the early commencement of construction prior to the registration of the individual titles.

This is common practice in other local government jurisdictions and enables reduced timeframes between the registering of titles and opening of display villages.

Proposed Condition
No Material Change of Use may commence until the plan of subdivision (for each stage as shown on Plan 7 _ Development Staging Dwg No. CDW01_45 Revision A dated 7.10.2014 (as amended in red)), generally in accordance with approved drawings created pursuant to a development permit for Reconfiguring a Lot component, has been registered with the relevant State Government Authority.

Exception to this condition is provided to dwellings within any identified display village. Construction may commence prior to the registration with the relevant State Government Authority, however the commencement of the material change of use may not occur until the registration of titles.

14 Maximum Building Height - House

For the purpose of a House, the maximum building height shall not exceed 9.5 metres above ground level and shall not exceed 2 storeys above ground level.

Comment
Given the nature of the subject site, it is considered that there will be occasion where the height above natural ground level may be exceeded in order to deal with the natural slope of the site, for example where pole homes are required.

The applicant seeks to make provision for instances where building methods will result in elevated building structures, in excessive of 9.5m from natural ground level.

The following wording has been provided to facilitate unique situations anticipated on some steep and sloping lots within the development.

Proposed Condition
For the purpose of a House, the maximum building height shall not exceed 9.5 metres above ground level and shall not exceed 2 storeys above ground level except where a dwelling is on a pier foundation (i.e. not slab on ground) and the ground floor does not exceed a separation distance from the natural ground level of greater than 600mm at its closest point.

15 Convenience Centre Use Limitation

Dwelling units shall be limited to upper storey of development within the Convenience Centre 0900 on approved drawing Plan 2_Land Use Zoning Dwg No. CDW01_45 Revision A dated 7.10.14 (as amended in red).

Comment
It was not the intent of the applicant to limit dwelling units to the upper storey of development within this zone. The area designated for Convenience Centre use on the approved plans is greater than that designated within the Local Plan. The intent was to allow for dwelling units within this precinct, and to allow ground floor units. The built form of a medium density residential use of this nature would facilitate being able to screen service areas and other back of house operations associated with local convenience centres, where disruptive noise can be generated that would impact on low density residential land uses, should it not be appropriately screened.

Allowing for medium density dwelling units to be used in this situation, rather than requiring solid acoustic attenuation fences to be used, creates a better neighbourhood design and outcome that addresses safety issues raised by CEPTED.

Proposed Condition
Delete Dwelling units shall be limited to upper storey of development within the Convenience Centre 0900 on approved drawing Plan 2_Land Use Zoning Dwg No. CDW01_45 Revision A dated 7.10.14 (as amended in red).

16 Secondary Dwelling _ House

For the purpose of a House, the maximum gross floor area of any secondary dwelling for the development to be self assessable, shall not exceed 80m².

17 Waterway Corridor

Any House within a waterway corridor mapped by Brisbane City Plan 2000 shall not interfere with the passage of stormwater within a waterway corridor by locating development outside of the 100 year ARI flood extent.

Comment
Extensive consideration of the waterway corridor network on the subject site has been undertaken through the assessment of this development. All defined waterways are located on the proposal plans, ensuring that all developable land identified on the approved plans are flood free, and will not impede the movement of water.

On this basis it is considered that the wording of this condition is inappropriate and should better reflect the extensive consideration of waterways that has already been undertaken. As such we request the wording of this condition to be amended as follows.

Proposed Condition
The identified flood extent and associated waterway corridors have been identified on Approved Plan B14159_W-SK02 Issue A Ultimate Concept Stormwater Management Plan prepared by Brown Consulting (Calibre Consulting) and prevail over any Any House within a waterway corridor mapped by Brisbane City Plan 2000. Any House within a waterway corridor identified on the Approved Plan shall not interfere with the passage of stormwater within a waterway corridor by locating development outside of the 100 year ARI flood extent.

18 Bushfire Exclusion Zone

For the purpose of House, no building structures (excluding swimming pools and associated equipment) are permitted within the bushfire exclusion zones as shown on the approved drawings and documents.

19 Minimum Boundary Setbacks

For the purpose of House where on a Small Lot, the minimum provision for front and side boundary setbacks and private open space and the maximum provision for site cover for development to be self assessable, shall be in accordance with the criteria listed in the following table:
### Minimum Boundary Setbacks

For the purpose of House where on a Small Lot, the minimum provision for front and side boundary setbacks and private open space and the maximum provision for site cover for development to be self-assessable, shall be in accordance with the criteria listed in the following table:

<table>
<thead>
<tr>
<th></th>
<th>Villa (300m²-400m²)</th>
<th>Courtyard (350m²-499m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Front Setback:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(as defined by Small Lot Code)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary frontage garage</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Secondary Frontage</td>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Garage</td>
<td>5.5</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>Side Setback:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground storey wall</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Built to boundary wall (ground storey)</td>
<td>One side Not allowed</td>
<td>One side Not allowed</td>
</tr>
<tr>
<td>Built to boundary wall (Second Storey)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. length of built to boundary wall</td>
<td>9m</td>
<td>9m</td>
</tr>
<tr>
<td><strong>Private open space:</strong></td>
<td>20% of site area (3.0m min. dim. In any direction)</td>
<td>20% of site area (3.0m min. dim. In any direction)</td>
</tr>
<tr>
<td><strong>Site Cover:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site cover</td>
<td>Up to 60%</td>
<td>Up to 60%</td>
</tr>
</tbody>
</table>

**Note:**

Built to boundary walls shall not be allowed on a retaining wall unless the retaining wall is certified by a RPEQ to be structurally suitable, the retaining wall is wholly within one lot and the combined height of the built to boundary wall and the retaining wall does not exceed 7.5 metres.

**Comment**

The provisions provided above do not reflect those discussed and assessed during the application. As such we seek the table to reflect the site cover and built to boundary provisions as previously provided. These provisions only relate to small lots, where an increased site cover allows for diversity of product including single and double storey built form. With a 60% site cover, only very small single storey dwellings would be able to be accommodated. By increasing the site cover provision to 65% allows for an additional 15m² (on a 300m² site) enabling an additional bedroom or living space in a single storey dwelling.

Additionally, granting a relaxation of the built to boundary walls to 11m from that permitted in the small lot code of only 9m, provides greater scope to design a home that maximises the available private open space in the backyard, and reducing the extent of wasted space along the sides of dwellings. Built to boundary limitations and impacts are controlled through the building envelopes and are known to purchasers of the subject block, or adjoining lots at the time of purchase. As such it is considered that the potential impact of the extended built to boundary relaxation sought is negligible, however the benefits for the built form is significant.

On this basis we seek the following amendments to this condition.

### Vegetation Retention

**Proposed Condition**

**Vegetation Retention**

All vegetation within the Subject Site shall be retained unless otherwise permitted by a development permit issued in conjunction with or pursuant to this preliminary approval.

**Comment**

The wording of this condition is sought to be amended to better reflect the intent and understanding of retention of vegetation within the subject site. The infrastructure agreement identified the land areas of ecological significance, where no development was to occur, it is in these areas where all efforts to retain vegetation must be applied. Outside of these areas it is understood that the vegetation is isolated and dispersed, with a significantly reduced ecological significance. As such the wording has been amended to ensure that all vegetation within the identified waterway corridors is to be retained and vegetation within the approved developable areas can be retained where appropriate, but not where compromising good design outcomes and safety within the built environment.

The amended wording is provided below.
All vegetation within the designated waterway corridors identified on the Land Transfer Plan in the Infrastructure Agreement originally signed on the 27th of February 2014 of the Subject Site shall be retained. Vegetation within the approved developable area as identified on the approved land use plans, may be removed where necessary otherwise permitted by a development permit issued in conjunction with or pursuant to this preliminary approval.

**21 Staging Sequence**
The development staging is to occur sequentially from Stage 1 to Stage 10 as indicated on Plan 7_Development Staging Dwg No. CDW01_45A dated 7/10/2014 (as amended in red).

**Comment**
The applicant did not intend to be limited to sequentially developing the site in a manner that reflects the staging identified. It is considered that there are sufficient other conditions imposed on this development that would ensure yield triggers and access provisions are provided at the appropriate times without also controlling the order in which stages are developed. As such we seek this condition to be removed.

**Proposed Condition**
Delete. The development staging is to occur sequentially from Stage 1 to Stage 10 as indicated on Plan 7_Development Staging Dwg No. CDW01_45A dated 7/10/2014 (as amended in red).

**22 No Vehicular Access to Mount Nebo Road**
No vehicular access is permitted from the Subject Site to Mount Nebo Road including access from the existing unformed roads of Ross Road and the unnamed road.

**Comment**
As part of the development application, Cedar Woods provided traffic impact assessment documentation to the Council to assist with the assessment and consideration of the potential impact of a connection to Mount Nebo Road. The assessing officer agreed on the location and extent of intersection requirements and safety upgrades in order to facilitate a connection to Mount Nebo Road. It is considered that the potential impacts to Mount Nebo Road in the immediate vicinity (of the development) were demonstrated to be minimal, as were the future impacts (at full development) on the surrounding receiving traffic network. The site currently has frontage and access to Mount Nebo Road and the two existing unformed roads (one being un-named and the other identified as the extension of Ross Road). It is considered irrelevant and unreasonable to restrict all access to these roads, when the impacts have been clearly identified and addressed.

In addition, the application (including access to Mount Nebo Road) has been assessed against the EPBC Act in relation to the impact on the environment, specifically on Koala movements, and has been determined to be not a controlled action. Although the Local Plan does make reference to the identified emerging community land on the site not gaining access to Mount Nebo Road, the Local Plan does not consider the development of the Rural land for future residential in the same manner. In this instance the Local Plan is silent on the matter, and therefore it is considered that assessment falls back to the Planning Scheme, under which a full and thorough assessment of the impacts of access to Mount Nebo Road has been demonstrated.

Further, we note that the Infrastructure Agreement for Institutional Investments for land at Upper Kedron (IA), which applies to the subject site, specifically states that the agreement does not preclude the Applicant from making an application to open, close or re-align a road which intersects Mount Nebo Road. The particular reference to a Mount Nebo Road connection in the IA indicates that the Council is not fundamentally opposed to such a connection. The reference in the IA demonstrates that, provided sufficient traffic analysis can be prepared in support of the connection, a Mount Nebo Road connection would be a feasible part of any development application. We consider that sufficient traffic analysis supporting the connection has been provided.

It is on this basis that we seek the deletion of this condition.

**Proposed Condition**
Delete. No vehicular access is permitted from the Subject Site to Mount Nebo Road including access from the existing unformed roads of Ross Road and the unnamed road.

**Note:** This condition does not preclude access for emergency vehicles.

**23 Plans/Documents for Consultants/Contractors**
Provide a copy of the Brisbane City Council approval package including the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014, development approval conditions, approved plans & documents and the Decision Notice to the following and as indicated (where applicable):

a) all consultants preparing or lodging a subsequent development application for Material Change of Use or Reconfiguration of a Lot;
b) all consultants preparing or lodging a development application for Operational Work;
c) all consultants preparing or lodging an application for development requiring compliance assessment;
d) all consultants preparing or lodging an application for Carrying out building Work;
e) all contractors carrying out Site works or Building Work associated with or resulting from this Preliminary Approval.

**GUIDELINE**
This condition is imposed to ensure that all consultants, contractors and building Certifiers involved with completing the development are aware of the particular requirements of the Subject Site.

**Comment**
We seek administrative changes to the wording of this condition to provide the required flexibility for compliance in the future following revisions of the Infrastructure Agreement as required with the approval of each subdivision of land.

**Proposed Condition**
Plans/Documents for Consultants/Contractors
Provide a copy of the Brisbane City Council approval package including the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land, development approval conditions, approved plans & documents and the Decision Notice to the following and as indicated (where applicable):

a) all consultants preparing or lodging a subsequent development application for Material Change of Use or Reconfiguration of a Lot;
b) all consultants preparing or lodging a development application for Operational Work;
c) all consultants preparing or lodging an application for development requiring compliance assessment;
d) all consultants preparing or lodging an application for Carrying out building Work;
24 Limitations of Use - Home Business
The extent, to which this preliminary approval varies the effect of the planning scheme for Brisbane, is limited to Material Change of Use and / or Building Work for the purpose of:

Home Business
Where that development is on land shown as Low Density Residential on approved drawing Plan 2_Land Use Zoning Dwg No. CDW01_45, Revision A dated 7.10.14 (as amended in red) and is limited to the circumstances detailed below.

Notwithstanding the contents of the level of assessment tables in the planning scheme, development for the purpose of Home Business, pursuant to this preliminary approval where that development is compliant with the conditions of this preliminary approval and where:

a) Complying with the self assessable Acceptable Solutions in the Home Business Code, shall be subject to Self assessment against the Home Business Code.


The definitions and codes mentioned in this condition refer definitions and codes contained the Brisbane City Plan 2000 (current at the time the application was properly made and superseded by Brisbane City Plan on 30 June 2014).

Where there is conflict between the codes and the conditions contained herein, the conditions shall prevail.

25 Limitations of Use - House
The extent, to which this preliminary approval varies the effect of the planning scheme for Brisbane, is limited to Material Change of Use and / or Carrying out Building Work for the purpose of:

House
Where that development is on land shown as Low Density Residential on approved drawing Plan 2_Land Use Zoning Dwg No. CDW01_45, Revision A dated 7.10.14 (as amended in red) and is limited to the circumstances detailed below.

Notwithstanding the contents of the level of assessment tables in the planning scheme, development for the purpose of House, pursuant to this preliminary approval where that development is compliant with the conditions of this preliminary approval and where:

a) complying with the Acceptable Solutions in Section 4.1 of the House Code (except where varied by the conditions of this preliminary approval), and where not on a Small Lot, shall be subject to Self Assessment against the House Code;

b) complying with the Acceptable Solutions in Part 1 of the Residential Design I Small Lot Code (except where varied by the conditions of this preliminary approval), shall be subject to Self assessment against the House Code and Residential Design I Small Lot Code;

c) complying with the Acceptable Solutions in Part 1 of the Residential Design I Small Lot Code (except where varied by the conditions of this preliminary approval) and where on a Small Lot and where complying with the Acceptable Solutions in Part 1 of the Residential Design I Small Lot Code (including any approved variations by this preliminary approval), shall be subject to Code assessment against the Residential Design I Small Lot Code And Self Assessment against the House Code

d) not complying with the Acceptable Solutions in Section 4.1 of the House Code (including any approved variations by this preliminary approval), and where not on a Small Lot shall be subject to Code assessment against the House Code;

e) not complying with the Acceptable Solutions in Section 4.1 of the House Code (including any approved variations by this preliminary approval) and where on a Small Lot and where complying with the Acceptable Solutions in Part 1 of the Residential Design I Small Lot Code (including any approved variations by this preliminary approval), shall be subject to Code assessment against the House Code and Self Assessment against the Residential Design I Small Lot Code;

f) not complying with the Acceptable Solutions in Section 4.1 of the House Code and where on a Small Lot and where not complying with the Acceptable Solutions in Part 1 of the Residential Design I Small Lot Code (including any approved variations by this preliminary approval), shall be subject to Code assessment against the House Code and Residential Design I Small Lot Code.

The definitions and codes mentioned in this condition refer definitions and codes contained the Brisbane City Plan 2000 (current at the time the application was properly made and superseded by Brisbane City Plan on 30 June 2014).

Where there is conflict between the codes and the conditions contained herein, the conditions shall prevail.

26 Limitations of Use - Park
The extent, to which this preliminary approval varies the effect of the planning scheme for Brisbane, is limited to Material Change of Use and / or Carrying out Building Work for the purpose of:

Park
Where that development is on land shown as Low Density Residential on approved drawing Plan 2_Land Use Zoning Dwg No. CDW01_45, Revision A dated 7.10.14 (as amended in red) and Category 4 Park on approved drawing Plan 3_Open Space & Environment Dwg No. CDW01_45, Revision A dated 7.10.14 and is limited to the circumstances detailed below.

Notwithstanding the contents of the level of assessment tables in the planning scheme, development for the purpose of Park, pursuant to this preliminary approval where that development is compliant with the conditions of this preliminary approval and where:

a) Complying with the Acceptable Solutions in the Park Code, shall be subject to Self assessment against the Park Code.

b) Not complying with the Acceptable Solutions in the Park Code, shall be subject to Code assessment against the Park Code.

The definitions and codes mentioned in this condition refer definitions and codes contained the Brisbane City Plan 2000 (current at the time the application was properly made and superseded by Brisbane City Plan on 30 June 2014).
Where there is conflict between the codes and the conditions contained herein, the conditions shall prevail.

### Limitations of Use - Centre Activities

The extent, to which this preliminary approval varies the effect of the planning scheme for Brisbane, is limited to Material Change of Use and / or Carrying out Building Work for the purpose of:

**Centre Activities**

Where that development is on land shown as Convenience Centre MP4 on approved drawing Plan 2_Land Use Zoning Dwg No. CDW01_45, Revision A dated 7.10.14 (as amended in red) and is limited to the circumstances detailed below.

Notwithstanding the contents of the level of assessment tables in the planning scheme, development for the purpose of Centre Activities (excluding amusement arcade, cinema, club, convention centre, education purposes, hotel, garden centre, industry, nightclub), pursuant to this preliminary approval where that development is compliant with the conditions of this preliminary approval and where:

- not involving building work and where complying with the Acceptable Solutions in the Centre Amenity and Performance Code shall be subject to Code Assessment against the Centre Amenity and Performance Code;
- not involving building work and where not complying with the Acceptable Solutions in the Centre Amenity and Performance Code shall be subject to Code Assessment against the Centre Amenity and Performance Code;
- involving building work and where complying with the Acceptable Solutions for building height and gross floor area in the Ferny Grove / Upper Kedron Local Plan Code shall be subject to Code Assessment against the following codes:
  - Ferny Grove / Upper Kedron Local Plan Code
  - Centre Amenity and Performance Code
  - Centre Design Code
  - Sections 5 of the Residential Design & Low Density, Character and Low medium Density Code
  - Landscaping Code
  - Services, Works and Infrastructure Code
  - Stormwater Management Code
  - Transport, Access, parking and Servicing Code
  - Waterway Code

The definitions and codes mentioned in this condition refer definitions and codes contained the Brisbane City Plan 2000 (current at the time the application was properly made and superseded by Brisbane City Plan on 30 June 2014).

Where there is conflict between the codes and the conditions contained herein, the conditions shall prevail.

### Limitations of Use - Display Dwelling

The extent, to which this preliminary approval varies the effect of the planning scheme for Brisbane, is limited to Material Change of Use and / or Carrying out Building Work for the purpose of:

**Display Dwelling**

Where that development is on land shown as Low Density Residential or Convenience Centre MP4 on approved drawing Plan 2_Land Use Zoning Dwg No. CDW01_45, Revision A dated 7.10.14 (as amended in red) and is limited to the circumstances detailed below.

Notwithstanding the contents of the level of assessment tables in the planning scheme, development for the purpose of Display Dwelling, pursuant to this preliminary approval where that development is compliant with the conditions of this preliminary approval and where for no more than two years and where within an existing building constructed pursuant to this preliminary approval, shall be exempt development. The definitions and codes mentioned in this condition refer definitions and codes contained the Brisbane City Plan 2000 (current at the time the application was properly made and superseded by Brisbane City Plan on 30 June 2014).

Where there is conflict between the codes and the conditions contained herein, the conditions shall prevail.

### Limitations of Use - Estate Sales Office

The extent, to which this preliminary approval varies the effect of the planning scheme for Brisbane, is limited to Material Change of Use and / or Carrying out Building Work for the purpose of:

**Estate Sales Office**

Where that development is on land shown as Low Density Residential or Convenience Centre MP4 on approved drawing Plan 2_Land Use Zoning Dwg No. CDW01_45, Revision A dated 7.10.14 (as amended in red) and is limited to the circumstances detailed below.

Notwithstanding the contents of the level of assessment tables in the planning scheme, development for the purpose of Estate Sales Office, pursuant to this preliminary approval where that development is compliant with the conditions of this preliminary approval and where for no more than two years and where within an existing building or temporary building constructed pursuant to this preliminary approval, shall be exempt development. The definitions and codes mentioned in this condition refer definitions and codes contained the Brisbane City Plan 2000 (current at the time the application was properly made and superseded by Brisbane City Plan on 30 June 2014).

Where there is conflict between the codes and the conditions contained herein, the conditions shall prevail.

### Non-Trunk Internal Road Layout

Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide internal non-trunk road works with any associated drainage, pathways, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme.
Point 30c) seeks a 20m wide road reserve from the proposed roundabout to the northern boundary of Category 1 Corridor. This is considered unnecessary particularly given that the road will only be providing access to the emergency services track to Mount Nebo Road. It is considered that the reserve width should be reduced to a local collector provision, simply to ensure that there is connectivity for emergency vehicles to the internal road network. As such the wording has been amended to reflect a minimum road reserve width, with flexibility included to allow for greater should the traffic demand based on the local catchment require a higher order road.

The following changes to the conditions wording are provided below. Point 30c) It is considered that this condition is too vague and does not provide certainty to the applicant on the extent of infrastructure for a bus service to be required to achieve compliance with this condition.

Therefore further clarification from Council is sought in relation to this aspect of condition 30.

Proposed Condition

Non-Trunk Internal Road Layout

Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide internal non-trunk road works with any associated drainage, pathways, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standards Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards including the following:

a) Internal District Road is to be extended from Canvey Road to the unformed Ross Road generally in accordance with Plan 4_Road Hierarchy & Access Dwg No. CDW01_45A dated 7.10.2014 (as amended in red). The District Road is to be 24m wide with direct property access permitted.

b) 20m wide road reserve from the proposed roundabout to the northern boundary of Category 1 Corridor generally in accordance with Plan 4_Road hierarchy & Access, Dwg No. CDW01_45A, dated 7.10.14 (as amended in red);

c) Infrastructure for a bus services at the first Stage of the development;

d) Roundabout to cater for the turnaround of a 14.5m public transport bus at the Ross Road / Canvey Road extension intersection.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

Comment

Point 30b) seeks a 20m wide road reserve from the proposed roundabout to the northern boundary of Category 1 Corridor. This is considered unnecessary particularly given that the road will only be providing access to the emergency services track to Mount Nebo Road. It is considered that the reserve width should be reduced to a local collector provision, simply to ensure that there is connectivity for emergency vehicles to the internal road network. As such the wording has been amended to reflect a minimum road reserve width, with flexibility included to allow for greater should the traffic demand based on the local catchment require a higher order road.

The following changes to the conditions wording are provided below.

Point 30c) It is considered that this condition is too vague and does not provide certainty to the applicant on the extent of infrastructure for a bus service to be required to achieve compliance with this condition.

Therefore further clarification from Council is sought in relation to this aspect of condition 30.

Proposed Condition

Non-Trunk Internal Road Layout

Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide internal non-trunk road works with any associated drainage, pathways, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standards Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards including the following:

a) Internal District Road is to be extended from Canvey Road to the unformed Ross Road generally in accordance with Plan 4_Road Hierarchy & Access Dwg No. CDW01_45A dated 7.10.2014 (as amended in red). The District Road is to be 24m wide with direct property access permitted.

b) 20m a minimum 16m wide road reserve (local Access Road standard or above) from the proposed roundabout to the northern boundary of Category 1 Corridor generally in accordance with Plan 4_Road hierarchy & Access, Dwg No. CDW01_45A, dated 7.10.14 (as amended in red);

c) [Awaiting further clarification on this from Council prior to providing amended wording] Infrastructure for a bus services at the first Stage of the development;

d) Roundabout to cater for the turnaround of a 14.5m public transport bus at the Ross Road / Canvey Road extension intersection.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

Water & Wastewater Services - Concurrence Agency Requirements

35 Grant Easements

Grant the following easement(s) for water supply or sewerage purposes.

a) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.

b) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

GUIDELINE

This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

PROOF OF FULFILMENT
<table>
<thead>
<tr>
<th>Proposed Condition</th>
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<tr>
<td>Grant Easements</td>
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</table>

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**GUIDELINE**
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

**PROOF OF FULFILMENT**
Connection Certification from QUU

### 36(a) Wastewater Network Infrastructure (Non-trunk Infrastructure)

- a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- c) Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities wastewater network infrastructures.
- d) Transfer ownership of the wastewater reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- e) If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network and/or property service infrastructure. This includes:
  - (i) where not required for existing or future development, removing existing wastewater network and/or property service infrastructure and sealing any connection(s) to remaining reticulation infrastructure;
  - (ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
  - (iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as specified in current standards.
- (iv) Timing:
  - Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 36(b) Wastewater Property Service Infrastructure (Non-trunk Infrastructure)

- a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- c) Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland Urban Utilities wastewater reticulation system
- d) Each lot must have a separate wastewater property service connection which commands the whole of each lot.
- e) If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.
- f) If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.
- g) Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.
h) Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

i) Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words "Wastewater Connection 2 M."

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

36(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all wastewater network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

36(d) Wastewater Network and Property Service Infrastructure- Sizing

The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

Timing:

Prior to the construction of network or property service infrastructure.

36(e) Wastewater Infrastructure- Design and Construction Standards

The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

36(f) Wastewater Network Infrastructure- CCTV Inspection

a) Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.

b) CCTV survey must be carried out in accordance with the WSA 05-2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.

c) The Applicant must repair all defects in accordance with the approved engineering restoration plan and schedule at no cost to Queensland Urban Utilities.

Timing:

Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

36(g) Wastewater Network Infrastructure- Pressure Testing

a) Conduct pressure/vacuum testing of wastewater mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

b) Pressure/vacuum testing of wastewater mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

c) The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:

Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment

Point 36(b)(h) It is considered that imposing the upgrades to existing services that are considered deficient by QUU and not located within the development is an unreasonable imposition on the development. As such we seek this aspect of the condition to be deleted.

Point 36c The impact and compliance with requirements prior to QUU issuing the Connection Certificate should be tied to demonstration of the relevant provisions of the SEQ water and sewerage design and construction codes. Amended wording is provided below to reflect this.

Point 36e The impact and compliance with requirements prior to QUU issuing the Connection Certificate should be tied to demonstration of the relevant provisions of the SEQ water and sewerage design and construction codes. Amended wording is provided below to reflect this.

Proposed Condition
### Point 36b(h) Delete. Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

### 36(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 36(e) Wastewater Infrastructure- Design and Construction Standards
The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Live Works for Water Supply and Wastewater
Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

| a) | All work on or near live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities. |
| b) | A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset. |
| c) | Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment. |
| d) | All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work. |
| e) | Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities. |
| f) | All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities. |

**Timing:**
Prior to and at the time of Live Works.

**Comment**
We seek amendments to this condition to provide certainty on when QUU must be notified about works within the vicinity of their live QUU infrastructure. It is considered that the definition of “near” is not clear enough to determine when QUU will need to be notified of works. AS such we seek amendments to the condition as follows.

Additionally we have added further clarity to the timing, to provided certainty and direction for the engineers, both designing and assessing compliance.

**Proposed Condition**
Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

| a) | All work on or within 1 metre of live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities. |
| b) | A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset. |
| c) | Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment. |
| d) | All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work. |
| e) | Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities. |
| f) | All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities. |

**Timing:**
Prior to and at the time of Live Works in accordance with the SEQ Water Supply and Sewerage Design and Construction Codes at the time of approval.

### Major Works for Water Supply and Wastewater Infrastructure
Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

### 38(a) Design Approval- Major Works
a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

**Timing:**
38(b) Pre-Construction Review - Major Works

a) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Schedule a pre-start meeting with at least 3 business days' notice to enable Queensland Urban Utilities to attend (if required).

c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.

d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

Timing:
Prior to the construction of water or wastewater infrastructure.

38(c) Construction Certification - Major Works

a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).

b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

38(d) End of Maintenance - Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

38(e) Works Inspections - Major Works

a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:

(i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);

(ii) Pouring of thrust blocks;

(iii) Pressure testing of pipelines;

(iv) Disinfection of water mains; and

(v) Construction completion inspection.

b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities has inspected the works and other (non-Hold Point) works inspections.

c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.

e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

Timing:
Prior to and during construction of water or wastewater infrastructure.

Comment
The condition requires the works to be inspected by and certified by a suitably qualified RPEQ, as such including these hold points would only add unnecessary time delays to the delivery of the project. The amendments sought to this condition seek to remove any additional hold points by QUU.

It is additionally requested that the timing sections of this condition are modified (as provided below) so that the timing refers to the compliance of work in accordance with the SEQ water and sewerage design and construction codes at the time of approval. This will avoid any potential issues with rework, redesign, and reconstruction resulting from updated standards after the time of approval. This is effectively to avoid any chance of retrospective changes being sought to work already completed.

The condition has been amended accordingly below.

Proposed Condition
Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

38(a) Design Approval - Major Works

b) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

c) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

Timing:
Prior to the construction of water or wastewater infrastructure.

38(b) Pre-Construction Review - Major Works

d) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

e) Schedule a pre-start meeting with at least 3 business days’ notice to enable Queensland Urban Utilities to attend (if required).
### 39 (a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

- **a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **c)** Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
- **d)** Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- **e)** If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
  - (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
  - (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
  - (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
  - (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**Timing:**

Prior to the construction of water or wastewater infrastructure.
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

39(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with ss99BRDI of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
b) This infrastructure is not eligible for an offset or refund in accordance with ss99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development’s proposed vehicular footway crossings.
j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

39(c) Drinking Water Network Infrastructure and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

39(d) Drinking Water Network Infrastructure and Property Service Infrastructure-Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

39(e) Drinking Water Infrastructure - Design and Construction Standards

a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

39(f) Drinking Water Network Infrastructure- Water Quality Testing

a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.

Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

39(g) Drinking Water Network Infrastructure - Pressure Testing

a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.
The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

**Timing:**
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

**Comment**
The condition has been amended below to more appropriately manage the timing of compliance in accordance with the SEQ water and sewerage design and construction codes, being the time of approval. This is requested to avoid any potential issues with rework, redesign and reconstruction resulting from updated standards after the time of approval.

### Proposed Condition

#### Construct Water Supply Non-Trunk Infrastructure System
Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions **at the time of approval**:

**GUIDELINE**
This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**
Connection Certification from QUU

#### 39(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

- **a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **c)** Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
- **d)** Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- **e)** If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
  - (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure on or within the development site;
  - (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
  - (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
  - (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

#### 39(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

- **a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **c)** Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
- **d)** Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
- **e)** Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
- **f)** Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
- **g)** Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
- **h)** Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
- **i)** If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.
- **j)** Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
- **k)** Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Prior to the construction of network or property service infrastructure.

The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code. Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.

Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.

Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Prior to submitting the Pre-Construction Package and at the pre-start meeting.

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Prior to construction of relevant water or wastewater infrastructure.

It is considered unreasonable to include references in conditions that relate to documents in Water Approvals that have not been issued to the applicant for consideration. As such we propose amendments to the condition as follows to provide greater certainty for the applicant on the implications of this condition on the delivery of the project.

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:
40(a) Land Owner's Consent
   a) Owner's consent to undertake works on the private property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
   b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Timing:
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

40(b) External Agency Approvals and other Authorisations
The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Timing:
Prior to construction of relevant water or wastewater infrastructure.

42 Temporary Works for Water and Wastewater Infrastructure
   (a) Provide temporary water and wastewater infrastructure, if applicable, and all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.
   (b) Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.
   (c) A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.
   (d) Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

43 Terminating Infrastructure for Water and Wastewater
   Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Comment
It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required. As such we seek deletion of this conditions in its entirety.

Proposed Condition
Delete Terminating Infrastructure for Water and Wastewater

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

44 Maintenance Period for Water and Wastewater Infrastructure
a) Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and maintenance schedule (lodged as part of the As-Constructed Package), relevant engineering standards and sound engineering practice.

b) The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.

c) Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.

d) Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.

e) Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.

Timing:
Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

45 Maintenance Bond
a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.

b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.

c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

Comment
It is considered that bank guarantees for maintenance periods are to protect against physical defects and faults. It is not considered reasonable to include defects and faults in the design, as QUU will have had the opportunity through the assessment of the DA (conceptual design) and then additionally through the OPW process to review and comment on the detailed design proposed. As such a bank guarantee associated with works should only cover defects and faults not associated with the approved detailed design. The amended wording to the condition is provided below.

Proposed Condition
a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials and workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.

b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.

c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

46 Payment of Fees and Charges
Pay fees and charges calculated in accordance with the Queensland Urban Utilities Water Netserv Plan.

Timing:
At the times specified in the Queensland Urban Utilities Water Netserv Plan.

47 Works for Trunk Infrastructure for Water and Wastewater
Provide the following Trunk Infrastructure Network for Queensland Urban Utilities and the following requirements:

47(a) Drinking Water Network Infrastructure (Trunk Infrastructure)
a) Construct Pump Station, Rising Main, and Reservoir, Items WPS 01, RES 01, and RM 01 respectively, as identified in the plan, titled Figure 1- Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 12 Nov 2014.

b) This condition for trunk infrastructure has been applied in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 s99BRCQ (2) (b).

c) This trunk infrastructure is eligible for an offset or refund in accordance with s99BRCQ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

d) The details of the offset and refund will be provided in the Infrastructure Charges Notice in accordance with s99BRCQ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

e) Provide a drinking water supply reticulation system (trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
f) Transfer ownership of the drinking water reticulation system (trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

g) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:

(i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
(ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
(iii) raising or lowering mains to current standards if development works change the depth of cover on these works;
(iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:

After the Council signs the Subdivision Plans for Stages 1 and Stage 2, then prior to the earlier of the following: Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use.

47(b) Additional Payment Condition for Trunk Infrastructure Costs

Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:

a) as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water Netserv Plan.

b) the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the following:

(i) levied charges for the trunk infrastructure; and
(ii) the trunk infrastructure provided, or to provided, by the applicant.

c) the details of trunk infrastructure to be provided is shown in the plan, Figure 2- Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20 Nov 2014.

d) the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734322200.

e) this additional trunk infrastructure is not eligible for a refund in accordance with s99BRCQ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

47(c) Land Dedication (Trunk Infrastructure)

a) Provide land for Items RES 01 and WPS 01 and associated infrastructure identified in the plan, Figure 1- Proposed Water Supply Infrastructure, Upper Kedron.

b) This condition for trunk infrastructure has been applied in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 s99BRCQ (2) (b).

c) Land required for any water or wastewater trunk infrastructure to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

d) The land for the water or wastewater trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Timing:

After the Council signs the Subdivision Plans for Stages 1 and Stage 2, then prior to the earlier of the following: Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use.

Comment

The water trunk infrastructure proposed to support the development is consistent with the QUU Master Plan which was provided by QUU to Calibre Consulting on 16 October 2014. The Approval Conditions 47(d)(c) makes reference to Figure 2- Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20 November 2014.

QUU have not demonstrated or identified how the proposed development demand is greater than that assumed in the QUU Water Netserv Plan. Additional information is required from QUU to justify any consideration of additional payment of contributions in relation to the water and wastewater infrastructure. From the material provided by QUU during the assessment period, it is considered that the demand on the infrastructure is not beyond that planned by QUU.

It is on this basis that we seek a number of deletions from the condition as provided below.

Proposed Condition

Work for Trunk Infrastructure for Water and Wastewater

Provide the following Trunk Infrastructure Network for Queensland Urban Utilities and the following requirements:

47(a) Drinking Water Network Infrastructure (Trunk Infrastructure)

h) Construct Pump Station, Rising Main, and Reservoir, Items WPS 01, RES 01, and RM 01 respectively, as identified in the plan, titled Figure 1- Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 12 Nov 2014 as required.

i) This condition for trunk infrastructure has been applied in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 s99BRCQ (2) (b).
j) This trunk infrastructure is eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

k) The details of the offset and refund will be provided in the Infrastructure Charges Notice in accordance with s99BRCK of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

l) Provide a drinking water supply reticulation system (trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

m) Transfer ownership of the drinking water reticulation system (trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

n) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
   (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
   (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
   (iii) raising or lowering mains to current standards if development works change the depth of cover on these works;
   (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
After the Council signs the Subdivision Plans for Stages 1 and Stage 2, then prior to the earlier of the following: Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use.

47(b) Additional Payment Condition for Trunk Infrastructure Costs
Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:

  f) as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water Netserv Plan;

  g) the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the following:

     (i) levied charges for the trunk infrastructure; and

     (ii) the trunk infrastructure provided, or to be provided, by the applicant.

  h) the details of trunk infrastructure to be provided is shown in the plan "Figure 2- Proposed Water Supply Infrastructure, Upper Kedron" prepared by Queensland Urban Utilities dated 20Nov2014.

  i) the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734422280.

  j) this additional trunk infrastructure is not eligible for a refund in accordance with s99BRCY of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

47(c) Land Dedication (Trunk Infrastructure)

  e) Provide land for Items RES 01 and WPS 01 and associated infrastructure identified in the plan "Figure 1- Proposed Water Supply Infrastructure, Upper Kedron".

  f) This condition for trunk infrastructure has been applied in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 s99BRCQ (2) (b).

  g) Land required for any water or wastewater trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

  h) The land for the water or wastewater trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Provide all weather access for items RES 01 and WPS 01 identified in Figure 1.

Timing:
After the Council signs the Subdivision Plans for Stages 1 and Stage 2, then prior to the earlier of the following: Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use.

Permit to which these conditions relate: DA SPA Material Change of Use: Preliminary Approval to vary the effect of the planning scheme for reconfiguration of a lot.
<table>
<thead>
<tr>
<th>Proposed Condition</th>
<th>Transfer Land for Environmental Purposes and Drainage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to include the provision of land for environmental purposes and drainage required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land.</td>
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<thead>
<tr>
<th>Comment</th>
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<tr>
<td>This condition does not deal with the applicant being granted permission to enter the corridor following the sealing and registration of the titles, placing the Parkland in the ownership of the Council. It has been recognised and discussed throughout the assessment process that access would be granted through the OPW process to undertake the works within the dedicated parkland areas. This needs to be reflected in the wording of this condition for certainty, for both parties, during the OPW process and delivery.</td>
</tr>
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<table>
<thead>
<tr>
<th>Proposed Condition</th>
<th>Transfer Land as Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>A subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to include the provision of land for park required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014 that meets the requirements of City Plan.</td>
<td></td>
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</tbody>
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<tr>
<th>Comment</th>
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<tbody>
<tr>
<td>We seek administrative changes to the wording of this condition to avoid the need to amend the condition in order to achieve compliance with the referenced Infrastructure Agreement.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>General Compliance Requirement</th>
</tr>
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<tbody>
<tr>
<td>Development of the Subject Site must comply with the following:</td>
</tr>
<tr>
<td>a) the Approved Plans;</td>
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<td>b) the Conditions of this Preliminary Approval;</td>
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<tr>
<td>a) subsequent Material Change of Use and Reconfiguring a Lot of the Subject Site including other plans and documents approved by subsequent development approvals; and</td>
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<tr>
<td>b) the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014.</td>
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<thead>
<tr>
<th>Proposed Condition</th>
<th>General Compliance Requirement</th>
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<tr>
<td>Development of the Subject Site must comply with the following:</td>
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<tr>
<td>c) the Approved Plans;</td>
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<td>d) the Conditions of this Preliminary Approval;</td>
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<td>c) subsequent Material Change of Use and Reconfiguring a Lot of the Subject Site including other plans and documents approved by subsequent development approvals; and</td>
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<td>the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land.</td>
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<tr>
<th>Non-Trunk External Intersection Upgrades</th>
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<tr>
<td>Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide the following non-trunk external roadwork intersection upgrades with any associated drainage, site access, services, signs and markings in accordance with the</td>
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<tr>
<td>a)</td>
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<td>b)</td>
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<td>c)</td>
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**Note:** This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

**Proposed Condition**

Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide the following non-trunk external roadwork intersection upgrades with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

- Prior to the completion of the development in Stage 1 or 180 lots which ever is the earliest, T Works for the upgrade and signalisation of the intersection at Upper Kedron Road / Cemetery Road;
- Prior to the completion of the development in Stage 1 or 180 lots which ever is the earliest, T Works for the upgrade and signalisation of the intersection at Upper Kedron Road / Hogarth Road;
- Prior to the completion of 500 lots, T Works for the upgrade at the intersection of Ross Road / Cedar Creek Road to a priority controlled T-intersection.

**Note:** This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

**Master Vegetation Management Plan**

Any subsequent Reconfiguring of a Lot is to be supported by Vegetation Management Plan (VMP) and an Arborist’s report. The VMP is to be in the form of scaled plans and supporting documentation as per the Ecological Assessment Guidelines (referenced on Council’s website) for the protection, retention and/or management of vegetation on the site and include the following information:

- the extent of the VMP is to include evaluation of all areas including, proposed road reserves, external works and development areas;
- the location and description of existing vegetation including species and botanical name plus the height and canopy spread;
- the location and extent of all site works including all proposed infrastructure and areas of earthworks;
- design of all civil works is to be cognisant of environmental values. Alternative solutions may be required in some instances,
- to protect significant vegetation (eg alternative service alignments, variations to batter slopes and tunnel boring);
- the location and description of all vegetation to be retained and that to be removed;
- methods of physical identification of trees/vegetation to be retained;
- a description of all measures to be used to protect vegetation and habitat features to be retained during construction, including protective fencing;
- a description of all pruning and tree surgery works (to AS4373/96) to maintain health and stability of trees and reduce potential hazards for future residents;
- the location and extent of storage and stockpile areas for cleared vegetation and site mulch;
- a description of all methods to salvage and/or re-use cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works;
- details of all measures to protect and recover fauna during clearing operations, including: presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures. Vegetation removal must be determined by consultation with a suitably qualified Ecologist with a minimum of 5 years experience to provide advice on vegetation retention from an ecological perspective where opportunities exist (i.e. where SISD requirements will not be compromised). Consultation with a qualified Arborist trained to a minimum AQF Level 5 in Arboriculture with a minimum of 5 years experience is also required to identify trees that can be retained from an arboricultural perspective.
- Any subsequent Reconfiguring of a Lot is to be supported by a Wildlife Movement Solutions Plan (WMSP). Detailed design drawings are required for each WMS infrastructure including fauna exclusion fencing.

The WMSP and report must outline wildlife movement solutions infrastructure in conjunction with operational work approvals. Obtain approval from the Delegate, Development Assessment for the detailed report and plans. The detailed design for each structure is to be in the form of scaled plans and supporting documentation. Design options must be integrated with required exclusion fencing and include warning signage at crossing points. The detailed designs must also be generally in accordance with the Fauna Sensitive Road Design Manual - Volume 2: Preferred Practices developed by the Department of Mains Roads. The plans must include, but not be limited to, the following information:

- description of the fauna exclusion/movement fences;
- location of warning signage at crossing points;
- description of hardwork ledges and other structures that must be installed inside the culverts;
- description of location, dimensions and openness of the structure to enable wildlife to enter the structure;
- description of the topography and rehabilitation type to be planted at entry points to the culverts. The vegetation must attract target species (wallabies, possums, koalas, echidnas, etc.) to the structure and provide food source and shelter. Clear and workable plans representing rehabilitation on the ground;
- including details of the proposed rehabilitation schedule, staging, plant species, stock size, densities, quantities and locations;
- description of proposed rehabilitation, including earthwork, methods and objectives;
- a detailed 5 year maintenance period and monitoring program is to be provided to maintain the vegetation at the entry points to the culvert;
- include details of special habitat features to be provided for the enhancement/restoration of habitat values;
- description of the weed management program;
- Details of associated fauna furniture must be included to provide opportunities for a broad range of species to roads.

NDN Application T A003905687 T 390 Levitt Road, Upper Kedron Qld 4055
### Master Compensatory Planting Management Plan

#### a) Any subsequent Reconfiguration of a Lot, Material Change of Use or Operational Works is to include a Master Compensatory Planting Management Plan which is to include the following matters:

1. **(i)** Accurately quantify the extent of development intrusion into mapped habitat areas, ecological corridors (including the Category 1, 2, 3 and 4 Corridors on the Approved Plans) and valuable ecological features such as waterways, and the level of compensation to be provided. This plan will be the overarching document to guide rehabilitation works in all stages of the development and other compensation proposed by the Applicant.

2. **(ii)** Suitable compensation can include:
   - The dedication or protection of land with intrinsic ecological value that has development intent under the Brisbane City Plan 2000 as deemed suitable by Council;
   - Substantial ecological restoration including revegetation works in areas as deemed suitable by Council that are currently deficient of an existing vegetation structure and floristic composition that is commensurate with the Regional Ecosystem for that area;
   - Areas that will naturally regenerate over time or require minimal assisted regeneration do not qualify.

3. **(iii)** Compensatory planting is to be located as physically close to the point of impact as possible and is to be within Brisbane City.

4. **(iv)** The proposed intent and outcomes of the compensatory planting (e.g. to achieve regional ecosystem parity, habitat and ecological corridor functions).

5. **(v)** Activities and their associated timeframes that will be undertaken to achieve the management intent and outcomes.

6. **(vi)** Demonstration that all compensatory planting will be either on land being dedicated to Council or on land that will be secured via a legally binding mechanism suitable to Council (i.e. Environmental Covenant).

7. **(vii)** Restrictions, if any, imposed on the use of the compensatory planting areas to achieve the management intent and outcomes.

8. **(viii)** Compensatory planting is required to be designed and delivered in a spatial configuration that minimises the edge to area ratio.

9. **(ix)** A map clearing showing a boundary of all proposed compensatory planting areas;

10. **(x)** A detailed Rehabilitation Plan will be required for each stage of development and for any Compensatory Planting proposed by the Applicant outside of dedication corridors. Rehabilitation plans will include, but will not be limited to the following:
    - A maintenance plan for a period of 5 years;
    - A monitoring and reporting program;
    - Key performance indicators to measure the success of the compensatory planting;
    - An analysis of the risks and remedial action that will be undertaken if any of the risks occur;
    - A map clearing showing a boundary of the proposed compensatory planting area.

b) Obtain approval from the Delegate Development assessment for the plan.

c) The matters identified in the Master Compensatory Planting Management Plan approved by the Council are carried out prior to site work commencing in accordance with the Master Compensatory Planting Management Plan and any applicable Development Approval.

### Comment

Some administrative amendments are sought to this condition along with clarification on item b) that the delivery of the rehabilitation planting will be undertaken progressively across the site as associated with development of a particular area. It is considered unreasonable to require all rehabilitation planting to occur on site prior to site work commencing. In some situations there may be areas that will undergo rehabilitation after site clearing and earthworks have occurred. Requiring rehabilitation to occur prior to site clearing may jeopardise the viability of the plant stock, and as such we seek amendment to the timing of delivery to reflect the progressive nature in which the site will be developed, and that rehabilitation planting is staged in a similar manner to the development of the site, with completion of the stages of planting to be required to be completed prior to the sealing of the survey plan for the immediately adjoining stage of development.

The amended wording is provided below.

### Proposed Condition

**Master Compensatory Planting Management Plan**

a) **Any subsequent Reconfiguration of a Lot, Material Change of Use or Operational Works is to include a Master Compensatory Planting Management Plan which is to include the following matters:**

1. **(i)** Accurately quantify the extent of development intrusion into mapped habitat areas, ecological corridors (including the Category 1, 2, 3 and 4 Corridors on the Approved Plans) and valuable ecological features such as waterways, and the level of compensation to be provided. This plan will be the overarching document to guide rehabilitation works in all stages of the development and other compensation proposed by the Applicant.

2. **(ii)** Suitable compensation can include:
   - The dedication or protection of land with intrinsic ecological value that has development intent under the Brisbane City Plan 2000 as deemed suitable by Council;
   - Substantial ecological restoration including revegetation works in areas as deemed suitable by Council that are currently deficient of an existing vegetation structure and floristic composition that is commensurate with the Regional Ecosystem for that area;
   - Areas that will naturally regenerate over time or require minimal assisted regeneration do not qualify.

3. **(iii)** Compensatory planting is to be located as physically close to the point of impact as possible and is to be within Brisbane City.

4. **(iv)** The proposed intent and outcomes of the compensatory planting (e.g. to achieve regional ecosystem parity, habitat and ecological corridor functions).

5. **(v)** Activities and their associated timeframes that will be undertaken to achieve the management intent and outcomes.

6. **(vi)** Demonstration that all compensatory planting will be either on land being dedicated to Council or on land that will be secured via a legally binding mechanism suitable to Council (i.e. Environmental Covenant).

7. **(vii)** Restrictions, if any, imposed on the use of the compensatory planting areas to achieve the management intent and outcomes.

8. **(viii)** Compensatory planting is required to be designed and delivered in a spatial configuration that minimises the edge to area ratio.

9. **(ix)** A map clearing showing a boundary of all proposed compensatory planting areas;
| (x) | A detailed Rehabilitation Plan will be required for each stage of development and for any Compensatory Planting proposed by the Applicant outside of dedication corridors. Rehabilitation plans will include, but will not be limited to the following: |
| - | A maintenance plan for a period of 5 years; |
| - | A monitoring and reporting program; |
| - | Key performance indicators to measure the success of the compensatory planting; |
| - | An analysis of the risks and remedial action that will be undertaken if any of the risks occur; |
| - | A map clearing showing a boundary of the proposed compensatory planting area. |

b) Obtain approval from the Delegate Development assessment for the plan. The matters identified in the Master Compensatory Planting Management Plan approved by the Council are carried out prior to the work commencing the sealing of the plan for the immediately adjoining stage in accordance with the Master Compensatory Planting Management Plan and any applicable Development Approval.

56  **QUU Reservoir and Service Supply**

Any subsequent Reconfiguring of a Lot is to be supported by a Vegetation Management Plan (VMP) an Arborist's report for all works associated with the construction of the QUU Reservoir and associated service infrastructure in conjunction with operational work approvals where within Council land. Obtain approval from the Delegate, Development Assessment for the detailed report and plans.

The VMP is to be in the form of scaled plans and supporting documentation as per the Ecological Assessment Guidelines (referenced on Council's website) for the protection, retention and/or management of vegetation on the site and include the following information:

- the extent of the VMP is to include evaluation of all areas including, proposed road reserves, external works and development areas;
- the location and description of existing vegetation including species and botanical name plus the height and canopy spread;
- the location and extent of all site works including all proposed infrastructure and areas of earthworks;
- detail design of all civil works is to be cognisant of environmental values. Alternative solutions may be required in some instances, to protect significant vegetation (eg alternative service alignments, variations to batter slopes and tunnel boring);
- the location and description of all vegetation to be retained and that to be removed;
- methods of physical identification of trees/vegetation to be retained;
- a description of all measures to be used to protect vegetation and habitat features to be retained during construction, including protective fencing;
- a description of all pruning and tree surgery works (to AS 4373/96) to maintain health and stability of trees and reduce potential hazards for future residents;
- the location and extent of storage and stockpile areas for cleared vegetation and site mulch;
- a description of all methods to salvage and/or re-use cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works;
- a description of all methods to salvage and/or re-use cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works;
- details of all measures to protect and recover fauna during clearing operations, including: presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures.

Final design to minimise impacts on ecological features.

Development intrusion or vegetation removal associated with the construction or operational requirements of the QUU Reservoir and service supply infrastructure within dedication corridors will require compensation (e.g. compensatory planting) at ratio of 4 units replaced for every 1 unit removed. This will need to be detailed in the Compensatory Planting Strategy.

57  **Compliance Statement**

An application for a development approval for a Material Change of Use or Reconfiguration of a Lot must be supported by information which states the following:

a) The total number of lots for the Subject Site;

b) The number of lots that have been applied for as part of the development application, and the number of lots applied for in any other development application for the Subject Site that has not yet been decided by Council; and

c) That the development application complies with the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014.

**Comment**

We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced Infrastructure Agreement.

<table>
<thead>
<tr>
<th>Proposed Condition</th>
<th>Compliance Statement</th>
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<tbody>
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<tr>
<td>d)</td>
<td>The total number of lots for the Subject Site;</td>
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<tr>
<td>e)</td>
<td>The number of lots that have been applied for as part of the development application, and the number of lots applied for in any other development application for the Subject Site that has not yet been decided by Council; and</td>
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<td>That the development application complies with the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land.</td>
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58  **Non-Trunk External Road Upgrades**

Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide the following non-trunk external roadwork upgrades with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

a) Prior to the completion of the development of Stage 1 or 180 lots whichever is the earliest
   - Works for the widening of Canvey Road on the south approach to Charolais Crescent roundabout;

b) Prior to the completion of the development of Stage 1 or 180 lots which ever is the earliest
   - Construct pavement and kerb and channel in Hogarth Road on southern approach to McGinn Road;

c) Prior to the completion of the development of Stage 1 or 180 lots which ever is the earliest
   - Land and works for the widening of Canvey Road along the full site frontage to achieve an overall road width of 24 metres.
d) Prior to the completion of Stage 1D of Land for the widening of Levitt Road along the full site frontage to achieve an overall road width of 24 metres.
e) Prior to the completion of 500 lots - Upgrade Ross Road from the Subject Site to the Ross Road / Cedar Creek Road intersection to an 11m wide pavement with 4.25m wide footpaths including concrete kerb and channel both sides of the road.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

**Comment**

**Point a)** seeks works for widening the south approach to the Canvey Road / Charolais Cres roundabout. We seek clarification on what works are sought in this location as the south approach to this roundabout on Canvey Road already appears to be appropriately formed including a shared pedestrian and cycle path within the road reserve. Any widening on this approach would need additional land from outside of the road reserve. Unless Council were seeking the alignment of the Canvey Road arm of the roundabout within the existing road reserve, to use the balance of the unformed portion on the eastern boundary. The aerial image overlaid with the cadastral information provided illustrates this matter.

We therefore seek clarification from Council on this condition, and following this will then provide amended wording to replace point 9a) above.

In relation to **Point b)** which seeks the applicant to construct pavement and kerb and channel in Hogarth Road on the southern approach to McGinn Road, we note that this upgrade work has been previously conditions by BCC for the recent ROL application (and subsequent roadworks approval) for the site at 26 Hogarth Road (Council Reference Number: A003978858), and a subsequent roadwork application has been granted. As such we seek the deletion of item 9b) from the approval.

**Point 9d)** relates to road widening of Levitt Road along the full site frontage to achieve an overall width of 24 metres.

The proposed development will not contribute sufficient traffic to justify a district access classified road standard (allowing direct lot property access). The existing road reserve is approximately 20.1m which is sufficient for a district access road with no property access provided. As such we consider that point 9d) should be removed completely.

Whilst we recognise that there may be some localised widening of the road to accommodate entry turns into the convenience centre, this would be dealt with as part of the future MCU for that use, where land dedication can be considered in more detail and incorporated into the design.

As such we seek the deletion of item 9d) from the approval.

**Point 9e)** relates to works required prior to the completion of 500 lots to upgrade Ross Road from the subject site to the Ross Road / Cedar Creek Road intersection. An intersection and connection to the existing road network is not anticipated in this location as has been demonstrated on the proposal plans provided as part of the application during assessment. As such it is considered unreasonable and unnecessary for works in this external location to be imposed on this development. It is on this basis that we seek to delete this item from the condition.

**Proposed Condition**

Any subsequent Reconfiguration of a Lot, Material Change of Use or Operational Work is to provide the following non-trunk external roadwork upgrades with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

f) **(Awaiting clarification from Council in order to provide recommended changes to wording)** Prior to the completion of the development of Stage 1 or 180 lots whichever is the earliest \(1 \) Works for the widening of Canvey Road on the south approach to Charolais Crescent roundabout;

g) **Delete** Prior to the completion of the development of Stage 1 or 180 lots whichever is the earliest \(1 \) Construct pavement and kerb and channel in Hogarth Road on southern approach to McGinn Road;

h) Prior to the completion of the development of Stage 1 or 180 lots whichever is the earliest \(1 \) Land and works for the widening of Canvey Road along the full site frontage to achieve an overall road width of 24 metres.

i) **Delete** Prior to the completion of Stage 1D of Land for the widening of Levitt Road along the full site frontage to achieve an overall road width of 24 metres.

j) **Delete** Prior to the completion of 500 lots - Upgrade Ross Road from the Subject Site to the Ross Road / Cedar Creek Road intersection to an 11m wide pavement with 4.25m wide footpaths including concrete kerb and channel both sides of the road.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

**Restricted Emergency Access Connection to Mt Nebo Road**

Prior to the completion of 500 lots construct a 4.5m wide Type A standard pavement driveway for emergency services from Mount Nebo Road to the northern boundary of the Category 1 Corridor generally in accordance with Plan 4 \(1 \) Road Hierarchy & Access, Dwg No. CDW01_45A, dated 7.10.2014 (as amended in red).

**Comment**

Given that the proposed road use will be for emergency vehicle access only with minimal traffic generated until the ultimate intersection with Mount Nebo Road is constructed, it is proposed that Council accept a reduced standard of service for the access track. It is proposed that a 150mm compacted gravel track with primer seal/chip seal would be sufficient to serve as all-weather access.

Additionally as there is no emergency access provided at this time to the rural land through this access location, it is considered inappropriate to link the provision of the access requirement to the 500\(^{th}\) lot being created. Given the access constraints placed on achieving a yield greater than 500 lots requires the access to Mount Nebo Road to be completed, development in the vicinity of this emergency access is generally limited.

It is our recommendation that the construction of the access track for emergency purposes is tied to the closest stage of development, being Stage 5 (as amended in red on the approved Staging Plan), and therefore the applicant has suggested the following amendments to the wording of this condition. The proposed wording includes a redundancy note, should the applicant have already completed 500 lots within other stages...
It is recommended that the limitations on the number of lots permitted and the triggers allowing the phasing of the development are articulated in the application and supporting material submitted for assessment.

The applicant seeks a maximum capped yield of 1,350 lots as has been demonstrated to be appropriately serviced and accessed in the development application.

Where there is conflict between the codes and the conditions contained herein, the conditions shall prevail.

It is considered that the use of the words ‘may be considered’ creates uncertainty in relation to the total yield of the site, furthermore the applicant seeks a maximum capped yield of 1,350 lots as has been demonstrated to be appropriately serviced and accessed in the development application and supporting material submitted for assessment.

The definitions and codes mentioned in this condition refer definitions and codes contained in the Brisbane City Plan 2000 (current at the time the application was properly made and superseded by Brisbane City Plan on 30 June 2014). Where there is conflict between the codes and the conditions contained herein, the conditions shall prevail.

Development of the Subject Site cannot exceed 780 lots. Development for additional 200 allotments may be considered if the Ross Road connection is constructed (total 980 lots).

Note: To ensure safe vehicular access the development cannot exceed 500 lots until such time an alternative road connection is constructed i.e. Ross Road connection.

It is recommended that the limitations on the number of lots permitted and the triggers allowing the phasing of the development are articulated more clearly to provide certainty to the development. On this basis, the following wording is provided to amend the extent of this condition.

Development of the Subject Site cannot exceed 240 1,350 lots. Development for additional 200 allotments may be considered if the Ross Road connection is constructed (total 1,550 lots of the site is limited in the following manner:

3. Development of 500 lots is permitted with access provided off Canvey Road.
4. On completion of the secondary access (Mount Nebo Road intersection), a further 850 lots are permitted, with access from either the primary and/or secondary accesses. For additional 200 allotments may be considered if the Ross Road connection is constructed (total 1,950 lots).

Note: To ensure safe vehicular access the development cannot exceed 500 lots until such time an alternative road connection is constructed i.e. Ross Mount Nebo Road connection.

The minimum area, width and depth of lots shall be in accordance with the following table:

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<th>Minimum Lot area and Dimensions</th>
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Notes:
1. Not more than 10 lots smaller than 400m² shall adjoin each other fronting the same street.

NDN Application I A003905687 I 390 Levitt Road, Upper Kedron Qld 4055
### Vegetation Retention

All vegetation within the site shall be retained unless otherwise permitted by a development permit issued in conjunction with or pursuant to this preliminary approval.

**Comment**
The wording of this condition is sought to be amended to better reflect the intent and understanding of retention of vegetation within the subject site. The infrastructure agreement identified the land areas of ecological significance, where no development was to occur; it is in these areas that all efforts to retain vegetation must be applied. Outside of these areas it is understood that the vegetation is isolated and dispersed, with a significantly reduced ecological significance. As such, the wording has been amended to ensure that all vegetation within the identified waterway corridors is to be retained and vegetation within the approved developable areas can be retained where appropriate, but not where compromising good design outcomes and safety within the built environment.

The amended wording is provided below.

**Proposed Condition**

**Vegetation Retention**

All vegetation within the designated waterway corridors identified on the Land Transfer Plan in the Infrastructure Agreement originally signed on the 27th of February 2014 of the Subject Site shall be retained. Vegetation within the approved developable area as identified on the approved land use plans, may be removed where otherwise permitted by a development permit issued in conjunction with or pursuant to this preliminary approval.

### Prescribed Period

The prescribed period for this preliminary approval is 120 months from when the preliminary approval takes effect.

**Note:** If the development or an aspect of development relating to this preliminary approval is not completed within the prescribed period, the preliminary approval lapses.

### Staging Sequence

The development staging is to occur sequentially from Stage 1 to Stage 10 as indicated on Plan 7_Development Staging Dwg No. CDW01_45A dated 7/10/2014 (as amended in red).

**Comment**
The applicant did not intend to be limited to sequentially developing the site in a manner that reflects the staging identified. It is considered that there are sufficient other conditions imposed on this development that would ensure yield triggers and access provisions are provided at the appropriate times without also controlling the order in which stages are developed. AS such we seek this condition to be removed.

**Proposed Condition**

Delete. **The development staging is to occur sequentially from Stage 1 to Stage 10 as indicated on Plan 7_Development Staging Dwg No. CDW01_45A dated 7/10/2014 (as amended in red).**

### No Vehicular Access to Mount Nebo Road

No vehicular access is permitted from the Subject Site to Mount Nebo Road including access from the existing unformed roads of Ross Road and the unnamed road.

**Note:** This condition does not preclude access for emergency vehicles.

**Comment**

As part of the development application, Cedar Woods provided traffic impact assessment documentation to the Council to assist with the assessment and consideration of the potential impact of a connection to Mount Nebo Road. The assessing officer agreed on the location and extent of intersection requirements and safety upgrades in order to facilitate a connection to Mount Nebo Road. It is considered that the potential impacts to Mount Nebo Road in the immediate vicinity [of the development?] were demonstrated to be minimal, as were the future impacts (at full development) on the surrounding receiving traffic network. The site currently has frontage and access to Mount Nebo Road and the two existing unformed roads (one being un-named and the other identified as the extension of Ross Road). It is considered irrelevant and unreasonable to restrict all access to these roads, when the impacts have been clearly identified and addressed.

In addition, the application (including access to Mount Nebo Road) has been assessed against the EPBC Act in relation to the impact on the environment, specifically on Koala movements, and has been determined to be not a controlled action.

Although the Local Plan does make reference to the identified emerging community land on the site not gaining access to Mount Nebo Road, the Local Plan does not consider the development of the Rural land for future residential in the same manner. In this instance the Local Plan is silent on the matter, and therefore it is considered that assessment falls back to the Planning Scheme, under which a full and thorough assessment of the impacts of access to Mount Nebo Road has been demonstrated. Further, we note that the Infrastructure Agreement for Institutional Investments for land at Upper Kedron (IA), which applies to the subject site, specifically states that the agreement does not preclude the Applicant from making an application to open, close or re-align a road which intersects Mount Nebo Road. The particular reference to a Mount Nebo Road connection in the IA indicates that the Council is not fundamentally opposed to such a connection. The reference in the IA demonstrates that, provided sufficient traffic analysis can be prepared in support of the connection, a Mount Nebo Road connection would be a feasible part of any development application. We consider that sufficient traffic analysis supporting the connection has been provided. It is on this basis that we seek the deletion of this condition.

**Proposed Condition**

Delete. **No vehicular access is permitted from the Subject Site to Mount Nebo Road including access from the existing unformed roads of Ross Road and the unnamed road.**

**Note:** This condition does not preclude access for emergency vehicles.

### Plans/Documents for Consultants/Contractors

Provide a copy of the Brisbane City Council approval package including the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27th February 2014, development approval conditions, approved plans & documents and the Decision Notice to the following and as indicated (where applicable):

- All consultants preparing or lodging a subsequent development application for Material Change of Use or Reconfiguration of a Lot.
b) all consultants preparing or lodging a development application for Operational Work;
c) all consultants preparing or lodging an application for development requiring compliance assessment;
d) all consultants preparing or lodging an application for Carrying out Building Work;
e) all contractors carrying out Site works or Building Work associated with or resulting from this Preliminary Approval.

This condition is imposed to ensure that all consultants, contractors and building Certifiers involved with completing the development are aware of the particular requirements of this Subject Site.

Non-Trunk Internal Road Layout

Any subsequent Reconfiguring of a Lot, Material Change of Use or Operational Work is to provide internal non-trunk roadworks with any associated drainage, pathways, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standards Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards including the following:

a) Internal District Road is to be extended from Canvey Road to the unformed Ross Road generally in accordance with Plan 4_Road Hierarchy & Access Dwg No. CDW01_45A dated 7.10.2014 (as amended in red). The District Road is to be 24m wide with direct property access permitted.
b) 20m wide road reserve from the proposed roundabout to the northern boundary of Category 1 Corridor generally in accordance with Plan 4_Road hierarchy & Access, Dwg No. CDW01_45A, dated 7.10.14 (as amended in red);
c) Infrastructure for a bus services at the first Stage of the development;
d) Roundabout to cater for the turnaround of a 14.5m public transport bus at the Ross Road / Canvey Road extension intersection.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

Comment

Point 69b) seeks a 20m wide road reserve from the proposed roundabout to the northern boundary of Category 1 Corridor. This is considered unnecessary particularly given that the road will only be providing access to the emergency services track to Mount Nebo Road. It is considered that the reserve width should be reduced to a local collector provision, simply to ensure that there is connectivity for emergency vehicles to the internal road network.

The following changes to the conditions wording are provided below.

Point 69c) It is considered that this condition is too vague and does not provide certainty to the applicant on the extent of infrastructure for a bus service which will be required to achieve compliance with this condition.

Therefore further clarification from Council is sought in relation to this aspect of condition 30.

Proposed Condition

Point 69b) 16m wide road reserve from the proposed roundabout to the northern boundary of Category 1 Corridor generally in accordance with Plan 4_Road hierarchy & Access, Dwg No. CDW01_45A, dated 7.10.14 (as amended in red);

Point 69c) Awaiting further clarification from Council prior to providing amended wording. Infrastructure for a bus services at the first Stage of the development;

Ecology

Natural Assets Local Law (NALL) - Public Land
Submit to Development Assessment documentation verifying that a NALL permit has been issued to carry out works on protected vegetation on public land.

Standard Advice

Defined Definitions
The definitions and codes mentioned in these conditions refer to definitions and codes contained in the Brisbane City Plan 2000 (current at the time of the application was properly made and superseded by the Brisbane City Plan 2014 on 30 June 2014).

Concurrency Agency Conditions
The Department of State Development Infrastructure and Planning as concurrence agency has imposed the amended conditions contained in the letter dated 2 December 2014.

Advice Agency Conditions
Powerlink acting as an advice agency for the proposal has imposed conditions contained in the letter dated 18 July 2014.

Water & Wastewater Services - Concurrence Agency Requirements

Grant Easements
Grant the following easement(s) for water supply or sewerage purposes.

a) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
b) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the
relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a
Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

GUIDELINE
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that
access is provided to QUU infrastructure.

PROOF OF FULFILMENT
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

Comment
It is considered that the timing impacts referenced in this condition may delay plan sealing. Delays may be experienced where live works are
still being undertaken after plan sealing but prior to on-maintenance (through the bonding process). As such we seek the reference to Prior to the
relevant Council signing the plan of subdivision to be removed from the timing, as suggested below.

Proposed Condition
Grant Easements
Grant the following easement(s) for water supply or sewerage purposes.

- Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written
consent of Queensland Urban Utilities.
- The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the
SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to
Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the
relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a
Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

GUIDELINE
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that
access is provided to QUU infrastructure.

PROOF OF FULFILMENT
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

Construct Waste Water Non-Trunk Infrastructure System
Construct a Sewerage Non-Trunk infrastructure system necessary to provide a sewerage connection to each allotment in accordance with the
current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

GUIDELINE
This condition has been imposed to ensure that sewerage infrastructure is in place to serve the development and that each lot has a sewerage
property connection. This condition has been imposed on behalf of Central SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

PROOF OF FULFILMENT
Connection Certification from QUU

75(a) Wastewater Network Infrastructure (Non-trunk Infrastructure)

- This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water
(Distribution and Retail Restructuring) Act 2009.
- This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water
(Distribution and Retail Restructuring) Act 2009.
- Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities
wastewater network infrastructures.
- Transfer ownership of the wastewater reticulation system (nontrunk infrastructure) to Queensland Urban Utilities, at no cost to
Queensland Urban Utilities.
- If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network and/or
property service infrastructure. This includes:
  (i) where not required for existing or future development, removing existing wastewater network and/or property service
infrastructure and sealing any connection(s) to remaining reticulation infrastructure;
  (ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
  (iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as
specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council
signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community
Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

75(b) Wastewater Property Service Infrastructure (Non-trunk Infrastructure)

- This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water
(Distribution and Retail Restructuring) Act 2009.
- This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water
(Distribution and Retail Restructuring) Act 2009.
- Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland
Urban Utilities wastewater reticulation system.
- Each lot must have a separate wastewater property service connection which commands the whole of each lot.
e) If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.

f) If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

g) Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

h) Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

i) Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words ‘Sewer Connection 2 M.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

75(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing
The design, construction and alteration of all wastewater property service infrastructure and network infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

75(d) Wastewater Network and Property Service Infrastructure- Sizing
The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

75(e) Wastewater Infrastructure- Design and Construction Standards

a) The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

75(f) Wastewater Network Infrastructure- CCTV Inspection

a) Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.

b) CCTV survey must be carried out in accordance with the WSA 05-2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.

c) The Applicant must repair all defects in accordance with the approved engineering restoration plan and schedule at no cost to Queensland Urban Utilities.

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

75(g) Wastewater Network Infrastructure- Pressure Testing

a) Conduct pressure/vacuum testing of wastewater mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

b) Pressure/vacuum testing of wastewater mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

c) The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment

Point 75(b)(h) It is considered that imposing the upgrades to existing services that are considered deficient by QUU and not located within the development is an unreasonable imposition on the development. As such we seek this aspect of the condition to be deleted.

Point 75(e) The impact and compliance with requirements prior to QUU issuing the Connection Certificate should be tied to demonstration of the relevant provisions of the SEQ water and sewerage design and construction codes. Amended wording is provided below to reflect this.

Point 75(e) The impact and compliance with requirements prior to QUU issuing the Connection Certificate should be tied to demonstration of the relevant provisions of the SEQ water and sewerage design and construction codes. Amended wording is provided below to reflect this.
Point 75b)(b) Delete. Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

75(e) Wastewater Network and Property Service Infrastructure - Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.
Timing: Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

77

76

Live Works for Water Supply and Wastewater
Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

- All work on or near live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.
- A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.
- Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.
- All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work. Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.
- All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

Timing: Prior to and at the time of Live Works.

Comment
We seek amendments to this condition to provide certainty on when QUU must be notified about works within the vicinity of their live QUU infrastructure. It is considered that the definition of ‘nearby’ is not clear enough to determine when QUU will need to be notified of works. AS such we seek amendments to the condition as follows.
Additionally we have added further clarity to the timing, to provided certainty and direction for the engineers, both designing and assessing compliance.

Proposed Condition
Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

- All work on or within 1 metre of live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.
- A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.
- Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.
- All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.
- Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.
- All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

Timing: Prior to and at the time of Live Works in accordance with the SEQ Water Supply and Sewerage Design and Construction Codes at the time of approval.

77

Major Works for Water Supply and Wastewater Infrastructure
Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

77(a) Design Approval - Major Works
- Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
- Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

Timing: Prior to the construction of water or wastewater infrastructure.
### 77(b) Pre-Construction Review - Major Works

- **a)** Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
- **b)** Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).
- **c)** Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.
- **d)** No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

**Timing:**
Prior to the construction of water or wastewater infrastructure.

### 77(c) Construction Certification - Major Works

- **a)** Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).
- **b)** The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 77(d) End of Maintenance - Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

### 77(e) Works Inspections - Major Works

- **a)** Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:
  - (i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);
  - (ii) Pouring of thrust blocks;
  - (iii) Pressure testing of pipelines;
  - (iv) Disinfection of water mains; and
  - (v) Construction completion inspection.
- **b)** Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities has inspected the works and other (non-Hold Point) works inspections.
- **c)** The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.
- **d)** Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.
- **e)** A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

**Timing:**
Prior to and during construction of water or wastewater infrastructure.

### Comment
The condition requires the works to be inspected by and certified by a suitably qualified RPEQ, as such including these hold points would only add unnecessary time delays to the delivery of the project. The amendments sought to this condition seek to remove any additional hold points by QCU.

It is additionally requested that the timing sections of this condition are modified (as provided below) so that the timing refers to the compliance of work in accordance with the SEQ water and sewerage design and construction codes at the time of approval. This will avoid any potential issues with rework, redesign, and reconstruction resulting from updated standards after the time of approval. This is effectively to avoid any chance of retrospective changes being sought to work already completed.

The condition has been amended accordingly below.

### Proposed Condition

**Major Works for Water Supply and Wastewater Infrastructure**

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

### 77(a) Design Approval - Major Works

- **a)** Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
- **b)** Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

**Timing:**
Prior to the construction of water or wastewater infrastructure.

### 77(b) Pre-Construction Review - Major Works

- **a)** Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
- **b)** Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).
<table>
<thead>
<tr>
<th>77(c) Construction Certification - Major Works</th>
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</thead>
<tbody>
<tr>
<td>a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).</td>
</tr>
<tr>
<td>b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.</td>
</tr>
</tbody>
</table>

**Timing:**

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

<table>
<thead>
<tr>
<th>77(d) End of Maintenance - Major Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.</td>
</tr>
</tbody>
</table>

**Timing:**

At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

<table>
<thead>
<tr>
<th>77(e) Works Inspections - Major Works</th>
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<tr>
<td>a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:</td>
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<tr>
<td>(i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);</td>
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<td>(iii) Pressure testing of pipelines;</td>
</tr>
<tr>
<td>(iv) Disinfection of water mains; and</td>
</tr>
<tr>
<td>(v) Construction completion inspection.</td>
</tr>
<tr>
<td>b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities shall be given the opportunity to inspect the works and other (non-Hold Point) works inspections.</td>
</tr>
<tr>
<td>c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.</td>
</tr>
<tr>
<td>d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.</td>
</tr>
<tr>
<td>e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.</td>
</tr>
</tbody>
</table>

**Timing:**

Prior to and during construction of water or wastewater infrastructure.

### Construct Water Supply Non-Trunk Infrastructure System

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**

Connection Certification from QUU

### 78(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:

   (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
   (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
   (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
   (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**Timing:**

Prior to and during construction of water or wastewater infrastructure.
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

78(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRD1 of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development’s proposed vehicular footway crossings.
j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

78(c) Drinking Water Network Infrastructure and Property Service Infrastructure Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

78(d) Drinking Water Network Infrastructure and Property Service Infrastructure Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

78(e) Drinking Water Infrastructure - Design and Construction Standards

a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

78(f) Drinking Water Network Infrastructure - Water Quality Testing

a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

78(g) Drinking Water Network Infrastructure - Pressure Testing

a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).
Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment
The condition has been amended below to more appropriately manage the timing of compliance in accordance with the SEQ water and sewerage design and construction codes, being the time of approval. This is requested to avoid any potential issues with rework, redesign and reconstruction resulting from updated standards after the time of approval.

PROOF OF FULFILMENT
Connection Certification from QUU

78(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)
   a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
   b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
   c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects to the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
   d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
   e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
      i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure on or within the development site;
      ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
      iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
      iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of use, whichever comes first.

78(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)
   a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
   b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
   c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
   d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
   e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
   f) Provide a meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
   g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
   h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
   i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.
   j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
   k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

78(c) Drinking Water Network Infrastructure and Property Service Infrastructure- Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

78(d) Drinking Water Network Infrastructure and Property Service Infrastructure - Sizing
The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

78(e) Drinking Water Infrastructure - Design and Construction Standards
a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

78(f) Drinking Water Network Infrastructure - Water Quality Testing
a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.

Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

78(g) Drinking Water Network Infrastructure - Pressure Testing
a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

79 Consent and Permits prior to Construction of Water and Wastewater Infrastructure
The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

79(a) Land Owner's Consent
a) Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.

b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Timing:
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

79(b) External Agency Approvals and other Authorisations
The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Timing:
Prior to construction of relevant water or wastewater infrastructure.

Comment
It is considered unreasonable to include references in conditions that relate to documents in Water Approvals that have not been issued to the applicant for consideration. As such we propose amendments to the condition as follows to provide greater certainty for the applicant on the implications of this condition on the delivery of the project.

Proposed Condition
Consent and Permits prior to Construction of Water and Wastewater Infrastructure
The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:
<table>
<thead>
<tr>
<th>79(a) Land Owner's Consent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Owner's consent to undertake works on the private property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.</td>
</tr>
<tr>
<td>b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.</td>
</tr>
<tr>
<td>Timing:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>79(b) External Agency Approvals and other Authorisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.</td>
</tr>
<tr>
<td>Timing:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>80 Land Dedication for Non-Trunk Water and Wastewater Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated land for purposes of water and wastewater infrastructure construction and the following requirements:</td>
</tr>
<tr>
<td>a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.</td>
</tr>
<tr>
<td>b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.</td>
</tr>
<tr>
<td>c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.</td>
</tr>
<tr>
<td>d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.</td>
</tr>
<tr>
<td>Timing:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>The applicant does not consider this condition to be relevant to this development. The condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and / or in accordance with the standards and guidelines prescribed. It is on this basis that we seek the deletion of this conditions in its entirety.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete Land Dedication for Non-Trunk Water and Wastewater Infrastructure</td>
</tr>
<tr>
<td>Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:</td>
</tr>
<tr>
<td>a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.</td>
</tr>
<tr>
<td>b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.</td>
</tr>
<tr>
<td>c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.</td>
</tr>
<tr>
<td>d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.</td>
</tr>
<tr>
<td>Timing:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>81 Temporary Works for Water and Wastewater Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Provide temporary water and wastewater infrastructure, if applicable, and all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.</td>
</tr>
<tr>
<td>b) Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.</td>
</tr>
<tr>
<td>c) A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.</td>
</tr>
<tr>
<td>d) Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.</td>
</tr>
<tr>
<td>Timing:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>82 Terminating Infrastructure for Water and Wastewater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner's consent.</td>
</tr>
<tr>
<td>Timing:</td>
</tr>
</tbody>
</table>
It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required. As such we seek deletion of this conditions in its entirety.

**Proposed Condition**

**Delete Terminating Infrastructure for Water and Wastewater**

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**83 Maintenance Period for Water and Wastewater Infrastructure**

- Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and maintenance schedule (lodged as part of the As-Constructed Package), relevant engineering standards and sound engineering practice.
- The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.
- Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.
- Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.
- Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.

**Timing:**

Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

**Comment**

It is considered that bank guarantees for maintenance periods are to protect against physical defects and faults. It is not considered reasonable to include defects and faults in the design, as QUU will have had the opportunity through the assessment of the DA (conceptual design) and then additionally through the OPW process to review and comment on the detailed design proposed. As such a bank guarantee associated with works should only cover defects and faults not associated with the approved detailed design. The amended wording to the condition is provided below.

**Proposed Condition**

- Summate a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.
- The Maintenance Bond must remain valid for the full term of the Maintenance Period.
- The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

**Timing:**

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

**85 Payment of Fees and Charges**

Pay fees and charges calculated in accordance with the Queensland Urban Utilities Water Netrov Plan.

**Timing:**

At the times specified in the Queensland Urban Utilities Water Netrov Plan.

**86 Works for Trunk Infrastructure for Water and Wastewater**

Provide the following Trunk Infrastructure Network for Queensland Urban Utilities and the following requirements:

**86(a) Drinking Water Network Infrastructure (Trunk Infrastructure)**

- Construct Pump Station, Rising Main, and Reservoir, Items WPS 01, RES 01, and RM 01 respectively, as identified in the plan, titled “Figure 1- Proposed Water Supply Infrastructure, Upper Kedron" prepared by Queensland Urban Utilities dated 12 Nov 2014.
- This condition for trunk infrastructure has been applied in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 s99BRCQ (2) (b).
- This trunk infrastructure is eligible for an offset or refund in accordance with s99BRC of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- The details of the offset and refund will be provided in the Infrastructure Charges Notice in accordance with s99BRCK of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- Provide a drinking water supply reticulation system (trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
- Transfer ownership of the drinking water reticulation system (trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
It is on this basis that we seek a number of deletions from the condition as provided below. Infrastructure is not beyond that planned by QUU.

Additional information is required from QUU to justify any consideration of additional payment of contributions in relation to the water and wastewater infrastructure. From the material provided by QUU during the assessment period, it is considered that the demand on the water trunk infrastructure proposed to support the development is consistent with the QUU Master Plan which was provided by QUU to Calibre Consulting on 16 October 2014. The Approval Conditions 47(d)(c) makes reference to Figure 2 – Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20Nov2014.

Timing:
After the Council signs the Subdivision Plans for Stages 1 and Stage 2, then prior to the earlier of the following: Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use.

86(b) Additional Payment Condition for Trunk Infrastructure Costs
Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:

(a) as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water Netserv Plan.

(b) the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the:
   (i) levied charges for the trunk infrastructure; and
   (ii) the trunk infrastructure provided, or to provided, by the applicant.

(c) the details of trunk infrastructure to be provided is shown in the plan, Figure 2 – Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20Nov2014.

(d) the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734322200.

(e) this additional trunk infrastructure is not eligible for a refund in accordance with s99BRCY of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

86(c) Land Dedication (Trunk Infrastructure)

(a) Provide land for Items RES 01 and WPS 01 and associated infrastructure identified in the plan Figure 1 – Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20Nov2014.

(b) This condition for trunk infrastructure has been applied in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 s99BRCQ(2) (b).

(c) Land required for any water or wastewater trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

(d) The land for the water or wastewater trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Provide all weather access for items RES 01 and WPS 01 identified in Figure 1.

Timing:
After the Council signs the Subdivision Plans for Stages 1 and Stage 2, then prior to the earlier of the following: Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use.

Comment
The water trunk infrastructure proposed to support the development is consistent with the QUU Master Plan which was provided by QUU to Calibre Consulting on 16 October 2014. The Approval Conditions 47(d)(c) makes reference to Figure 2 – Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20 November 2014.

QUU have not demonstrated or identified how the proposed development demand is greater than that assumed in the QUU Water Netserv Plan. Additional information is required from QUU to justify any consideration of additional payment of contributions in relation to the water and wastewater infrastructure. From the material provided by QUU during the assessment period, it is considered that the demand on the infrastructure is not beyond that planned by QUU.

It is on this basis that we seek a number of deletions from the condition as provided below.

Proposed Condition

Works for Trunk Infrastructure for Water and Wastewater

Provide the following Trunk Infrastructure Network for Queensland Urban Utilities and the following requirements:

86(a) Drinking Water Network Infrastructure (Trunk Infrastructure)

(a) Construct Pump Station, Rising Main, and Reservoir. Items WPS 01, RES 01, and RM 01 respectively, as identified in the plan, titled Figure 1 – Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 12 Nov 2014 as required.

(b) This condition for trunk infrastructure has been applied in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 s99BRCQ (2) (b).

(c) This trunk infrastructure is eligible for an offset or refund in accordance with s99BRCQ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(d) The details of the offset and refund will be provided in the Infrastructure Charges Notice in accordance with s99BRCK of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
c) Provide a drinking water supply reticulation system (trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

f) Transfer ownership of the drinking water reticulation system (trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

g) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
   (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
   (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
   (iii) raising or lowering mains to current standards if development works change the depth of cover on these works;
   (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
After the Council signs the Subdivision Plans for Stages 1 and Stage 2, then prior to the earlier of the following; Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use.

86(b) Additional Payment Condition for Trunk Infrastructure Costs
Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 1 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:

a) at the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water Network Plan.

b) the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities, after taking into account the following:
   (i) levied charges for the trunk infrastructure and
   (ii) the trunk infrastructure provided, or to be provided, by the applicant.

c) the details of trunk infrastructure to be provided as shown in the plan (Figure 2- Proposed Water Supply Infrastructure, Upper Kedron) prepared by Queensland Urban Utilities dated 20Nov2014.

d) the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734322200.

e) If additional trunk infrastructure is not eligible for a refund in accordance with s99BRCQ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

86(c) Land Dedication (Trunk Infrastructure)

a) Provide land for Items RES 01 and WPS 01 and associated infrastructure identified in the plan Figure 1- Proposed Water Supply Infrastructure, Upper Kedron.

b) This condition for trunk infrastructure has been applied in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 s99BRCQ (2) (b).

c) Land required for any water or wastewater trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

d) The land for the water or wastewater trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Timing:
After the Council signs the Subdivision Plans for Stages 1 and Stage 2, then prior to the earlier of the following; Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use.

Permit to which these conditions relate: DA SPA Reconfigure a lot, subdivision of land, Stage 1X

87 Demolish or Relocate Buildings
Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings.

Timing:
Prior to any new building work occurring (MCU or BW) or prior to Council’s notation on the plan of subdivision (ROL)

Comment
This is a standard condition and is tied to ensuring the sites are appropriately cleared of existing buildings prior to the creation of the approved development. Prior to any building work occurring is a sufficient time frame without the uncertainty added to timing. The condition has been amended to reflect this.

Proposed Condition

NDN Application I A003905687 I 390 Levitt Road, Upper Kedron Qld 4055
Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings.

Timing: Prior to any new building work occurring (MCU or BW) or prior to Council's notation on the plan of subdivision (ROL).

88 Exclusion of Land for QUU Reservoir Infrastructure
Submit to Council for approval a plan which depicts the location of the QUU Reservoir and associated infrastructure, and excludes the land for the QUU Reservoir and associated infrastructure from the boundary of the Category 1 Corridor to be transferred to Council.

Timing: Prior to lodging the plan of subdivision with the Council for the Council's approval.

89 Approved Drawings & Documents
A legible copy of the approved drawings and documents bearing "Council Approval" and the Development Approval Conditions package is to be available on site.

Note: This condition is imposed to ensure compliance with the development conditions of approval. The copy of the conditions and drawings should be located in any site management office or with the site foreman. Any copies of conditions or drawings that are illegible shall be deemed to be non compliance with this condition of approval.

90 Carry Out The Approved Development
Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s).

Note: This development approval may include the location of fences, retaining walls and/or external walls of buildings on the boundary of a lot. This approval does not constitute permission to enter neighbouring properties to carry out the construction (including associated drainage and earthworks) or maintenance activities. Permission to enter neighbouring properties must be obtained from relevant property owners.

91 Complete All Operational Work
Complete all operational work associated with this development approval, including work required by any of the conditions included in the Conditions Package. Such operational work is to be carried out generally in accordance with the approved drawing(s), and/or documents or, if requiring a further approval from the Council, in accordance with the relevant approval(s).

92 Land for Ecological Corridor (Category 1 Corridor) Infrastructure
Transfer at no cost to the Council, in fee simple and free of encumbrances, land for an ecological corridor as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27 February 2014, which forms the land depicted as Category 1 Corridor on the Approved Plan Proposal Plan Stage 1X Canvey Road, Upper Kedron, drawing number CDW01_UD44A received 2 October 2014. The land to be transferred is to exclude the land for the QUU Reservoir and associated infrastructure.

Timing: Within 3 months of this development approval taking effect.

Standard Advice

93 Concurrence Agency Conditions
The Department of State Development infrastructure and Planning as concurrence agency has imposed the conditions contained in the letter dated 2 December 2014.

94 Construction Noise and Dust Emissions
Pursuant to the Environmental Protection Act 1994, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emission are accordance with the requirements of the Act.

The Environmental Protection Act 1994 prescribes that:
(1) A person must not carry out building work in a way that makes an audible noise—
   (a) on a business day or Saturday, before 6.30a.m. or after 6.30p.m; or
   (b) on any other day, at any time.
(2) The reference in subsection (1) to a person carrying out building work—
   (a) includes a person carrying out building work under an owner-builder permit; and
   (b) otherwise does not include a person carrying out building work at premises used by the person only for residential purposes.

95 Advice Agency Conditions
Powerlink acting as an advice agency for the proposal has imposed conditions contained in the letter dated 18 July 2014.

Permit to which these conditions relate: DA SPA – Reconfigure a Lot, Subdivision of Land, Stage 1A

General / Planning Requirements

96 Demolish or Relocate Buildings
Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings.

Timing: Prior to any new building work occurring (MCU or BW) or prior to Council's notation on the plan of subdivision (ROL).

Comment
This is a standard condition and is tied to ensuring the sites are appropriately cleared of existing buildings prior to the creation of the approved development. Prior to any building work occurring is a sufficient time frame without the uncertainty added to timing. The condition has been amended to reflect this.

**Proposed Condition**
Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings.

**Timing:**
Prior to any new building work occurring (MCU or BW), or prior to Council's notation on the plan of subdivision (ROL).

<table>
<thead>
<tr>
<th>97</th>
<th>Staging of Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 1A cannot be plan sealed until all conditions relating to Stage 1X have been complied with.</td>
</tr>
<tr>
<td></td>
<td><strong>Timing:</strong></td>
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<tr>
<td></td>
<td>All conditions relating to the earlier stage have been complied with.</td>
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</table>

<table>
<thead>
<tr>
<th>98</th>
<th>Approved Drawings &amp; Documents</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>A legible copy of the approved drawings and documents bearing “Council Approval” and the Development Approval Conditions package is to be available on site.</td>
</tr>
<tr>
<td></td>
<td><strong>Note.</strong> This condition is imposed to ensure compliance with the development conditions of approval. The copy of the conditions and drawings should be located in any site management office or with the site foreman. Any copies of conditions or drawings that are illegible shall be deemed to be non compliance with this condition of approval.</td>
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<table>
<thead>
<tr>
<th>99</th>
<th>Carry Out The Approved Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s).</td>
</tr>
<tr>
<td></td>
<td><strong>Note.</strong> This development approval may include the location of fences, retaining walls and/or external walls of buildings on the boundary of a lot. This approval does not constitute permission to enter neighbouring properties to carry out the construction (including associated drainage and earthworks) or maintenance activities. Permission to enter neighbouring properties must be obtained from relevant property owners.</td>
</tr>
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<table>
<thead>
<tr>
<th>100</th>
<th>Complete All Operational Work</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Complete all operational work associated with this development approval, including work required by any of the conditions included in the Conditions Package. Such operational work is to be carried out generally in accordance with the approved drawing(s), and/or documents or, if requiring a further approval from the Council, in accordance with the relevant approval(s).</td>
</tr>
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</table>

**Ecology**

<table>
<thead>
<tr>
<th>101</th>
<th>Submit Vegetation Management Plan</th>
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<tbody>
<tr>
<td></td>
<td>Submit to Development Assessment and receive approval for a Vegetation Management Plan (VMP). The VMP is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation as per the Ecological Assessment Guidelines (referenced on Council’s website) for the protection, retention and/or management of vegetation on the site and in accordance with the approved Vegetation Retention Plan amended in red on 30 October 2014 and include the following information:</td>
</tr>
<tr>
<td></td>
<td>- The extent of the VMP is to include evaluation of all areas including, proposed road reserves, external works and development areas</td>
</tr>
<tr>
<td></td>
<td>- The location and description of existing vegetation at the interface between the development footprint and the Category 1, 2, 3 and 4 Corridors required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, including species and botanical name plus the height and canopy spread</td>
</tr>
<tr>
<td></td>
<td>- The location and extent of all site works including all proposed infrastructure and areas of earthworks</td>
</tr>
<tr>
<td></td>
<td>- Detailed design of all civil works is to be cognisant of environmental values. Alternative solutions may be required in some instances, to protect significant vegetation (e.g. alternative service alignments, variations to batter slopes and tunnel boring)</td>
</tr>
<tr>
<td></td>
<td>- The location and description of all vegetation to be retained and that to be removed</td>
</tr>
<tr>
<td></td>
<td>- Methods of physical identification of trees/vegetation to be retained</td>
</tr>
<tr>
<td></td>
<td>- A description of all measures to be used to protect vegetation and habitat features to be retained during construction, including protective fencing</td>
</tr>
<tr>
<td></td>
<td>- A description of all pruning and tree surgery works (to AS4373/96) to maintain health and stability of trees and reduce potential hazards for future residents</td>
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<tr>
<td></td>
<td>- The location and extent of storage and stockpile areas for cleared vegetation and site mulch</td>
</tr>
<tr>
<td></td>
<td>- A description of all methods to salvage and/or reuse cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works</td>
</tr>
<tr>
<td></td>
<td>- Details of all measures to protect and recover fauna during clearing operations, including: presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures.</td>
</tr>
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<table>
<thead>
<tr>
<th>101(a)</th>
<th>Arrange Pre-start Meeting</th>
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<tbody>
<tr>
<td></td>
<td>Once measures are in place to identify and protect vegetation on site (such as tree protection fencing), arrange a pre-start meeting with the Development Assessment.</td>
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<tr>
<td></td>
<td><strong>Timing:</strong> When protection measures are in place and prior to site / operational / building works occurring</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>101(b)</th>
<th>Implement Approved Plan</th>
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<tbody>
<tr>
<td></td>
<td>Implement and carry out the works in accordance with the approved VMP.</td>
</tr>
<tr>
<td></td>
<td><strong>Timing:</strong> Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL), and then to be maintained</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>101(c)</th>
<th>Certify Approved Works</th>
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<tbody>
<tr>
<td></td>
<td>Submit to Development Assessment certification that the approved VMP has been implemented.</td>
</tr>
<tr>
<td></td>
<td><strong>Timing:</strong> Certification to be submitted upon completion of each phase of the approved VMP</td>
</tr>
</tbody>
</table>
Submit Rehabilitation Plan

Submit to Development Assessment and receive approval for a Rehabilitation Plan. The Rehabilitation Plan is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation that includes at least the following information for the area identified on Concept Rehabilitation Plan amended in red 30/10/2014: This Rehabilitation Plan is to include all rehabilitation works for stages 1A, 1B, and 1C as identified on Proposal PlanStage One Overall Canvey Road, Upper Kedron (Drawing No. CDW01_44C) as amended in red.

- Description of proposed rehabilitation, including earthworks, restoration methods (revegetation and assisted regeneration where appropriate);
- Details of the proposed rehabilitation schedule, staging, including site preparation, planting and establishment; plant species names, stock size, quantities, locations; a maintenance program (5 years) for all rehabilitation works;
- Details of rehabilitation outcomes; performance monitoring and assessment (minimum 9 visits within the first 24 months every 4 to 6 weeks); survival thresholds (minimum 90% survival required); replacement planting triggers (minimum requirement to keep survival above 90% and replacement within 4 weeks of issue being identified); target minimum tree height and canopy cover to be achieved at the end of 5 year maintenance period;
- Stabilisation methods for all areas of exposed soil surface;
- Details of special habitat features to be provided for the enhancement/restoration of habitat values including: coarse woody debris (e.g. root balls; hollows; logs; branches) to be salvaged from clearing activities and reused; nest boxes (best industry practice). A minimum of 10 boxes per ha required to be installed in dedication corridors to achieve a hollow density of 32 hollows per ha. Additional nest boxes will be required in areas having a low natural hollow density. Consultation with an experienced fauna consultant is required to determine the location and type of nest box required, and appropriate nest box density for each area of corridor to be dedicated; nest box installation and maintenance, monitoring and reporting will also be required over a 5 year maintenance period. Habitat features such as nest boxes are to be provided for each stage during preparation works for site rehabilitation.
- Specification notes on site preparation; plant quality assurance including local provenance; plant stock handling; planting methodology; mulching; threat management (including tree guarding 1.600mm corflute with hardwood stake; watering as required to prevent plant stress); weed management; tree guard removal and maintenance; establishment and maintenance. All restoration works are to be in accordance with the SEQ Ecological Restoration Framework and industry best practice.
- Evidence that the rehabilitation plan has been prepared by a bushland restoration specialist/ecologist with a minimum of 5 years experience in ecological restoration.
- Evidence that the delivery of rehabilitation works will be undertaken by a bushland restoration specialist with a minimum of 5 years experience in ecological restoration.

Bushland restoration works to target areas that are currently deficient of an existing vegetation structure and floristic composition that is commensurate with the Regional Ecosystem identified on the site or an alternative Regional Ecosystem as determined by a suitably qualified and experienced bushland restoration practitioner or Ecologist with a minimum of 5 years experience in ecological restoration.

Rehabilitation methods must use a bushland restoration approach that will ultimately aim to achieve a vegetation structure and floristic composition commensurate with the Regional Ecosystem identified on the site. This will be achieved by including the establishment of as many flora species from all strata (tree, shrub, and ground layer) as commercially available; removal and management of all exotic flora species considered during the vegetation survey; and the establishment of vegetation consistent with the Regional Ecosystem identified on the site or an alternative Regional Ecosystem as determined by a suitably qualified and experienced bushland restoration practitioner or Ecologist with a minimum of 5 years experience in ecological restoration.

Alternative regional ecosystems may be appropriate for areas with landforms influenced by unnatural levels of soil moisture or altered landform.

Regional Ecosystems Technical Descriptions and Biocondition Benchmarks documentation will be used to guide planting density, flora species selection, flora species dominance and distribution. Planting densities higher than those recorded in Regional Ecosystem Technical Descriptions will be appropriate in more open areas to account for 10% mortality and to assist with the development of a robust canopy.

102(a) Implement Approved Plan

Carry out rehabilitation works in accordance with the approved Rehabilitation Plan.

Timing: While site/operational/building work is occurring and then to be maintained

102(b) On Maintenance Inspection

Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:

- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans. Timing: Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL)

102(c) On Maintenance Period

Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing: 5 years from acceptance of on maintenance period

102(d) Off Maintenance Inspection

NDN Application | A003905687 | 390 Levitt Road, Upper Kedron Qld 4055
On completion of the maintenance period, contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:**
On completion of the maintenance period

<table>
<thead>
<tr>
<th>103</th>
<th>Fauna Spotter</th>
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<tbody>
<tr>
<td><strong>103(a) Prior to Vegetation Clearing</strong></td>
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<tr>
<td>Clearing operations and other site works must not commence until the Fauna Spotter has certified that the site has been fully inspected and any necessary fauna protection measures or relocation procedures implemented. Submit to Development Assessment a Fauna Spotter Report to demonstrate compliance with this condition.</td>
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</table>

| 103(b) Fauna Spotter on Site |
| The Fauna Spotter is to be present on site during all clearing operations to monitor works and respond to any situations that may arise as determined by Development Assessment, based on the findings of the Fauna Spotter's pre-clearing certification report. |

| 103(c) Fauna in Work Area |
| If any animals are identified in trees to be removed during clearing operations, work shall cease immediately on that tree. The Fauna Spotter must supervise the relocation of any identified animal prior to clearing operations recommencing. |

| 103(d) Certification |
| Provide certification that works have been undertaken in accordance with this condition. |

| 104 | Natural Assets Local Law (NALL) – On Site |
| Lodge and receive approval from Development Assessment, an application to Carry Out Works on Protected Vegetation on the site. |

| 105 | Submit Wildlife Movement Solutions Plan |
| Submit to Development Assessment and receive approval for a Wildlife Movement Solutions Plan (WMSP). The WMSP is to include an overall plan of all Wildlife Movement Solutions (WMS) planned for the development including the WMS identified on the Wildlife Movement Solutions Concept Plan amended in red on 31/10/2014. Detailed design drawings are required for each development stage with WMS infrastructure. Submit an overall WMSP and detailed WMSP and report for Stage 1A outlining wildlife movement solutions infrastructure in conjunction with operational work programs. Obtain approval from the Delegate, Development Assessment for the detailed report and plans. |

The detailed design for each structure is to be in the form of scaled plans and supporting documentation. Design options must be integrated with required exclusion fencing and include warning signage at crossing points. The detailed designs must also be generally in accordance with the Fauna Sensitive Road Design Manual - Volume 2: Preferred Practices developed by the Department of Mains Roads. The plans must include, but not be limited to, the following information:

- Description of the fauna enclosure/movement fences
- Location of warning signage at crossing points
- Description of location, dimensions and openness of the structure to enable wildlife to enter the structure
- Description of the topography and vegetation type to be planted at entry points to the culverts
- The vegetation must attract target species (wallabies, possums, koalas, echidnas, etc.) to the structure and provide food source and shelter. Clear and workable plans representing rehabilitation on the ground including details of the proposed rehabilitation schedule, staging, plant species, stock size, densities, quantities and locations
- Description of proposed rehabilitation, including earthwork, methods and objectives
- A detailed 5 year maintenance period and monitoring program is to be provided to maintain the vegetation at the entry points to the culverts
- Include details of special habitat features to be provided for the enhancement/restoration of habitat values
- Description of the weed management program
- Details of associated fauna furniture must be included to provide opportunities for a broad range of species to roads

| 105(a) Implement approved plan |
| Construction of the wildlife movement solutions and the road network is to occur in accordance with approved designs. |

**Timing:** While site/operational/building work is occurring and then to be maintained

| 105(b) On Maintenance Inspection |
| Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to Council
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans. |

**Timing:** Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL)

| 105(c) On Maintenance Period |
| Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period. Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council. |

**Timing:** 5 years from acceptance of on maintenance period

| 105(d) Off Maintenance Inspection |
| On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection. |

**Timing:** On completion of the maintenance period
106 Arboricultural Requirements
The following arboricultural requirements are to be performed to ensure the long-term health and safety of trees to be retained:

106(a) Site Works
In consultation with Development Assessment, the Arborist is to direct the civil works contractor in relation to any service installation activities utilising alternative technologies such as directional-boring or under-boring using vacuum excavation or air-spade. The Arborist must be a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture).

106(b) Certification
Submit to Development Assessment, certification from a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) that all necessary arboricultural works have been carried out in accordance with the requirements of all parts of this condition.

106(c) Vegetation Pruning
Any necessary pruning, tree surgery and other maintenance works to maintain health and stability of any trees to be retained, and to reduce potential hazards for future residents, is to be carried out in consultation with Development Assessment.

All works must be performed by a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) in accordance with the Australian Standard 4373/96 for Pruning of Amenity Trees.

107 Land for Ecological and Waterway Corridors Infrastructure
Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27 February 2014, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red). With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances.

Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

Comment
We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced Infrastructure Agreement.

Proposed Condition
Land for Ecological and Waterway Corridors Infrastructure
Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red).

With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances.

Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

108 Bushfire Management Plan
i) Implement and carry out the works in accordance with approved Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014;

ii) Submit certification to Development Assessment certifying that the approved Bushfire Management Plan has been implemented.

109 Stormwater Quality - Submit Management Plan
Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SBSMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/0 Healthy Waters, the State Planning Policy 4/0 Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010. The water quality treatment strategy is to be generally in accordance with approved plan B14159.W-SK01 'concept Stormwater Quality Management Plan For Stage 1 & 2' by Brown Consulting QLD dated 14th October 2014. The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, build-outs or other speed control devices) in the streetscape of all areas within Stage 1A, 1B, and 1C consisting of street tree pits, and bioretention basins.

Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap.

109(a) Implement Approved Plan
Implement and maintain the approved Site Based Stormwater Quality Management Plan.

109(b) Certification
Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.

Comment
The BCC has amended in redmarkups on the concept stormwater management plan suggests that additional at source treatment devices, beyond those already incorporated into the stormwater strategy are necessary for the development. It is considered that this is unnecessary for Stage 1A, 1B and 1C, and therefore seek the removal of references relating to at source treatment for these stages.

The Stage 2 conditions seek to restrict constructing services through these devices, which is unnecessary as it forms part of the infrastructure of the development.

We additionally seek the removal of the references requiring Gross Pollutant Traps (GPTs) being required for all basins. The inclusion of these devices adds unnecessary expense and maintenance burden on Council stormwater infrastructure in locations that have been determined that GPTs are unnecessary.

This condition has been amended to reflect these points as provided below.

Proposed Condition
Stormwater Quality - Submit Management Plan
Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan.
Landscape Architecture & Open Space Planning

110 Landscape Works in Corridor

Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

Submit Plan for Works in Corridor

Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the, the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and the approved drawings from Landscape Concept 1 Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK176. The Landscape Management and Site Works Plan must document the following:

EXISTING SITE CONDITIONS
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

SITE PREPARATION
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

NEW WORKS
- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embankments chosen from Council’s standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontages to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Listing of all proposed plants by botanical name, quantity and size at time of planting.

COSTING AND MAINTENANCE PROGRAM

The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

Timing:

Prior to site/operational work commencing
EXISTING SITE CONDITIONS

Site Works Plan must document the following:

SITE PREPARATION

110(d) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance:

- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

Timing:
Prior to commencement of use (MCU) or prior to Council notation on the plan of subdivision (ROL)

110(e) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond.
Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing:
On completion of the maintenance period

Proposed Condition
Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

Submit Plan for Works in Corridor
Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the, the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and generally in accordance with the approved drawings Landscape Concept 1 Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK17b The Landscape Management and Site Works Plan must document the following:

EXISTING SITE CONDITIONS
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

SITE PREPARATION
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
NEW WORKS
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Await clarification from Council prior to amending this wording Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

NEW WORKS
- Corridor embellishments chosen from Council’s standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of one electricity and water connections to the corridor for each associated stage;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

COSTING AND MAINTENANCE PROGRAM
The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

Timing:
Prior to site/operational work commencing

110(b) Pre Start Meeting
Arrange with Development Assessment for a Pre Start meeting.

Timing:
Prior to site/operational work commencing

110(c) Construct Approved Works
Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

Timing:
Prior to acceptance of works on maintenance

110(d) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

Timing:
Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

110(e) On Maintenance Period
Provide 2 year maintenance to the landscape works and 5 years maintenance to the rehabilitation works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing:
2 year maintenance to the landscape works and 5 years to the rehabilitation works from acceptance of on maintenance period

110(f) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing:
On completion of the maintenance period
111(a) Submit Earthworks Plan
Submit to Asset Services and receive approval for a Street Tree Plan that provides details of street tree planting. Provide trees to all street frontages at spacings complying with the relevant Brisbane Planning Scheme Codes/Policies, or a minimum of one (1) tree per additional allotment frontage, whichever is the greater.

111(b) Maintain Tree(s)
Maintain street trees for a period of 12 months after planting. At the end of the 12 month maintenance period contact Asset Services to arrange an Off Maintenance inspection.

112 Landscape Works in Road Reserve
Provide Landscape Works to contribute to the amenity of the development:

112(a) Submit Detailed Plan
Submit to the Development Assessment and receive approval for a detailed Landscape Plan for works in the road reserve. The plan is to be prepared at a scale of 1:100 by a suitably qualified and experienced Landscape Architect, and must comply with the relevant Brisbane Planning Scheme Code/Policy. The plan must include the following:
- The extent of proposed soft and hard landscape within proposed Council land
- Location and description of fencing, retaining walls, entry statements, bollards, etc.
- Existing and proposed finished levels to external works particularly in critical areas (eg. top and toe of retaining walls and steps)
- Description/details of critical design elements where applicable (eg. proposed surface treatments, stabilisation of batters, water features, etc)
- Landscape treatments to storm water devices, revegetated areas, buffers, roundabouts, swales etc.
- Basic specification notes on plan for all proposed landscape works
- RPEQ certified drawings for structural work where required

112(b) Implement the Approved Plan
Carry out the works in the approved detailed Landscape Plan.
Timing: Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL)

112(c) On Maintenance Inspection
Contact Development Assessment to arrange an On Maintenance inspection. The following information is to be provided to Development Assessment prior to the on-maintenance inspection:
- Certification by a registered Professional Engineer (with demonstrated structural experience) for all new structures requiring construction certification
- Evidence of Public Liability Insurance.
Timing: Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL)

112(d) Maintenance Period
Provide 12 month’s maintenance to the works from the time the works are accepted On-Maintenance by Council. Maintain the landscape in accordance with an approved maintenance program and rectify all defects identified at the On-Maintenance inspection and those arising during the maintenance period. Lodge a bond for the maintenance period. The bond is to be calculated in accordance with the relevant Brisbane Planning Scheme Codes/Policies. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.
Timing: From acceptance of On Maintenance period

112(e) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.
Timing: On completion of the maintenance period

Engineering

113 Filling and Excavation
All proposed earthworks are to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the following requirements:

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council’s assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

113(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, checked and certified by a Registered Professional Engineer of Queensland - Civil (RPEQ-Civil).

The Earthworks Plan should include the following:
- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

113(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

113(c) Implement Endorsed Plan
Contract and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

Comment
We seek the following amendments to the wording of this condition to reflect the performance based design solutions proposed in the engineering services report submitted as part of the development application. During assessment of the application Council confirmed their support for performance based design solutions for construction, where the standard Council codes and design standards could not be achieved. It is considered that the amended wording reflects this position and appropriately references the performance based outcomes that have been discussed and resolved with Council.

Filling and Excavation
All proposed earthworks are to be carried out generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies where possible and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council's assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

113(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, 'Civil Engineering Services Report B14159: CER01.AN,jm(Revisions D)' by Brown Consulting QLD dated 9th August 2014 checked and certified by a Registered Professional Engineer of Queensland - Civil (RPEQ-Civil).

The Earthworks Plan should include the following:
- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

113(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

113(c) Implement Endorsed Plan
Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

Construction Management Plan
Prepare a Construction Management Plan for the subject site in accordance with the following requirements.
114(a) Construction Management Plan - For Endorsement
Submit to Development Assessment for endorsement, a Construction Management Plan for the demolition, excavation and construction phases of the approved development. Separate Construction Management Plans may be appropriate for the individual components. The Construction Management Plan is to be in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Workplace Health and Safety Legislation requirements, Environmental Protection Act, the requirements of any Concurrence Agency and any other relevant legislative requirements. The Construction Management Plan is to provide the following details and address impacts, where applicable:
- The anticipated staging for bulk earthworks and the construction works programme;
- Provision for pedestrian management including alternative pedestrian routes, past or around the site;
- Location of and impacts on any Council or other authority’s assets on and external to the site. Council assets include water, sewer, stormwater, street trees and kerb side allocation signs and line marking such as bus stops, loading zones and parking meters and/or ticket dispensers. Details of street trees are to include location, species, trunk and canopy size;
- Temporary vehicular access points and frequency of use;
- Existing and proposed kerb-side allocation signs and line marking (such as bus stops, loading zones and parking meters and or ticket dispensers);
- Provision for loading and unloading materials including the location of any remote loading sites;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- How materials are to be loaded/unloaded and potential impacts on existing street trees;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- Location of proposed external hoardings and gantries;
- Employee and visitor parking areas;
- Anticipated staging, programming;
- Provision for fire exit routes for other uses on the subject or adjoining sites;
- Details that identify and define phases of construction considered necessary to be conducted out of normal business hours (where normal hours are defined as Monday to Saturday between 6:30am and 6:30pm excluding public holidays).
Notes.
- Approval for footpath closures and/or temporary vehicle access will only be considered where it can be demonstrated that no reasonable alternative can be provided due to site constraints and that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are not compromised.
- Proposed arrangements utilising any part of the road reserve for construction related activities, for example,

114(b) Construction Management Plan - Pre- start Meeting
Arrange a pre- start meeting with the Development Assessment.

114(c) Construction Management Plan - Works in Road
Obtain relevant approvals to carry out any works within the road reserve required by the approved Construction Management Plan:
- Temporary lane closures;
- Restricted work zones (subject to relaxation of clearway hours and resolution of alternate kerb side allocation including bus zones);
- Overcoming clearway restrictions;
- Gantry erection.
Notes.
- Applications will be assessed on the basis of road and footpath network operating conditions prevailing at the time. Council will consider impacts of other construction works or events that occur during the life of the permit.
- All fees are to be paid in full prior to any permit being granted by Council. Council may revoke any permits at any time for non-compliance with requirements or if it considers that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are likely to be compromised during the construction project.

114(d) Construction Management Plan - Plans on Site
Legible copies of the Construction Management Plan and current permits are to be kept on site and be made available on request at all times during construction.

114(e) Construction Management Plan - Out of Hours Works to be Performed
Notify Development Assessment for any work activity identified broadly in the endorsed Construction Management Plan to be conducted out of normal business hours 6:30am and 6:30pm Monday to Saturday.

114(f) Construction Management Plan - Implement the Plan
Subject to the provisions of this condition, implement and maintain the approved Construction Management Plan.

115 On-site Erosion (high risk)
Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

115(a) Prepare ESC Plan and Program
Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.

Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council’s Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

Timing:
<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
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</table>
| 115(b) Implement Certified ESC Plan and Program | Implement the certified ESC plan(s) and Program, and provide design and inspection certificates and program of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control.

The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:** While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

**Comment:** It is considered unnecessary to require sediment and erosion control measures to be certified by both RPEQ and CPESC, as such we have amended the condition to reflect the most appropriate certified engineer to sign off on these aspects of the development.

Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council’s Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

**Timing:** Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

<table>
<thead>
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</table>
| 115(a) Prepare ESC Plan and Program | Prepare Erosion and Sediment Control (ESC) Plan(s) and Program, and provide design and inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control.

The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:** While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
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<tbody>
<tr>
<td>116</td>
<td>Protect Existing Infrastructure</td>
</tr>
</tbody>
</table>
| 116(a) As Constructed Drawings | Submit to Development Assessment “As Constructed” drawings including an asset register, showing all new and/or rectification works required by this condition. These works must be certified by a Registered Professional Engineer of Queensland-Civil that they are in accordance with the relevant Brisbane Planning Scheme Codes/Policies and any other relevant infrastructure requirements.
| 117  | Waterway Corridor |
| 118  | Dedicate As Road - Non Trunk |
| 119  | Provide Certified Site Survey Levels |
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

(i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.

(ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.

(iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall.

(iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.

(v) Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.

(vi) Retaining walls that retain fill and are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall unless an alternative has been approved by Council.

(vii) Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.

(viii) Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

(ix) Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

121(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

Comment
The proposal plans that have been approved by Council do not nominate the location of anticipated guard rails on the top of retaining walls. In some areas having a minimum 500mm setback for a guard rail may negatively impact on the design outcome. As such we have sought changes to the wording of this condition to provide sufficient flexibility for alternative design solutions to be considered in order to appropriately respond to the uniqueness of this site.

Additionally amendments to the wording of this condition area sought in relation to intra-block retaining walls. In order to limit the extent of dead-space between allotments it is sought to increase the maximum height of a retaining wall to 3m (as has been discussed with Council) and limit the stepping requirements to one third of the height, rather than the conditioned half the height. It is considered that this will be a better design outcome and solution in the instances where retaining walls greater than 1.5m are required.

The amendments to the condition are provided below.

<table>
<thead>
<tr>
<th>Proposed Condition Retaining Walls</th>
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</thead>
<tbody>
<tr>
<td>Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:</td>
</tr>
<tr>
<td>(i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.</td>
</tr>
<tr>
<td>(ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.</td>
</tr>
<tr>
<td>(iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall.</td>
</tr>
<tr>
<td>(iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than ( \frac{3}{5} ) 3.0m in height are to be vertically and horizontally tiered by a dimension of ( \frac{1}{5} ) one third of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.</td>
</tr>
<tr>
<td>(v) Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.</td>
</tr>
<tr>
<td>(vi) Retaining walls that retain fill and are greater than ( \frac{3}{5} ) 3.0m in height are to be vertically and horizontally tiered by a dimension of ( \frac{1}{5} ) one third of the height of the retaining wall unless an alternative has been approved by Council.</td>
</tr>
<tr>
<td>(vii) Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.</td>
</tr>
<tr>
<td>(viii) Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.</td>
</tr>
<tr>
<td>(ix) Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.</td>
</tr>
</tbody>
</table>

121(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

122 Granting Easements
Grant the following easements:

i. Easements for underground drainage, overland flow and access purposes as may be required, in favour of Brisbane City Council.

ii. Easements over that part of Stages 1A, 1B, 1C and 1D within the proposed Waterway Corridors affected by the 100 year Average Recurrence Interval (ARI) flooding, in favour of Brisbane City Council.

NDN Application 1 A003905687 390 Levitt Road, Upper Kedron Qld 4055
123 Service Crossings of Waterways  
All service crossings of creek/waterways are to be located below ground level or attached to an approved crossing structure (e.g., road crossing) where located within the 100 year ARI flood extent. This is to ensure these crossings do not impede floodwaters or create scour of the creek/waterway and to protect the service against damage by flood debris.

124 Minimum Floor or Pad Levels  
Design and construct all proposed pad levels and roads to have the appropriate freeboard in accordance with Brisbane Planning Scheme Codes/Policies to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI Creek/waterway flood event, whichever is the higher flood level. Flood immunity requirements for other development (including relevant infrastructure, floor levels, parks, substations and ancillary structures) is to meet the requirements of Brisbane Planning Scheme Codes/Policies. (Note: flooding within all Category 1, 2 and 3 waterways and Cedar Creek is defined as Creek/waterway flooding for the purpose of this condition).

125 Flooding & Stormwater Detention  
Construct the Stage 1 North Detention area and Stage 1 South waterway crossing in accordance with the approved Flood Investigation report (Issue B) prepared by Brown Consulting QLD and dated 14th October 2014, ensuring:

(i) culvert crossings of waterways utilise reinforced concrete box culverts, arch culverts or bridges in accordance with Council’s Natural Channel Design Guidelines,
(ii) culverts incorporate debris deflectors headwalls to minimise blockages and incorporate scour control at inlets and outlets,
(iii) roads on embankments of stormwater detention areas are designed to be safe for a minimum 500 year ARI flow,
(iv) stormwater detention areas are designed to reduce access to the public by incorporating (where required) appropriate fencing, batter grades, depth markers and flood warning signs to ensure safety of the public.

Timing:
   a) For construction of the Stage 1 North Stormwater Detention area prior to Council’s notation of the plan of subdivision (ROL) for Stage 1A, 1B or 1C whichever is the earliest; and
   b) For construction of the Stage 1 South waterway crossing prior to Council’s notation of the plan of subdivision (ROL) Stage 1A.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

125(a) Submit Flood Study  
Submit and obtain endorsement from Development Assessment for an updated Flood Study prepared and certified by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies, QUDM and Australian Rainfall and Runoff. The flood study is to be specific to Stage 1 and Stage 2 local flooding within the waterways and the Stage 1 North and Stage 1 South stormwater detention areas (as noted within the approved Flood Investigation by Brown Consulting QLD) and incorporate design earthworks, details for all detention basin outlets and provide a severe storm analysis as per QUDM requirements.

Timing: Prior to site/operational/building work commencing.

125(b) Submit Drawings for Endorsement  
Submit and obtain endorsement from Development Assessment, engineering drawings for the Stage 1 North detention area and Stage 1 South waterway crossing (as nominated in the approved Flood Investigation report (Issue B) by Brown Consulting QLD and dated 14th October 2014) prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing

125(c) Implement Approved Drawings  
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

Timing: Prior to On-Maintenance Inspection

125(d) Submit "As Constructed" Plans  
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing: Prior to On Maintenance Inspection

125(e) On Maintenance Acceptance  
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

Timing: Prior to On-Maintenance Acceptance
<table>
<thead>
<tr>
<th>125(f) Off Maintenance Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.</td>
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<tr>
<td>Timing:</td>
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<tr>
<td>On completion of the maintenance period.</td>
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<tr>
<th>125(g) Geotechnical Certification</th>
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<tbody>
<tr>
<td>Submit to Development Assessment a geotechnical report with testing, recommendations and certification by a Registered Professional Engineer of Queensland (Geotechnical) that supports the design and construction of the Stage 1 North and South stormwater detention area embankments and road crossings. The geotechnical report is to certify that the detention basin embankments have been suitably designed to safely manage expected hydrostatic and hydrodynamic loads associated with ponding of stormwater behind the embankments to prevent failure (including piping failures).</td>
</tr>
<tr>
<td>Timing:</td>
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<tr>
<td>Prior to site/operational/building work commencing.</td>
</tr>
</tbody>
</table>

**Proposed Condition**

Construct the Stage 1 North Detention area and Stage 1 South waterway crossing in accordance with the approved Flood Investigation report (Issue B) prepared by Brown Consulting QLD and dated 14th October 2014, ensuring:

1. Culverts crossings of waterways utilise reinforced concrete box culverts, arch culverts or bridges in accordance with Councils Natural Channel Design Guidelines.
2. Culverts incorporate debris deflector headwalls to minimise blockages and incorporate scour control at inlets and outlets.
3. Roads on embankments of stormwater detention areas are designed to be safe for a minimum 500 year ARI flow.
4. Stormwater detention areas are designed to reduce access by the public to these areas and incorporate (where required) appropriate fencing, batter grades, depth markers and flood warning signs to ensure safety of the public.

**Timing:**
- a) For construction of the Stage 1 North Stormwater Detention area prior to Council’s notation of the plan of subdivision (ROL) for Stage 1A, 1B or 1C whichever is the earliest; and
- b) For construction of the Stage 1 South waterway crossing prior to Council’s notation of the plan of subdivision (ROL) Stage 1A.

**Note:**
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

<table>
<thead>
<tr>
<th>125(a) Submit Flood Study</th>
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<tbody>
<tr>
<td>Submit and obtain endorsement from Development Assessment for an updated Flood Study prepared and certified by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies, QUDM and Australian Rainfall and Runoff. The flood study to be specific to Stage 1 and Stage 2 local flooding within the waterways and the Stage 1 North and Stage 1 South stormwater detention areas (as noted within the approved Flood Investigation by Brown Consulting QLD) and incorporate design earthworks, details for all detention basin outlets and provide a severe storm analysis as per QUDM requirements.</td>
</tr>
<tr>
<td>Timing:</td>
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<tr>
<td>Prior to site/operational/building work commencing.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>125(b) Submit Drawings for Endorsement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit and obtain endorsement from Development Assessment, engineering drawings for the Stage 1 North detention area and Stage 1 South waterway crossing (as nominated in the approved Flood Investigation report (Issue B) by Brown Consulting QLD and dated 14th October 2014) prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.</td>
</tr>
<tr>
<td>Timing:</td>
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<tr>
<td>Prior to site/operational/building work commencing.</td>
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<thead>
<tr>
<th>125(c) Implement Approved Drawings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted “on maintenance” and “off maintenance” as a Council asset, by Development Assessment.</td>
</tr>
<tr>
<td>Timing:</td>
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<tr>
<td>Prior to On-Maintenance Inspection</td>
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<table>
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<tr>
<th>125(d) Submit As Constructed Plans</th>
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<tbody>
<tr>
<td>Submit “As Constructed” plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.</td>
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<td>Timing:</td>
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<tr>
<td>Prior to On Maintenance Inspection</td>
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</table>

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<tr>
<th>125(e) On Maintenance Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the following in relation to the on maintenance acceptance of the asset:</td>
</tr>
<tr>
<td>- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment.</td>
</tr>
<tr>
<td>- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works at the time of Operational Works assessment.</td>
</tr>
<tr>
<td>- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies.</td>
</tr>
<tr>
<td>- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.</td>
</tr>
</tbody>
</table>
125(f) Off Maintenance Acceptance
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

Timing:
On completion of the maintenance period.

125(g) Geotechnical Certification
Submit to Development Assessment a geotechnical report with testing, recommendations and certification by a Registered Professional Engineer of Queensland (Geotechnical) that supports the design and construction of the Stage 1 North and South stormwater detention area embankments and road crossings. The geotechnical report is to certify that the detention basin embankments have been suitably designed to safely manage expected hydrostatic and hydrodynamic loads associated with ponding of stormwater behind the embankments to prevent failure (including piping failures).

Timing:
Prior to site/operational/building work commencing.

126 Stormwater Outlets in Waterways
Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline \textit{Stormwater Outlets in Parks and Waterways 2003}. Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings.

Timing:
Prior to On-Maintenance Acceptance.

127 Stormwater - Hydraulic Report
Construct the development in accordance with the approved concept Site Based Stormwater Management Plan prepared by Brown Consulting, Document Reference: BI4159.W-05A dated 14th October 2014 (as amended in red).

127(a) Certification
Provide certification from a Registered Professional Engineer Queensland that the development has been constructed in accordance with the approved hydraulic report.

128 Construct Footpath Non-Trunk
Construct a 1.2 metre wide footpath to the following:
(i) Along one side of all 16 metres wide neighbourhood access roads.
(ii) Along the entire site frontage of Canvey Road.
(iii) Along both sides of the new District Access Road (Canvey Road extension), all in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Notes:
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

128(a) Submit As Constructed Plans
Submit to Development Assessment “As Constructed” plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with relevant Brisbane Planning Scheme Codes/Policies.

Timing:
Upon completion of the work.

129 Refuse Collection - Kerb Side (external road or internal private road)
Refuse and recycling bins for the proposed development are to be collected from the kerb side unless alternative refuse collection arrangements are made with Brisbane City Council/Waste Services. Bin collection pads are to be constructed, for purposes of storing the bins on collection days, as may be required for the rear lots. The pads are to be located behind the kerbs, alongside the rear access pavement, measuring 2.0m x 0.8m (catering for 1 general and 1 recycling bin) for each dwelling.

130 Works for Transport Infrastructure - Non-Trunk External Roadworks
Provide the following non-trunk roadworks with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

a) Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL):
   (i) Construct new Type D concrete kerb and channel and associated drainage along the site frontage of Canvey Road, on a 4.25 metres alignment, taking into account the required road reserve widening to achieve overall road reserve width of 24.0 metres for Canvey Road.
   (ii) Construct Type D road pavement from the lip of the new kerb and channel to the edge of the existing road pavement to Canvey Road frontage with any appropriate tapers (the minimum width of road construction/reconstruction is to be 1.2 metres.
   (iii) Provide appropriate intersection treatment including modification to the existing or construction of new median islands at intersections, as may be required and applicable, due to the new road pavement widening and extension works.
   (iv) Provide signs and pavement markings to the new roadworks along the site frontage of Canvey Road.

Note: The above external roadworks to Canvey Road frontages for Stage 1B, 1C and 1D may have to be constructed in the earlier stages subject to detailed design in the Functional Layout Plans and Roads and Drainage plans to facilitate lawful point of discharge.

b) Prior to the completion of the development of Stage 1 or 180 lots, whichever is the earliest:
   (i) Works for the upgrade and signalisation of the intersection at Upper Kedron Road/Cemetery Road, generally in accordance with the Conceptual Signalised Intersection Upgrade Works Plan, TTM Reference 14BRT0323-04, dated 14 Oct 2014. The upgrade to the intersection is to include road works to obtain a satisfactory sight distance to the left for vehicles exiting Cemetery Road into Upper Kedron Road.
   (ii) Works for the upgrade and signalisation of the intersection of Upper Kedron Road/Hogarth Road, generally in accordance with Conceptual Signalised Intersection Upgrade Works Plan TTM Reference 14BRT0323-04, dated 14 Oct 2014.
Note: All signalised intersections are required to be designed in accordance with Austroads Part 4A-Unsignalised & Signalised Intersections Design Guidelines. The traffic signal designs need to be approved by the CRU-Signals Operations Section prior to being submitted at the Operation Works stage.

c) Prior to the completion of the development of Stage 1 or 180 lots within the Subject Site, which ever is the earlier:
   
   (i) Works for the widening of Canvey Road on the south approach to Charolais Crescent roundabout to a District Access road standard.
   
   (ii) Construct a Type C pavement and kerb and channel in Hogarth Road on southern approach to McGinn Road

Notes:
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

### 130(a) Submit Functional Layout Plans
Submit separate functional layout plans showing:

- The extent of the external roadworks; and
- The signal infrastructure layout.

Obtain Preliminary Approval from Development Assessment.

**Timing:**
Prior to the submission of Roads & Drainage, Signs & Pavement Marking, and Signals Design drawings.

### 130(b) Submit Roads and Drainage Plans
Submit and obtain endorsement from Development Assessment Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
Prior to site/operational/building work commencing

### 130(c) Submit Traffic Signal Design Plans
Submit and obtain endorsement from Development Assessment Traffic Signal Design Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil. The Signal Design plans are to be signed by Council's Transport & Traffic, Signals Management Section prior to lodgement.

**Timing:**
Prior to site/operational/building work commencing

### 130(d) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment, Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
Prior to site/operational/building work commencing

### 130(e) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off- maintenance" as a Council asset, by Development Assessment.

**Timing:**
Prior to On-Maintenance Inspection

### 130(f) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**
Prior to On Maintenance Inspection

### 130(g) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On- Maintenance inspection and those arising during the maintenance period.

**Timing:**
Prior to On- Maintenance Acceptance

### 130(h) Off Maintenance inspection
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

Timing:
On completion of the maintenance period

Comment
The condition specifies the Type D pavement profile for external roadworks upgrades. This profile is in direct conflict with the existing pavement profile which has been constructed in accordance with the previous standard (being a flexible pavement). It is considered unreasonable to condition external upgrade works to roads to be in accordance with a differing road profile from that of the existing road. As such appropriate amendments to the conditions are sought, as below, to provide the flexibility for each external upgrade required to be undertaken to the same profile and pavement type as that existing in that location.

This condition further requires frontage works to Canvey Road in relation to Stage 1D. Stage 1D is the creation of a large future development allotment, and as such is subject to a future Development Application in accordance with the provisions of this preliminary approval. As such, it is considered unreasonable to require upgrade works to be undertaken to the frontage of Canvey Road (adjoining Stage 1D) as part of this ROL. The future application for the use of land within Stage 1D is the most appropriate time to require these works, to avoid duplication of works, or the undertaking of works that will need to be redone as part of future development. The condition has been amended accordingly below.

Council have also sought the submission of road functional plans separate to the lodgement of OPW applications for roadwork. This is considered unreasonable, given a road hierarchy plan has been provided as part of the Development Application package, and that there is no benefit of separating the road functional plan assessment from the OPW assessment of the detailed design. The condition has been amended below to remove this additional unreasonable requirement.

Finally, this condition also requests providing a minimum 12 month maintenance period to works and is then contradicted by the timing provisions (prior to on-maintenance acceptance). The intent of the condition in relation to maintenance periods and timing is appropriately covered under the off-maintenance provisions, and as such the condition has been amended to reflect this.

Proposed Condition
Works for Transport Infrastructure - Non-Trunk External Roadworks
Provide the following non-trunk roadworks with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

a) Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL):
   (i) Construct new Type D concrete kerb and channel and associated drainage along the site frontage of Canvey Road, on a 4.25 metres alignment, taking into account the required road reserve widening to achieve overall road reserve width of 24.0 metres for Canvey Road.
   (ii) Construct Type D road pavement from the lip of the new kerb and channel to the edge of the existing road pavement to Canvey Road frontage with any appropriate tapers (the minimum width of road construction/reconstruction is to be 1.2 metres The construction standard is to adopt the same pavement profile type as the existing constructed road.
   (iii) Provide appropriate intersection treatment including modification to the existing or construction of new median islands at intersections, as may be required and applicable, due to the new road pavement widening and extension works.
   (iv) Provide signs and pavement markings to the new roadworks along the site frontage of Canvey Road.

Note: The above external roadworks to Canvey Road frontages for Stage 1B, and 1C and 1D may have to be constructed in the earlier stages subject to detailed design in the Functional Layout Plans and Roads and Drainage plans to facilitate lawful point of discharge.

b) Prior to the completion of the development of Stage 1 or 180 lots, which ever is the earliest:
   (i) Works for the upgrade and signalisation of the intersection at Upper Kedron Road/Cemetery Road, generally in accordance with the Conceptual Signalised Intersection Upgrade Works Plan, TTM Reference 14BRT0323-04, dated 14 Oct 2014. The upgrade to the intersection is to include road works to obtain a satisfactory sight distance to the left for vehicles exiting Cemetery Road into Upper Kedron Road.
   (ii) Works for the upgrade and signalisation of the intersection of Upper Kedron Road/Hogarth Road, generally in accordance with Conceptual Signalised Intersection Upgrade Works Plan TTM Reference 14BRT0323-04, dated 14 Oct 2014.

Note: All signalised intersections are required to be designed in accordance with Austroads Part 4A-Unsignalised & Signalised Intersections Design Guidelines. The traffic signal designs need to be approved by the CRU-Signals Operations Section prior to being submitted at the Operation Works stage.

c) Prior to the completion of the development of Stage 1 or 180 lots within the Subject Site, which ever is the earlier:
   (i) Works for the widening of Canvey Road on the south approach to Charlois Crescent roundabout to a District Access road standard.
   (ii) Construct a Type C pavement and kerb and channel in Hogarth Road on southern approach to McGinn Road.

Notes:
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

130(a) Submit Functional Layout Plans
Submit separate functional layout plans showing:
- The extent of the external roadworks; and
- The signal infrastructure layout.

Obtain Preliminary Approval from Development Assessment.

Timing:
Submit concurrently with the submission of Roads & Drainage, Signs & Pavement Marking, and Signals Design drawings.
130(b) Submit Roads and Drainage Plans  
Submit and obtain endorsement from Development Assessment Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:  
Prior to site/operational/building work commencing

130(c) Submit Traffic Signal Design Plans  
Submit and obtain endorsement from Development Assessment Traffic Signal Design Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, the *Queensland Manual of Uniform Traffic Control Devices* and the *AUSTROADS* Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil. The Signal Design plans are to be signed by Council's Transport & Traffic, Signals Management Section prior to lodgement.

Timing:  
Prior to site/operational/building work commencing

130(d) Submit Signs and Pavement Plans  
Submit and obtain endorsement from Development Assessment, Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the *Queensland Manual of Uniform Traffic Control Devices* and the *AUSTROADS* Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:  
Prior to site/operational/building work commencing

130(e) Implement Endorsed Drawings  
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.

Timing:  
Prior to On-Maintenance Inspection

130(f) Submit As Constructed Plans  
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing:  
Prior to On Maintenance Inspection

130(g) On Maintenance Acceptance  
Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies

Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.

Timing:  
Prior to On Maintenance Inspection

130(h) Off Maintenance Inspection  
On completion of the minimum 12 months maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

Timing:  
On completion of the maintenance period

131 Repair Damage To Kerb, Footpath Or Road  
Repair any damage to existing kerb and channel, footpath or roadway (including removal of concrete slurry from footways, roads, kerb and channel and stormwater gullies and drainlines) and re-installation existing traffic signs and pavement markings that have been removed or damaged during any works carried out in association with the approved development.

132 Works for Transport Infrastructure - Non-Trunk Internal Roadworks  
Provide the following Roadworks, Stormwater Drainage, and any associated services in accordance with an endorsed detailed design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, and the following requirements:

(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 50 km/hr maximum);
(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 50 km/hr maximum with provision as an interim bus route, as may be required, for bus access);
(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area;
(iv) The roads 19.5-24.0 metres wide to be designed and constructed as District Access Roads – Bus Route (designed for 85 percentile 60 km/hr maximum); and

NDN Application I A003905687 I 390 Levitt Road, Upper Kedron Qld 4055
(v) Cul-de-sac to be constructed to 9.0 metres radius and constructed as Local Access Roads (designed for 85 percentile 50 km/h maximum).

Notes:
- Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series).
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

132(a) Submit Functional Layout Drawings
Submit functional layout plans showing the extent of all proposed Roadworks.

Timing: Prior to site/operational/building work commencing

Note.
Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

132(b) Submit Roads and Drainage Plans
Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing

132(c) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing

132(d) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted “on-maintenance” and “off-maintenance” as a Council asset, by Development Assessment.

Timing: Prior to On-Maintenance Inspection

132(e) Submit As Constructed Plans
Submit “As Constructed” plans including an asset register and a pre-On-Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing: Prior to On-Maintenance Inspection

132(f) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.

Timing: Prior to On-Maintenance Acceptance

132(g) Off-Maintenance Acceptance
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.

Timing: On completion of the maintenance period

Comment
The design speed for 14m wide local roads and 16m neighbourhood roads should be 40km/hr as per the Traffic and Transport PSP (and also the new BCC City Plan Infrastructure Design PSP). As such item (i) and (ii) has been amended to reflect the appropriate speed limit.

Given the nature of the site it is considered that a 50km/hr posted and design speed is more appropriate for the District Access roads and bus routes. Canvey Road is presently posted at 50km/hr, and it is anticipated that with the increase in patronage of this road (and extensions of it) that 50km/hr speed is more desirable. As such the condition has been amended accordingly below.
For clarity we have amended condition 132(a) to ensure that the functional layout drawings are included as part of the operational works package, and not a separate package required prior to this time.

As Council are aware in some instances the design outcomes achieved for the site are performance outcomes that are not specifically in accordance with standard Council specifications and standards. As such the condition has been amended throughout to reflect outcomes agreed with Council through the inclusion of the following words: *For as otherwise approved by Council*

Condition 132(f) has also been amended to remove the last bullet point as it is considered that this is covered by the off-maintenance condition that follows in point g).

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<td>Provide the following Roadworks, Stormwater Drainage, and any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, and the following requirements:</td>
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<td>(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum);</td>
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<td>(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 450 km/hr maximum with provision as an interim bus route, as may be required, for bus access);</td>
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<td>(iii) A suitably scaled area as may be required for the provision of a temporary refuse vehicle turning area;</td>
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<td>(iv) The roads 19.5-24.0 metres wide to be designed and constructed as District Access Roads 1 Bus Route (designed for 85 percentile 560 km/hr maximum); and</td>
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<td>(v) Cul-de-sac to be constructed to 9.0 metres radius and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum).</td>
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Notes:
- Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series) or as otherwise approved by Council.
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

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<tr>
<td>Submit functional layout plans showing the extent of all proposed Roadworks as part of the Operational Works application.</td>
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<td>Note: Obtain preliminary approval from Development Assessment, prior to the submission of Roads &amp; Drainage and Signs &amp; Pavement Marking.</td>
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<td>Submit and obtain endorsement from Development 1 Assessment Signs &amp; Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, checked and certified by a Registered Professional Engineer of Queensland-Civil.</td>
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<td>• Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies</td>
</tr>
<tr>
<td>• Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.</td>
</tr>
<tr>
<td>Timing: Prior to On-Maintenance Acceptance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>132(g) Off-Maintenance Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.</td>
</tr>
</tbody>
</table>
### 133 Water Quality Treatments in Public Open Space

Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design).

The design must provide for safe egress into and out of the treatment facility. All Bioretention basins are to:

- provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level,
- provide gross pollutant traps at all stormwater inlets from roads,
- design all outlet pits for a minimum 2 year ARI flow without overtopping spillways, and the spillway designed to safely convey the 50 year ARI peak flow,
- ensure the basin (including embankments and retaining walls) is located outside of the 10 year ARI flood extent within any waterway,
- provide scour control and tail-out channels in accordance with Council's Natural Channel Design Guidelines.

#### 133(a) Bioretention Basin Landscaping

Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrently with the engineering drawings.

**Timing:**
Prior to site/operational/building work commencing

#### 133(b) Implement Approved Drawings

Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.

**Timing:**
Prior to On-Maintenance Inspection

#### 133(c) On-Maintenance Inspection

Contact Development Assessment to arrange an On-Maintenance inspection.

**Timing:**
Prior to On-Maintenance Inspection

#### 133(d) Maintenance Period

Provide the following in relation to the maintenance period:

- The maintenance period will be 24 months upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment. The maintenance period ends when the works are accepted Off-Maintenance by Development Assessment.
- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.
- Submit "As Constructed" plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the approved plans.

**Timing:**
From acceptance of On-Maintenance period

#### 133(e) Off-Maintenance Inspection

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:**
On completion of the maintenance period

---

**Comment**

The condition seeks the provision of gross pollutant traps (GPTs) at all stormwater inlets from roads. It is considered unreasonable to require this, and it does not accord with the proposed stormwater management strategy. There are substantial construction and maintenance cost implications with an increased number of GPTs. The bullet point requiring the inclusion of GPTs has been deleted as per below.

Requiring the concurrent lodgement of engineering and landscaping plans will create delays for the development. General practice is that the landscape operational works applications are lodged with Council following the lodgement of the engineering drawings. Approval of the engineering drawings does not occur until landscape OPW is lodged. As such the wording has been amended below to allow for the delay in finalising landscape detailed design following completion of the engineering drawings.

The maintenance period for the water quality treatments has been amended to reflect standard practice of 12 months, followed by a 12 month period for planting establishment. It is considered that the standard maintenance periods can be applied to this aspect of the development.

---

**Proposed Condition**

Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design).

The design must provide for safe egress into and out of the treatment facility. All Bioretention basins are to:

- provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level,
- design all outlet pits for a minimum 2 year ARI flow without overtopping spillways, and the spillway designed to safely convey the 50 year ARI peak flow,
- ensure the basin (including embankments and retaining walls) is located outside of the 10 year ARI flood extent within any waterway,
- provide scour control and tail-out channels in accordance with Council's Natural Channel Design Guidelines.
133(a) Bioretention Basin Landscaping
Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrent with following lodgement of the engineering drawings.
Timing:
Prior to site/operational/building work commencing

133(b) Implement Approved Drawings
Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Council's Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.
Timing:
Prior to On-Maintenance Inspection

133(c) On-Maintenance Inspection
Contact Development Assessment to arrange an On-Maintenance inspection.
Timing:
Prior to On-Maintenance Inspection

133(d) Maintenance Period
Provide the following in relation to the maintenance period:
- The maintenance period will be 24 months, followed by a 12 month establishment period for planting upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment.
- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.
- Submit "As Constructed" plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the approved plans.
Timing:
From acceptance of On-Maintenance period

133(e) Off-Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.
Timing:
On completion of the maintenance period.

134 Works for Stormwater Infrastructure - Non-Trunk
Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:
- Runoff from the site and external catchments is to be managed in accordance with approved engineering plans to ensure there will be no adverse impacts on neighbouring properties.
- All allotments and roads are to be designed and constructed to have the appropriate freeboard to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek/waterway flood event, whichever is the higher flood level.
- A satisfactory lawful point of discharge has been provided via discharge to Council owned land (drainage reserve, road reserve) or stormwater easement designed to accommodate developed flows.
- Extension of existing stormwater culverts on Canvey Road to ultimate road reserve width.

Notes.
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

134(a) Submit Drawings for Endorsement
Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.
Timing:
Prior to site/operational/building work commencing

134(b) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.
Timing: Prior to On-Maintenance Inspection

134(c) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
Timing:
Prior to On Maintenance Inspection

134(d) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works.

- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies.
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

Timing:
Prior to On-Maintenance Acceptance

134(c) Off Maintenance Inspection

On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

Timing:
On completion of the maintenance period

Comment

The existing culverts located in Canvey Road are adjacent to Stage 1D of the development. Given that this approval does not seek to develop Stage 1D, and will require future development approvals in order to do so, we seek the deletion of any aspects of conditions that require works to be undertaken adjoining Stage 1D. This is to reduce the need to redo construction work when the stage is developed in the future. As the ultimate development proposal is unknown for Stage 1D, it is not possible to condition appropriate works at this time.

It has been confirmed by TTM Consulting (advice attached) that the construction of the current road network is sufficient to accommodate the anticipated traffic demand without the need to undertake works to the external network prior to the development of Stage 1D.

This condition also requests providing a minimum 12 month maintenance period to works and is then contradicted by the timing provisions (prior to on-maintenance acceptance). The intent of the condition in relation to maintenance periods and timing is appropriately covered under the off-maintenance provisions, and as such the condition has been amended to reflect this

Proposed Condition

Works for Stormwater Infrastructure - Non- Trunk

Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

- Runoff from the site and external catchments is to be managed in accordance with approved engineering plans to ensure there will be no adverse impacts on neighbouring properties.
- All allotments and roads are to be designed and constructed to have the appropriate freeboard to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek/waterway flood event, whichever is the higher flood level.
- A satisfactory lawful point of discharge has been provided via discharge to Council owned land (drainage reserve, road reserve) or stormwater easement designed to accommodate developed flows.

Notes.

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

134(a) Submit Drawings for Endorsement

Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:
Prior to site/operational/building work commencing

134(b) Implement Endorsed Drawings

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

Timing: Prior to On-Maintenance Inspection

134(c) Submit As Constructed Plans

Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing:
Prior to On Maintenance Inspection

134(d) On Maintenance Acceptance

Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

Timing:
Prior to On-Maintenance Acceptance
<table>
<thead>
<tr>
<th>134(e) Off Maintenance Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>On completion of the minimum 12 months maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.</td>
</tr>
<tr>
<td><strong>Timing:</strong></td>
</tr>
<tr>
<td>On completion of the maintenance period</td>
</tr>
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<table>
<thead>
<tr>
<th>135 Public Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodge street lighting design drawings showing the proposed public lighting system in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and obtain approval from the City Lighting, Asset Services.</td>
</tr>
<tr>
<td><strong>136(a) Agreement with Supplier</strong></td>
</tr>
<tr>
<td>Enter into an agreement with an electricity supplier and provide a public lighting system in accordance with the above approved lighting design plans.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>136 Service Conduits and Mains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply and install all service conduits and meet the cost of any alterations to public utility mains, existing mains, services or installations required in connection with the approved development in accordance with the relevant Brisbane Planning Scheme Codes/Policies. This includes:</td>
</tr>
<tr>
<td>- the provision of all services and/or conduits along the full length of any rear allotment access or access easement.</td>
</tr>
<tr>
<td>- the relocation of any fire hydrant and/or valves from the development’s vehicular footway crossings if applicable.</td>
</tr>
<tr>
<td>- the retention and/or relocation of any existing foul water lines that currently exist within the site.</td>
</tr>
<tr>
<td><strong>Note:</strong> Applicants should liaise with the appropriate service authorities. Typical underground services and/or conduits to be constructed include power, phone, telecommunications, sewer, stormwater and gas if applicable.</td>
</tr>
<tr>
<td><strong>137(a) As Constructed Drawings</strong></td>
</tr>
<tr>
<td>Submit to Development Assessment “As Constructed” drawings including an asset register, approved by a Registered Professional Engineer Queensland that are in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and any other relevant infrastructure requirements, showing the works required by this condition.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>138 Conduit for Brisbane City Council</th>
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<tbody>
<tr>
<td>Provide a single underground conduit (100mm diameter UPVC class PN9) in favour of Brisbane City Council on at least one side of all Neighbourhood Access Roads (Bus Route only), Industrial Access Roads and Major Roads in the Council Road Hierarchy, in accordance with the following:</td>
</tr>
<tr>
<td>- The conduit must be laid in the telecommunication alignment of the footpath, on the kerb side of the Telecommunication Carrier conduit or in an agreed shared trench arrangement with the Telecommunication Carrier and other Utilities as may be relevant, subject to the approval of Development Assessment.</td>
</tr>
<tr>
<td>- The conduit must bypass the Telecommunication Carrier pits.</td>
</tr>
<tr>
<td>- Pits (minimum size, Type 4 as per BCC Drawing UMS 600/031) with lids (as per Drawing UMS 600/030 - but Class B instead of Class C) must be installed at the fledge ends of the conduit, both sides of road crossings, at intersections and at other locations that may be specified by Council.</td>
</tr>
<tr>
<td>- The conduit must be plugged at each pit.</td>
</tr>
<tr>
<td>- The conduit must be located and installed in such a way that facilitates the installation of cable and additional pits in the future.</td>
</tr>
<tr>
<td><strong>138(a) Submit “As Constructed” Drawings</strong></td>
</tr>
<tr>
<td>Submit to Development Assessment, “As Constructed” drawings, including an asset register, approved by a Registered Professional Engineer Queensland, and in accordance with the requirements of this condition and the relevant Brisbane Planning Scheme Codes/Policies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>139 Telecommunications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit to Development Assessment, documentary evidence issued by a relevant telecommunication carrier to verify that the necessary underground telecommunication services have been supplied within and adjacent to the development.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>140 Provide Rear Lot Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide access to rear lots, where applicable, in accordance with the following:</td>
</tr>
<tr>
<td>- Construct a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.</td>
</tr>
<tr>
<td>- The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover.</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
</tr>
<tr>
<td>It is considered more relevant and reasonable to require access to rear lots to be constructed in accordance with the Brisbane City Council standard drawings rather than specifying a construction standard in the condition. This allows for amendments to design standards over the life of the project.</td>
</tr>
<tr>
<td><strong>Proposed Condition</strong></td>
</tr>
<tr>
<td>Provide access to the rear lots in accordance with the following by constructing a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies. The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover.</td>
</tr>
<tr>
<td><strong>BCC Standard Drawing BSD-2021.</strong></td>
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<tr>
<th>141 Concurrency Agency Conditions</th>
</tr>
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</table>

NDN Application I A003905687 I 390 Levitt Road, Upper Kedron Qld 4055
The Department of State Development Infrastructure and Planning as concurrence agency has imposed the conditions contained in the letter dated 2 December 2014.

**142. Construction Noise and Dust Emissions**
Pursuant to the *Environmental Protection Act 1994*, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emission are accordance with the requirements of the Act.

The *Environmental Protection Act 1994* prescribes that:
1. A person must not carry out building work in a way that makes an audible noise:
   - (a) on a business day or Saturday, before 6.30a.m. or after 6.30p.m; or
   - (b) on any other day, at any time.
2. The reference in subsection (1) to a person carrying out building work:
   - (a) includes a person carrying out building work under an owner-builder permit; and
   - (b) otherwise does not include a person carrying out building work at premises used by the person only for residential purposes.

**143. Advice Agency Condition**
Powerlink acting as an advice agency for the proposal has imposed conditions contained in the letter dated 18 July 2014.

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**Water & Wastewater Services – Concurrence Agency Requirements**

**144. Grant Easements**
Grant the following easement(s) for water supply or sewerage purposes.

- a) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
- b) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**GUIDELINE**
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

**PROOF OF FULFILMENT**
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

**Comment**
It is considered that the timing impacts referenced in this condition may delay plan sealing. Delays may be experienced where live works are still being undertaken after plan sealing but prior to on-maintenance (through the bonding process). As such we seek the reference to "prior to the relevant Council signing the plan of subdivision" to be removed from the timing, as suggested below.

**Proposed Condition**

**Grant Easements**
Grant the following easement(s) for water supply or sewerage purposes.

- e) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
- f) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**GUIDELINE**
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

**PROOF OF FULFILMENT**
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

**145. Construct Waste Water Non-Trunk Infrastructure System**
Construct a Sewerage Non-Trunk infrastructure system necessary to provide a sewerage connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**
This condition has been imposed to ensure that sewerage infrastructure is in place to serve the development and that each lot has a sewerage property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**
Connection Certification from QUU
### 145(a) Wastewater Network Infrastructure (Non-trunk Infrastructure)

- **a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **c)** Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities wastewater network infrastructures.
- **d)** Transfer ownership of the wastewater reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- **e)** If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network and/or property service infrastructure. This includes:
  - (i) where not required for existing or future development, removing existing wastewater network and/or property service infrastructure and sealing any connection(s) to remaining reticulation infrastructure;
  - (ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
  - (iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as specified in current standards.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 145(b) Wastewater Property Service Infrastructure (Non-trunk Infrastructure)

- **a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring)* Act 2009.
- **c)** Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland Urban Utilities wastewater reticulation system.
- **d)** Each lot must have a separate wastewater property service connection which commands the whole of each lot.
- **e)** If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.
- **f)** If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.
- **g)** Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.
- **h)** Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.
- **i)** Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words "Bewer Connection 2 M.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 145(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 145(d) Wastewater Network and Property Service Infrastructure- Sizing

The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

**Timing:**
Prior to the construction of network or property service infrastructure.

### 145(e) Wastewater Infrastructure- Design and Construction Standards

- **a)** The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 145(f) Wastewater Network Infrastructure- CCTV Inspection

- **a)** Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.
- **b)** CCTV survey must be carried out in accordance with the WSA 05-2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.
Additionally we have added further clarity to the timing, to provide certainty and direction for the engineers, both designing and assessing such we seek amendments to the condition as follows.

Amended wording is provided below to reflect this.

Point 145c Wastewater Network and Property Service Infrastructure - Layout, Design and Sizing

The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water and Sewerage Design and Construction Code must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing: Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Proposed Condition

- Delete. Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

Point 145(c) Wastewater Network and Property Service Infrastructure - Layout, Design and Sizing

The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water and Sewerage Design and Construction Code must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing: Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Proposed Condition

- Delete. Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.
m) All work on or within 1 metre of live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.

n) A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.

o) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.

p) All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.

q) Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.

r) All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

Timing:
Prior to and at the time of Live Works in accordance with the SEQ Water Supply and Sewerage Design and Construction Codes at the time of approval.

### 147 Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

#### 147(a) Design Approval - Major Works

a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

Timing:
Prior to the construction of water or wastewater infrastructure.

#### 147(b) Pre-Construction Review - Major Works

a) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).

c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.

d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

Timing:
Prior to the construction of water or wastewater infrastructure.

#### 147(c) Construction Certification - Major Works

a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).

b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

#### 147(d) End of Maintenance - Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

#### 147(e) Works Inspections - Major Works

a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:

(i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);

(ii) Pouring of thrust blocks;

(iii) Pressure testing of pipelines;

(iv) Disinfection of water mains; and

(v) Construction completion inspection.

b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities has inspected the works and other (non-Hold Point) works inspections.

c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.
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<td>e)</td>
<td>A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.</td>
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<td>f)</td>
<td>Timing: Prior to and during construction of water or wastewater infrastructure.</td>
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**Comment**

The condition requires the works to be inspected by and certified by a suitably qualified RPEQ, as such including these hold points would only add unnecessary time delays to the delivery of the project. The amendments sought to this condition seek to remove any additional hold points by QUU.

It is additionally requested that the timing sections of this condition are modified (as provided below) so that the timing refers to the compliance of work in accordance with the SEQ water and sewerage design and construction codes at the time of approval. This will avoid any potential issues with rework, redesign, and reconstruction resulting from updated standards after the time of approval. This is effectively to avoid any chance of retrospective changes being sought to work already completed.

The condition has been amended accordingly below.

**Proposed Condition**

Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

### 147(a) Design Approval - Major Works

a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

**Timing:**

Prior to the construction of water or wastewater infrastructure.

### 147(b) Pre-Construction Review - Major Works

a) Submit pre-construction plans and associated supporting information (Pre- Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).

c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.

d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

**Timing:**

Prior to the construction of water or wastewater infrastructure.

### 147(c) Construction Certification - Major Works

a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).

b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

**Timing:**

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 147(d) End of Maintenance - Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**

At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

### 147(e) Works Inspections - Major Works

a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:

(i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);

(ii) Pouring of thrust blocks;

(iii) Pressure testing of pipelines;

(iv) Disinfection of water mains; and

(v) Construction completion inspection.

b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities shall be given the opportunity to be inspected the works and other (non-Hold Point) works inspections.

c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.

e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

**Timing:**

Prior to and during construction of water or wastewater infrastructure.
**148 Construct Water Supply Non-Trunk Infrastructure System**

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**

Connection Certification from QUU

148(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

- a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
- d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
  - (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
  - (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
  - (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
  - (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

148(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

- a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
- d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
- e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
- f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
- g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
- h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
- i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.
- j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
- k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

148(c) Drinking Water Network Infrastructure and Property Service Infrastructure Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

148(d) Drinking Water Network Infrastructure and Property Service Infrastructure Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.
**Timing:**
Prior to the construction of network or property service infrastructure.

## 148(e) Drinking Water Infrastructure - Design and Construction Standards

**a)** The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

## 148(f) Drinking Water Network Infrastructure - Water Quality Testing

**a)** Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**b)** Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.

Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

**Timing:**
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

## 148(g) Drinking Water Network Infrastructure - Pressure Testing

**a)** Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**b)** Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

**Timing:**
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

### Comment
The condition has been amended below to more appropriately manage the timing of compliance in accordance with the SEQ water and sewerage design and construction codes, being the time of approval. This is requested to avoid any potential issues with rework, redesign and reconstruction resulting from updated standards after the time of approval.

### Proposed Condition

#### Construct Water Supply Non-Trunk Infrastructure System

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions at the time of approval:

**GUIDELINE**

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**

Connection Certification from QUU

## 148(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

**a)** This condition for non-trunk infrastructure has been applied in accordance with s99BDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

**b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

**c)** Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

**d)** Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

**e)** If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:

- (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure on or within the development site;
- (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
- (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
- (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
148(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

- a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
- d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
- e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
- f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
- g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
- h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
- i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.
- j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
- k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

148(c) Drinking Water Network Infrastructure and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

148(d) Drinking Water Network Infrastructure and Property Service Infrastructure-Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

148(e) Drinking Water Infrastructure - Design and Construction Standards

- b) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

148(f) Drinking Water Network Infrastructure- Water Quality Testing

- a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
- b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.

Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

148(g) Drinking Water Network Infrastructure - Pressure Testing

- a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
- b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Consent and Permits prior to Construction of Water and Wastewater Infrastructure

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

### 149(a) Land Owner's Consent

- **a)** Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
- **b)** Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

**Timing:**
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

### 149(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to construction of relevant water or wastewater infrastructure.

**Comment**

It is considered unreasonable to include references in conditions that relate to documents in Water Approvals that have not been issued to the applicant for consideration. As such we propose amendments to the condition as follows to provide greater certainty for the applicant on the implications of this condition on the delivery of the project.

**Proposed Condition**

Consent and Permits prior to Construction of Water and Wastewater Infrastructure

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

### 149(a) Land Owner's Consent

- **a)** Owner's consent to undertake works on the private property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
- **b)** Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

**Timing:**
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

### 149(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to construction of relevant water or wastewater infrastructure.

Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

- **a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **c)** Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.
- **d)** The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**Comment**

The applicant does not consider this condition to be relevant to this development. The condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and / or in accordance with the standards and guidelines prescribed. It is on this basis that we seek the deletion of this conditions in its entirety.

**Proposed Condition**

Delete Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

- **a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

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### Proposed Condition

Should only cover defects and faults not associated with the approved detailed design. The amended wording to the condition is provided below.

Additionally through the OPW process to review and comment on the detailed design proposed. As such a bank guarantee associated with works include defects and faults in the design, as QUU will have had the opportunity through the assessment of the DA (conceptual design) and then it is considered that bank guarantees for maintenance periods are to protect against physical defects and faults. It is not considered reasonable to comment.

### Comment

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

### Timing:

#### Maintenance Period for Water and Wastewater Infrastructure

- **a)** Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and maintenance schedule (lodged as part of the As-Constructed Package), relevant engineering standards and sound engineering practice.
- **b)** The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.
- **c)** Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.
- **d)** Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.
- **e)** Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.

#### Maintenance Bond

- **a)** Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.
- **b)** The Maintenance Bond must remain valid for the full term of the Maintenance Period.
- **c)** The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

#### Comment

It is considered that bank guarantees for maintenance periods are to protect against physical defects and faults. It is not considered reasonable to include defects and faults in the design, as QUU will have had the opportunity through the assessment of the DA (conceptual design) and then additionally through the OPW process to review and comment on the detailed design proposed. As such a bank guarantee associated with works should only cover defects and faults not associated with the approved detailed design. The amended wording to the condition is provided below.

#### Proposed Condition

As such we seek deletion of this condition in its entirety.

#### Terminating Infrastructure for Water and Wastewater

- **a)** Land required for any water or wastewater non-trunk infrastructure is to be a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.
- **b)** The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

#### Temporary Works for Water and Wastewater Infrastructure

- **a)** Provide temporary water and wastewater infrastructure, if applicable, and all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.
- **b)** Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.
- **c)** A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.
- **d)** Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.

#### Terminating Infrastructure for Water and Wastewater

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

#### Timing:

- **a)** Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
- **b)** Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

#### Proposed Condition

Delete Terminating Infrastructure for Water and Wastewater,

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

#### Timing:

- **a)** Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

#### Comment

- It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required. As such we seek deletion of this condition in its entirety.

#### Proposed Condition

As such we seek deletion of this conditions in its entirety.
a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials and workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.
b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.
c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

155 Payment of Fees and Charges
Pay fees and charges calculated in accordance with the Queensland Urban Utilities Water Netserv Plan.

Timing:
At the times specified in the Queensland Urban Utilities Water Netserv Plan.

156 Additional Payment Condition for Trunk Infrastructure Costs
Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:

a) as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water Netserv Plan.
b) the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the following:
   (i) levied charges for the trunk infrastructure; and
   (ii) the trunk infrastructure provided, or to provided, by the applicant.
c) the details of trunk infrastructure to be provided is shown in the plan, Figure 2- Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20Nov2014.
d) the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734322200.
e) this additional trunk infrastructure is not eligible for a refund in accordance with s99BRCY of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Comment
The water trunk infrastructure proposed to support the development is consistent with the QUU Master Plan which was provided by QUU to Calibre Consulting on 16 October 2014. The Approval Conditions 156 makes reference to Figure 2 - Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20 November 2014.
QUU have not demonstrated or identified how the proposed development demand is greater than that assumed in the QUU Water Netserv Plan. Additional information is required from QUU to justify any consideration of additional payment of contributions in relation to the water and wastewater infrastructure. From the material provided by QUU during the assessment period, it is considered that the demand on the infrastructure is not beyond that planned by QUU.
It is on this basis that we seek to delete this condition as provided below.

Proposed Condition
Delete Additional Payment Condition for Trunk Infrastructure Costs
Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:

a) as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water Netserv Plan.
b) the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the following:
   (i) levied charges for the trunk infrastructure; and
   (ii) the trunk infrastructure provided, or to provided, by the applicant.
c) the details of trunk infrastructure to be provided is shown in the plan, Figure 2 - Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20Nov2014.
d) the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734322200.
e) this additional trunk infrastructure is not eligible for a refund in accordance with s99BRCY of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Permit to which this relates ï¢ DA SPA ROL Subdivision of Land Stage 1B

157 Staging of Development
Stage 1B cannot be ï¢ released until all conditions relating to Stage 1X have been complied with.

Timing:
All conditions relating to the earlier stage have been complied with.
158 Approved Drawings & Documents
A legible copy of the approved drawings and documents bearing “Council Approval” and the Development Approval Conditions package is to be available on site.
Note. This condition is imposed to ensure compliance with the development conditions of approval. The copy of the conditions and drawings should be located in any site management office or with the site foreman. Any copies of conditions or drawings that are illegible shall be deemed to be non-compliant with this condition of approval.

159 Carry Out The Approved Development
Carry out the approved development generally in accordance with the approved drawings(s) and/or document(s).
Note. This development approval may include the location of fences, retaining walls and/or external walls of buildings on the boundary of a lot. This approval does not constitute permission to enter neighbouring properties to carry out the construction (including associated drainage and earthworks) or maintenance activities. Permission to enter neighbouring properties must be obtained from relevant property owners.

160 Complete All Operational Work
Complete all operational work associated with this development approval, including work required by any of the conditions included in the Conditions Package. Such operational work is to be carried out generally in accordance with the approved drawing(s), and/or documents or, if requiring a further approval from the Council, in accordance with the relevant approval(s).

Ecology

161 Submit Vegetation Management Plan
Submit to Development Assessment and receive approval for a Vegetation Management Plan (VMP). The VMP is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation as per the Ecological Assessment Guidelines (referenced on Council’s website) for the protection, retention and/or management of vegetation on the site and in accordance with the approved Vegetation Retention Plan amended in red on 30 October 2014 and include the following information:
- The extent of the VMP is to include evaluation of all areas including, proposed road reserves, external works and development areas.
- The location and description of existing vegetation at the interface between the development footprint and the Category 1, 2, 3 and 4 Corridors required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, including species and botanical name plus the height and canopy spread.
- The location and extent of all site works including all proposed infrastructure and areas of earthworks.
- Detail design of all civil works is to be cognisant of environmental values. Alternative solutions may be required in some instances, to protect significant vegetation (e.g. alternative service alignments, variations to batter slopes and tunnel boring).
- The location and description of all vegetation to be retained and that to be removed.
- Methods of physical identification of trees/vegetation to be retained.
- A description of all measures to be used to protect vegetation and habitat features to be retained during construction, including protective fencing.
- A description of all pruning and tree surgery works (to AS 4373/96) to maintain health and stability of trees and reduce potential hazards for future residents.
- The location and extent of storage and stockpile areas for cleared vegetation and site mulch.
- A description of all methods to salvage and/or re-use cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works.
- Details of all measures to protect and recover fauna during clearing operations, including: presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures.

161(a) Arrange Pre-start Meeting
Once measures are in place to identify and protect vegetation on site (such as tree protection fencing), arrange a pre-start meeting with the Development Assessment.
Timing: When protection measures are in place and prior to site / operational / building works occurring.

161(b) Implement Approved Plan
Implement and carry out the works in accordance with the approved VMP.
Timing: Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL), and then to be maintained.

161(c) Certify Approved Works
Submit to Development Assessment certification that the approved VMP has been implemented.
Timing: Certification to be submitted upon completion of each phase of the approved VMP.

162 Submit Rehabilitation Plan
Submit to Development Assessment and receive approval for a Rehabilitation Plan. The Rehabilitation Plan is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation that includes at least the following information for the area identified on Concept Rehabilitation Plan amended in red 30/10/2014: This Rehabilitation Plan is to include all rehabilitation works for stages 1A, 1B, and 1C as identified on Proposal Plan_Stage One Overall Canvey Road, Upper Kedron (Drawing No. CDW01_44C) as amended in red.
- Description of proposed rehabilitation, including earthworks, restoration methods (revegetation and assisted regeneration where appropriate).
- Details of the proposed rehabilitation schedule, staging, including site preparation, planting and establishment; plant species names, stock size, quantities, locations, a maintenance program (5 years) for all rehabilitation works.
- Details of rehabilitation outcomes performance monitoring and assessment (minimum 9 visits within the first 24 months every 4 T 6 weeks); survival thresholds (minimum 90% survival required); replacement planting triggers (minimum requirement to keep survival above 90% and replacement within 4 weeks of issue being identified); target minimum tree height and canopy cover to be achieved at the end of 5 year maintenance period.
- Stabilisation methods for all areas of exposed soil surface.
- Details of special habitat features to be provided for the enhancement/restoration of habitat values including: coarse woody debris (e.g. root balls; hollows; logs; branches) to be salvaged from clearing activities and reused; nest boxes (best industry practice). A minimum of 10 boxes per ha required to be installed in dedication corridors to achieve a hollow density of 32 hollows per ha. Additional nest boxes will be required in areas having a low natural hollow density. Consultation with an experienced fauna consultant is required to determine the location and type of nest box required, and appropriate nest box density for each area of corridor to be dedicated; nest box installation and maintenance, monitoring.
and reporting will also be required over a 5 year maintenance period. Habitat features such as nest boxes are to be provided for each stage during preparation works for site rehabilitation.

- Specification notes on site preparation; plant quality assurance including local provenance; plant stock handling; planting methodology; mulching; threat management (including tree guarding 1 600mm corflute with hardwood stake; watering as required to prevent plant stress); weed management; tree guard removal and maintenance; establishment and maintenance. All restoration works are to be in accordance with the SEQ Ecological Restoration Framework and industry best practice.

- Evidence that the rehabilitation plan has been prepared by a bushland restoration specialist/ecologist with a minimum of 5 years experience in ecological restoration.

- Evidence that the delivery of rehabilitation works will be undertaken by a bushland restoration specialist with a minimum of 5 years experience in ecological restoration. Bushland restoration works are to target areas that are currently deficient of an existing vegetation structure and floristic composition that is commensurate with the Regional Ecosystem identified on the site or an alternative Regional Ecosystem as determined by a suitably qualified and experienced bushland restoration practitioner or Ecologist with a minimum of 5 years experience in ecological restoration. Rehabilitation methods must use a bushland restoration approach that will ultimately aim to achieve a vegetation structure and floristic composition commensurate with the Regional Ecosystem identified on the site. This will be achieved by including the establishment of as many flora species from all strata (tree, shrub, and ground layer) as commercially available; removal and management of all exotic flora species within the maintenance period; introduction of coarse woody debris and leaf litter from clearing site as appropriate; Alternative regional ecosystems may be appropriate for areas with landforms influenced by unnatural levels of soil moisture or altered landform.

Regional Ecosystems Technical Descriptions and Biocondition Benchmarks documentation will be used to guide planting density, flora species selection, flora species dominance and distribution. Planting densities higher than those recorded in Regional Ecosystem Technical Descriptions will be appropriate in more open areas to account for 10% mortality and to assist with the development of a robust canopy.

162(a) Implement Approved Plan
Carry out rehabilitation works in accordance with the approved Rehabilitation Plan.
Timing: While site/operational/building work is occurring and then to be maintained

162(b) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.
Timing: Prior to commencement of use (MCU) or prior to Council's notification on the plan of subdivision (ROL)

162(c) On Maintenance Period
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.
Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.
Timing: 5 years from acceptance of on maintenance period

162(d) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off- Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.
Timing: On completion of the maintenance period

163 Fauna Spotter
A Fauna Spotter, qualified by the relevant Queensland State Government Authority, shall inspect the site to ensure identification of any wildlife (fauna) or habitat features (e.g. nests, tree hollows) prior to clearing.

163(a) Prior to Vegetation Clearing
Clearing operations and other site works must not commence until the Fauna Spotter has certified that the site has been fully inspected and any necessary fauna protection measures or relocation procedures implemented. Submit to Development Assessment a Fauna Spotter Report to demonstrate compliance with this condition.

163(b) Fauna Spotter on Site
The fauna spotter is to be present on site during all clearing operations to monitor works and to respond to any situations that may arise as determined by Development Assessment, based on the findings of the fauna spotter's pre-clearing certification report.

163(c) Fauna in Work Area
If any animals are identified in trees to be removed during clearing operations, work shall cease immediately on that tree. The Fauna Spotter must supervise the relocation of any identified animal prior to clearing operations recommencing.

163(d) Certification
Provide certification that works have been undertaken in accordance with this condition.

164 Natural Assets Local Law (NALLL) - On Site
Lodge and receive approval from Development Assessment, an application to Carry Out Works on Protected Vegetation on the site.

165 Submit Wildlife Movement Solutions Plan
Submit to Development Assessment and receive approval for a Wildlife Movement Solutions Plan (WMS). The WMS is to include an overall plan of all Wildlife Movement Solutions (WMS) planned for the development including the WMS identified on the Wildlife Movement Solutions Concept Plan amended in red on 31/10/2014. Detailed design drawings are required for each development stage with WMS infrastructure.
Submit an overall WMS and detailed WMS and report for Stage 1B outlining wildlife movement solutions infrastructure in conjunction with operational work approvals. Obtain approval from the Delegate, Development Assessment for the detailed report and plans. The detailed design for each structure is to be in the form of scaled plans and supporting documentation. Design options must be integrated with required exclusion
### 165(f) Off-Maintenance Inspection

- On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond.
- The maintenance bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment.
- Lodge a bond for the on-maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program.
- The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.
- Timing: 5 years from acceptance of the on-maintenance period.

### 165(c) On-Maintenance Period

- The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
  - Ensure that the works are constructed to a standard acceptable to Council;
  - Provide proof of Public Liability Insurance ($20 million) for the on-maintenance period; and
  - Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.
- Timing: Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL).

### 165(b) On-Maintenance Inspection

- Contact Development Assessment to arrange an on-maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance.
- The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
  - A detailed 5-year maintenance period and monitoring program is to be provided to maintain the vegetation at the entry points to the culvert;
  - Include details of special habitat features to be provided for the enhancement/restoration of habitat values;
  - Description of the weed management program; and
  - Details of associated fauna furniture must be included to provide opportunities for a broad range of species to roads.
- Timing: While site/operational/building work is occurring and then to be maintained.

### 165(a) Implement approved plan

- Construction of the wildlife movement solutions and the road network is to occur in accordance with approved designs.
- Timing: While site/operational/building work is occurring and then to be maintained.

### 165(b) On Maintenance Inspection

- Contact Development Assessment to arrange an on-maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance.
- The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
  - Ensure that the works are constructed to a standard acceptable to Council;
  - Provide proof of Public Liability Insurance ($20 million) for the on-maintenance period; and
  - Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.
- Timing: Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL).

### 165(c) On-Maintenance Period

- Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.
- Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.
- Timing: 5 years from acceptance of the on-maintenance period.

### 165(d) Off-Maintenance Inspection

- On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond.
- Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.
- Timing: On completion of the maintenance period.

### 166 Arboricultural Requirements

- The following arboricultural requirements are to be performed to ensure the long-term health and safety of trees to be retained:

#### 166(a) Site Works

- In consultation with Development Assessment, the Arborist is to direct the civil works contractor in relation to any service installation activities utilising alternative technologies such as directional-boring or under-boring using vacuum excavation or air-spade. The Arborist must be suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture).

#### 166(b) Certification

- Submit to Development Assessment, certification from a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) that all necessary arboricultural works have been carried out in accordance with the requirements of all parts of this condition.

#### 166(c) Vegetation Pruning

- Any necessary pruning, tree surgery and other maintenance works to maintain health and stability of any trees to be retained, and to reduce potential hazards for future residents, is to be carried out in consultation with Development Assessment. All works must be performed by a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) in accordance with the Australian Standard 4373/96 for Pruning of Amenity Trees.

### 167 Land for Ecological and Waterway Corridors Infrastructure

- Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27 February 2014, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan_Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red). With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances.
- Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

#### Comment

- We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced Infrastructure Agreement.

#### Proposed Condition

- Land for Ecological and Waterway Corridors Infrastructure

NDN Application A003905687 390 Levitt Road, Upper Kedron Qld 4055
<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>168</td>
<td><strong>Bushfire Management Plan</strong>&lt;br&gt;i) Implement and carry out the works in accordance with approved Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014;&lt;br&gt;ii) Submit certification to Development Assessment certifying that the approved Bushfire Management Plan has been implemented.</td>
</tr>
<tr>
<td>169</td>
<td><strong>Stormwater Quality - Submit Management Plan</strong>&lt;br&gt;Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SBSMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010. The water quality treatment strategy is to be generally in accordance with approved plan B14159.W-SK01 Concept Stormwater Quality Management Plan For Stage 1 &amp; 2 by Brown Consulting QLD dated 14th October 2014. The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, build-outs or other speed control devices) in the streetscape of all areas within Stage 1A, 1B, and 1C consisting of street tree pits, and bioretention basins. Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap.</td>
</tr>
<tr>
<td>169(a)</td>
<td><strong>Implement Approved Plan</strong>&lt;br&gt;Implement and maintain the approved Site Based Stormwater Quality Management Plan.</td>
</tr>
<tr>
<td>169(b)</td>
<td><strong>Certification</strong>&lt;br&gt;Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.</td>
</tr>
<tr>
<td>Comment</td>
<td>The BCC has amended in redmarkups on the concept stormwater management plan suggests that additional at source treatment devices, beyond those already incorporated into the stormwater strategy are necessary for the development. It is considered that this is unnecessary for Stage 1A, 1B and 1C, and therefore seek the removal of references relating to at source treatment for these stages. The Stage 2 conditions seek to restrict constructing services through these devices, which is unnecessary as it forms part of the infrastructure of the development. We additionally seek the removal of the references requiring Gross Pollutant Traps (GPTs) being required for all basins. The inclusion of these devices adds unnecessary expense and maintenance burden on Council stormwater infrastructure in locations that have been determined that GPTs are unnecessary. This condition has been amended to reflect these points as provided below.</td>
</tr>
<tr>
<td>Proposed Condition</td>
<td><strong>Stormwater Quality - Submit Management Plan</strong>&lt;br&gt;Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SBSMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010. The water quality treatment strategy is to be generally in accordance with approved plan B14159.W-SK01 Concept Stormwater Quality Management Plan For Stage 1 &amp; 2 by Brown Consulting QLD dated 14th October 2014. The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, build-outs or other speed control devices) in the streetscape of all areas within Stage 1A, 1B, and 1C consisting of street tree pits, and bioretention basins. Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap.</td>
</tr>
<tr>
<td>109(a)</td>
<td><strong>Implement Approved Plan</strong>&lt;br&gt;Implement and maintain the approved Site Based Stormwater Quality Management Plan.</td>
</tr>
<tr>
<td>109(b)</td>
<td><strong>Certification</strong>&lt;br&gt;Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.</td>
</tr>
<tr>
<td>Landscape Works in Corridor</td>
<td>Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:</td>
</tr>
<tr>
<td>170(a)</td>
<td><strong>Submit Plan for Works in Corridor</strong>&lt;br&gt;Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and the approved drawings. Landscape Concept 1 Stage 1 and 2 received 15/10/2014 dwgs SK08 to SK17. The Landscape Management and Site Works Plan must document the following:</td>
</tr>
<tr>
<td>EXISTING SITE CONDITIONS</td>
<td>- Existing topography and land cover (including water bodies); - Existing vegetation including species, location, height, spread, diameter at breast height and health; - Location of existing under-ground and above-ground services within the proposed corridor; and - Location and description of existing fencing and retaining walls within and abutting the corridor.</td>
</tr>
</tbody>
</table>
**SITE PREPARATION**

- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

**NEW WORKS**

- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embankments and structures chosen from Council's standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road fromage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

**COSTING AND MAINTENANCE PROGRAM**

The plans are to provide details of a costing and maintenance program, including the following:

- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

**Timing:**

*Prior to site/operational work commencing*

**170(b) Pre Start Meeting**

Arrange with Development Assessment for a Pre Start meeting.

**Timing:**

Prior to site/operational work commencing

**170(c) Construct Approved Works**

Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

**Timing:**

Prior to acceptance of works on maintenance

**170(d) On Maintenance Inspection**

Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance:

- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

**Timing:**

Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL)

**170(e) On Maintenance Period**

Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

**Timing:**

5 years from acceptance of on maintenance period
**EXISTING SITE CONDITIONS**
Site Works Plan must document the following:

- **SITE PREPARATION**
  - Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:
  - **Proposed Condition**
    - Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
    - Proposed finished levels, including sections across and through the corridor at critical points;
    - Location and description of proposed fencing and retaining walls within and abutting the corridor.
- **NEW WORKS**
  - 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
  - Corridor embellishments chosen from Council’s standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
  - Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
  - Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
  - Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
  - 3 tiered planting to base of retaining walls to visually screen retaining walls;
  - Measures to protect any downstream areas of corridor already constructed;
  - Bank stabilisation/mulching methods including construction details;
  - Planing to bio-basins;
  - Tree protection fencing;
  - Spot levels and gradient lines in all Corridor areas;
  - Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
  - Cross-sectional treatment of creek invert;
  - Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
  - Provision of electricity and water connections to the corridor;
  - Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
  - Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
  - Details and locations of proposed embellishments;
  - Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

**COSTING AND MAINTENANCE PROGRAM**
The plans are to provide details of a costing and maintenance program, including the following:

- **An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;**
- **Details of a 12-month Maintenance Plan for all proposed landscape works; and**
- **Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.**

**Comment**
During the assessment of the application it was agreed with Council that the analysis of the 2 year, 5 year and 100 year floodlines was sufficient. As such, it is considered unnecessary to require further analysis against the 10 year, 20 year and 50 year floodlines, and have therefore deleted these from this condition.

Furthermore, the agreement to undertake a 5 year maintenance period was understood to be in relation to the areas of the site being rehabilitated, to ensure the protection and longevity of these particular species. It is not considered appropriate for a 5 year maintenance period to be enforced on the balance open space and landscape works within the corridors. On this basis the condition has been amended below to reflect a 2 year maintenance period on landscaped areas and a 5 year period on rehabilitation areas only.

**Proposed Condition**
Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

**Submit Plan for Works in Corridor**
Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the **IA, 1B and 1C** Corridor in accordance with the, the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and generally in accordance with the approved drawings & Landscape Concept 1 Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK17 & The Landscape Management and Site Works Plan must document the following:

**EXISTING SITE CONDITIONS**
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

**SITE PREPARATION**
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

**NEW WORKS**
- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embellishments chosen from Council’s standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planing to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

**170(f) Off Maintenance Inspection**
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:**
On completion of the maintenance period

**Comment**
On completion of the maintenance period

**Timing:**
Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond.

**110(c) Construct Approved Works**
Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

**Timing:**

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| 110(d) | **On Maintenance Inspection**  
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:  
- Ensure that the works are constructed to a standard acceptable to council;  
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and  
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.  
**Timing:**  
Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL) |
| 110(e) | **On Maintenance Period**  
Provide 2 year maintenance to the landscape works and 5 years maintenance to the rehabilitation works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period. Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.  
**Timing:**  
2 year maintenance to the landscape works and 5 years to the rehabilitation works from acceptance of on maintenance period |
| 110(f) | **Off Maintenance Inspection**  
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.  
**Timing:**  
On completion of the maintenance period |

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| 171(a) | **Implement Approved Plan**  
Install new street tree(s) in accordance with the approved plan. Contact Asset Services to arrange an On Maintenance inspection and obtain written confirmation that the street tree(s) have been planted in accordance with the approved Street Tree Plan.  
| 171(b) | **Maintain Tree(s)**  
Maintain street trees for a period of 12 months after planting. At the end of the 12 month maintenance period contact Asset Services to arrange an Off Maintenance inspection.  
| 172(a) | **Submit Detailed Plan**  
Submit to the Development Assessment and receive approval for a Street Tree Plan that provides details of street tree planting. Provide trees to all street frontages at spacings complying with the relevant Brisbane Planning Scheme Codes/Policies, or a minimum of one (1) tree per additional allotment frontage, whichever is the greater.  
**WORKS:**  
- The extent of proposed soft and hard landscape within proposed Council land  
- Location and description of fencing, retaining walls, entry statements, bollards, etc.  
- Existing and proposed finished levels to external works particularly in critical areas (eg. top and toe of retaining walls and steps) -  
- Description/details of critical design elements where applicable (eg. proposed surface treatments, stabilisation of buttresses, water features, etc)  
- Basic specification notes on plan for all proposed landscape works  
- RPEQ certified drawings for structural work where required  
**PLANTING:**  
- A planting schedule listing proposed plants by botanical names, quantities, pot size, height, spread and caliper at time of planting  
**COSTING AND MAINTENANCE PROGRAM:**  
The plans are to provide details of a costing and maintenance program, including the following:  
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan; and  
- Details of a 12 month Maintenance Plan for all proposed landscape works.  
**Note:** This condition does not refer to Parks or Street Trees. A Street Tree Plan is to be sent to the Arboriculturist, Asset Services for approval.  
**Timing:** Prior to building work above ground level commencing (MCU), or prior to operational work commencing (ROL) |
| 172(b) | **Implement the Approved Plan**  
Carry out the works in the approved detailed Landscape Plan.  
**Timing:** Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL) |
| 172(c) | **On Maintenance Inspection**  
Contact Development Assessment to arrange an On Maintenance inspection. The following information is to be provided to Development Assessment prior to the on maintenance inspection: |
### Engineering

**173 Filling and Excavation**

All proposed earthworks are to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council's assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

**173(a) Submit Earthworks Plan**

Submit and obtain endorsement from Development Assessment an earthworks plan prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ-Civil).

The Earthworks Plan should include the following:

- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

**173(b) Suitable Fill Material**

All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

**173(c) Implement Endorsed Plan**

Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

**Comment**

We seek the following amendments to the wording of this condition to reflect the performance based design solutions proposed in the engineering services report submitted as part of the development application. During assessment of the application Council confirmed their support for performance based design solutions for construction, where the standard Council codes and design standards could not be achieved. It is considered that the amended wording reflects this position and appropriately references the performance based outcomes that have been discussed and resolved with Council.

**Proposed Condition**

**Filling and Excavation**

All proposed earthworks are to be carried out generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies where possible and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council’s assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.
173(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications. ‘Civil Engineering Services Report B14159.CER01.AN’. (Revisions D) by Brown Consulting QLD dated 9th August 2014 checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ- Civil).

The Earthworks Plan should include the following:
- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

173(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

173(c) Implement Endorsed Plan
Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

174 Construction Management Plan
Prepare a Construction Management Plan for the subject site in accordance with the following requirements.

Note. This condition is imposed when construction activities need to be limited to manage the impact on the surrounding area. This condition is intended to apply throughout the period of site preparation to the completion of the development.

As indicated

174(a) Construction Management Plan - For Endorsement
Submit to Development Assessment for endorsement, a Construction Management Plan for the demolition, excavation and construction phases of the approved development. Separate Construction Management Plans may be appropriate for the individual components. The Construction Management Plan is to be in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Workplace Health and Safety Legislation requirements, Environmental Protection Act, the requirements of any Concurrence Agency and any other relevant legislative requirements. The Construction Management Plan is to provide the following details and address impacts, where applicable:
- Provision for pedestrian management including alternative pedestrian routes, past or around the site;
- Location of and impacts on any Council or other authority’s assets on and external to the site. Council assets include water, sewer, stormwater, street trees and kerb side allocation signs and line marking such as bus stops, loading zones and parking meters and/or ticket dispensers. Details of street trees are to include location, species, trunk and canopy size;
- Temporary vehicular access points and frequency of use;
- Existing and proposed kerb-side allocation signs and line marking (such as bus stops, loading zones and parking meters and or ticket dispensers);
- Provision for loading and unloading materials including the location of any remote loading sites;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- How materials are to be loaded/unloaded and potential impacts on existing street trees;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- Location of proposed external hoardings and gantries;
- Employee and visitor parking areas;
- Anticipated staging, programming;
- Provision for fire exit routes for other uses on the subject or adjoining sites;
- Details that identify and define phases of construction considered necessary to be conducted out of normal business hours (where normal hours are defined as Monday to Saturday between 6:30am and 6:30pm excluding public holidays).

Notes.
- Approval for footpath closures and/or temporary vehicle access will only be considered where it can be demonstrated that no reasonable alternative can be provided due to site constraints and that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are not compromised.
- Proposed arrangements utilising any part of the road reserve for construction related activities, for example, on street work zones, overhead gantries, hoardings or pedestrian diversions, are subject to separate application fees and rental fees.
- The Construction Management Plan may require modification, at Council’s discretion, to reflect changes in relevant legislation and industry best practice prevailing at the time of the permit application and throughout the construction program.
- Endorsement of the Construction Management Plan does not allow the carrying out of specific work activities for any phase of construction outside of normal hours.

174(b) Construction Management Plan - Pre-start Meeting
Arrange a pre-start meeting with the Development Assessment.

174(c) Construction Management Plan - Works in Road
Obtain relevant approvals to carry out any works within the road reserve required by the approved Construction Management Plan.
At least 10 days prior to either the pre-start meeting or commencement of site works, documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

Suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.

The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC. Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council’s Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

Timing: Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council’s Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

Proposed Condition On-site Erosion (high risk)

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.

Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council’s Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.

Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council’s Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.
Timing: Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

175(b) Implement Certified ESC Plan and Program
Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

176 Protect Existing Infrastructure
Where there is existing infrastructure in the vicinity of the proposed work, then the new work must not damage or compromise the working ability of the existing infrastructure. Should it be required to provide alterations to public utility mains, existing mains, services or installations, then the developer is required to meet the costs of the alteration(s), which is to be carried out in accordance with the relevant Brisbane Planning Scheme Codess/Polcies.

176(a) As Constructed Drawings
Submit to Development Assessment “As Constructed” drawings including an asset register, showing all new and/or rectification works required by this condition. These works must be certified by a Registered Professional Engineer of Queensland-Civil that they are in accordance with the relevant Brisbane Planning Scheme Codess/Polcies and any other relevant infrastructure requirements.

177 Waterway Corridor
Materials, equipment or structures (including but not limited to material stockpiles, sheds, concrete areas, landscaping materials, etc.) of any description must not be located within the waterway corridor unless specifically shown on the approved drawings.

178 Dedicate As Road - Non Trunk
Dedicate as road the following requirements:
(a) the areas shown as new roads on the approved drawings and documents, including land along the full frontage of the Subject Site to Canvey Road, to achieve an overall road reserve width of 24 metres;
(b) Areas, where required, to provide for external works in association with shared pedestrian access; and
(c) All corner truncations as six (6) metre by six (6) metre by three (3) equal chord truncations.

Note: This condition is imposed under Section 66.5 of the Sustainable Planning Act 2009.

179 Provide Certified Site Survey Levels
Submit to Development Assessment, “As Constructed” plans approved by a Registered Surveyor (in accordance with the relevant Brisbane Planning Scheme Codess/Polcies) showing finished surface level information over the completed development. The survey information is required to show surface levels and site contours at 1 metre intervals. All levels are to be shown as Reduced Levels to the “Australian Height Datum” (AHD).

180 Remove Improvements & Obstructions From Truncation and Dedication
Remove all improvements (fences, gates, letter boxes, garden beds and plots and other constructed items etc.) and obstructions (existing earth banks, vegetation etc.) from the area of the corner truncation(s) and/or area of dedicated road and reinstate the area as footway in accordance with the relevant Brisbane Planning Scheme Codess/Polcies.

Note: The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service, utility or asset owner will be required. Council permission is required if street trees, stormwater gullies/drains, water or sewer and swales are affected.

181 Retaining Walls
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codess/Polcies and to ensure the following:

(i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.

(ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.

(iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall.

(iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.

(v) Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This set back may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.

(vi) Retaining walls that retain fill and are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall unless an alternative has been approved by Council.

(vii) Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners. viii. Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

(ix) Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

181(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.
Consulting QLD and dated 14th October 2014, ensuring:

Construct the Stage 1 North Stormwater Detention area in accordance with the approved Flood Investigation report (Issue B) prepared by Brown

Proposed Condition

Retaining Walls

Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

(i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.

(ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.

(iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall unless otherwise approved by Council.

(iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than $\leq 3.0 \text{m}$ in height are to be vertically and horizontally tiered by a dimension of at least one third of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.

(v) Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.

(vi) Retaining walls that retain fill and are greater than $\leq 3.0 \text{m}$ in height are to be vertically and horizontally tiered by a dimension of at least one third of the height of the retaining wall unless an alternative has been approved by Council.

(vii) Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.

(viii) Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

(ix) Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

181(a) Certification of Retaining Walls

For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

182 Granting Easements

Grant the following easements:

i. Easements for underground drainage, overland flow and access purposes as may be required, in favour of Brisbane City Council.

ii. Easements over that part of Stages 1A, 1B, 1C and 1D within the proposed Waterway Corridors affected by the 100 year Average Recurrence Interval (ARI) flood, in favour of Brisbane City Council.

Note: This condition is imposed to provide access, maintenance of services and to protect drainage paths if required. Easements in favour of the Brisbane City Council are required to have the necessary easement documentation prepared (free of costs and compensation to Council) by the applicant’s private solicitors. Easements are to be shown on a Survey Plan and lodged with the Plan Sealing Unit. Enquiries regarding any legal documentation can be directed to the Plan Sealing Unit, Development Assessment (p: 3403 8888).

183 Service Crossings of Waterways

All service crossings of creek/waterways are to be located below ground level or attached to an approved crossing structure (eg road crossing) where located within the 100 year ARI flood extent. This is to ensure these crossings do not to impede floodwaters or create scour of the creek/waterway and to protect the service against damage by flood debris.

184 Minimum Floor or Pad Levels

Design and construct all proposed pad levels and roads to have the appropriate freeboard in accordance with Brisbane Planning Scheme Codes/Policies to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI Creek/waterway flood event, whichever is the higher flood level. Flood immunity requirements for other development (including relevant infrastructure, floor levels, parks, substations and ancillary structures) is to meet the requirements of Brisbane Planning Scheme Codes/Policies. (Note: flooding within all Category 1, 2 and 3 waterways and Cedar Creek is defined as Creek/waterway flooding for the purpose of this condition). Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL).

184(a) Certification

Provide certification and/or As-Constructed plans from a Registered Surveyor that confirm the development complies with the requirements of this condition.

185 Flooding & Stormwater Detention

Construct the Stage 1 North Stormwater Detention area in accordance with the approved Flood Investigation report (Issue B) prepared by Brown Consulting QLD and dated 14th October 2014, ensuring:

(i) Culvert crossings of waterways utilise reinforced concrete box culverts, arch culverts or bridges in accordance with Councils Natural Channel Design Guidelines.

(ii) Culverts incorporate debris deflector headwalls to minimise blockages and incorporate scour control at inlets and outlets.

(iii) Roads on embankments of stormwater detention areas are designed to be safe for a minimum 500 year ARI flow.

(iv) Stormwater detention areas are designed to reduce access by the public to these areas and incorporate (where required) appropriate fencing, barrier grades, depth markers and flood warning signs to ensure safety of the public.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

185(a) Submit Flood Study
Submit and obtain endorsement from Development Assessment for an updated Flood Study prepared and certified by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies, QUDM and Australian Rainfall and Runoff. The flood study is to be specific to Stage 1 and Stage 2 local flooding within the waterways and the Stage 1 North and Stage 1 South stormwater detention areas (as noted within the approved Flood Investigation by Brown Consulting QLD) and incorporate design earthworks, details for all detention basin outlets and provide a severe storm analysis as per QUDM requirements.

**Timing:**
Prior to site/operational/building work commencing.

**185(b) Submit Drawings for Endorsement**
Submit and obtain endorsement from Development Assessment, engineering drawings for the Stage 1 North detention area and Stage 1 South waterway crossing (as nominated in the approved Flood Investigation report (Issue B) by Brown Consulting QLD and dated 14th October 2014) prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
Prior to site/operational/building work commencing.

**185(c) Implement Approved Drawings**
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

**Timing:**
Prior to On-Maintenance Inspection

**185(d) Submit As Constructed Plans**
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**
Prior to On Maintenance Inspection

**185(e) On Maintenance Acceptance**
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

**Timing:**
Prior to On-Maintenance Acceptance

**185(f) Off Maintenance Acceptance**
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

**Timing:**
On completion of the maintenance period.

**185(g) Geotechnical Certification**
Submit to Development Assessment a geotechnical report with testing, recommendations and certification by a Registered Professional Engineer of Queensland (Geotechnical) that supports the design and construction of the Stage 1 North and South stormwater detention area embankments and road crossings. The geotechnical report is to certify that the detention basin embankments have been suitably designed to safely manage expected hydrostatic and hydrodynamic loads associated with ponding of stormwater behind the embankments to prevent failure (including piping failures).

**Timing:**
Prior to site/operational/building work commencing.

**Comment**
Point 185c) has been re-worded to provide more certainty for the applicant on what standard works will be assessed against, being those approved through OPW assessment. The amended condition is provided below.
**Point 185e)** bullet point 4 has been removed, as it is considered that this has been covered by the Off Maintenance requirements set out in condition 185f). The amendments to the condition are provided below.

**Proposed Condition**
Construct the Stage 1 North Detention area and Stage 1 South waterway crossing in accordance with the approved Flood Investigation report (Issue B) prepared by Brown Consulting QLD and dated 14th October 2014, ensuring:

(i) culvert crossings of waterways utilise reinforced concrete box culverts, arch culverts or bridges in accordance with Councils Natural Channel Design Guidelines,

(ii) culverts incorporate debris deflector headwalls to minimise blockages and incorporate scour control at inlets and outlets,

(iii) roads on embankments of stormwater detention areas are designed to be safe for a minimum 500 year ARI flow,

(iv) stormwater detention areas are designed to reduce access by the public to these areas and incorporate (where required) appropriate fencing, barrier grades, depth markers and flood warning signs to ensure safety of the public.

**Timing:**

a) For construction of the Stage 1 North Stormwater Detention area prior to Council notation of the plan of subdivision (ROL) for Stage 1A, 1B or 1C whichever is the earliest; and

b) For construction of the Stage 1 South waterway crossing prior to Council notation of the plan of subdivision (ROL) Stage 1A.

**Note:**
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

**185(a) Submit Flood Study**

NDN Application A003905687 390 Levitt Road, Upper Kedron Qld 4055
Submit and obtain endorsement from Development Assessment for an updated Flood Study prepared and certified by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies, QUDM and Australian Rainfall and Runoff. The flood study is to be specific to Stage 1 and Stage 2 local flooding within the waterways and the Stage 1 North and Stage 1 South stormwater detention areas (as noted within the approved Flood Investigation by Brown Consulting QLD) and incorporate design earthworks, details for all detention basin outlets and provide a severe storm analysis as per QUDM requirements.

Timing:
Prior to site/operational/building work commencing.

### 185(b) Submit Drawings for Endorsement
Submit Drawings for Endorsement from Development Assessment, engineering drawings for the Stage 1 North detention area and Stage 1 South waterway crossing (as nominated in the approved Flood Investigation report (Issue B) by Brown Consulting QLD and dated 14th October 2014) prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:
Prior to site/operational/building work commencing

### 185(c) Implement Approved Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

Timing:
Prior to On-Maintenance Inspection

### 185(d) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing:
Prior to On Maintenance Inspection

### 185(e) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment.
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works at the time of Operational Works assessment.
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies.
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

Timing:
Prior to On-Maintenance Acceptance

### 185(f) Off Maintenance Acceptance
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

Timing:
On completion of the maintenance period.

### 185(g) Geotechnical Certification
Submit to Development Assessment a geotechnical report with testing, recommendations and certification by a Registered Professional Engineer of Queensland (Geotechnical) that supports the design and construction of the Stage 1 North and South stormwater detention area embankments and road crossings. The geotechnical report is to certify that the detention basin embankments have been suitably designed to safely manage expected hydrostatic and hydrodynamic loads associated with ponding of stormwater behind the embankments to prevent failure (including piping failures).

Timing:
Prior to site/operational/building work commencing.

### 186 Stormwater Outlets in Waterways
Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline "Stormwater Outlets in Parks and Waterways 2003". Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings.

### 187 Stormwater - Hydraulic Report
Construct the development in accordance with the approved concept Site Based Stormwater Management Plan prepared by Brown Consulting, document no. B14159.W-05A dated 14th October 2014 (as amended in red).

#### 187(a) Certification
Provide certification from a Registered Professional Engineer Queensland that the development has been constructed in accordance with the approved hydraulic report.

### 188 Construct Footpath Non-Trunk
Construct a 1.2 metre wide footpath to the following:
- Along one side of all 16 metres wide neighbourhood access roads.
- Along the entire site frontage of Canvey Road.
- Along both sides of the new District Access Road (Canvey Road extension), all in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Notes:
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.
188(a) Submit As Constructed Plans
Submit to Development Assessment "As Constructed" plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with relevant Brisbane Planning Scheme Codes/Policies.
Timing:
Upon completion of the work

189 Refuse Collection - Kerb Side (external road or internal private road)
Refuse and recycling bins for the proposed development are to be collected from the kerb side unless alternative refuse collection arrangements are made with Brisbane City Council's Waste Services.

190 Works for Transport Infrastructure - Non-Trunk External Roadworks
Provide the following non-trunk roadworks with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the Austroads design standards:

a) Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL):

(i) Construct new Type D concrete kerb and channel and associated drainage along the site frontage of Canvey Road, on a 4.25 metres alignment, taking into account the required road reserve widening to achieve overall road reserve width of 24.0 metres for Canvey Road.
(ii) Construct Type D road pavement from the lip of the new kerb and channel to the edge of the existing road pavement to Canvey Road frontage with any appropriate tapers (the minimum width of road construction/reconstruction is to be 1.2 metres)
(iii) Provide appropriate intersection treatment including modification to the existing or construction of new median islands at intersections, as may be required and applicable, due to the new road pavement widening and extension works.
(iv) Provide signs and pavement markings to the new roadworks along the site frontage of Canvey Road.

Note:
The above external roadworks to Canvey Road frontages for Stage 1B, 1C and 1D may have to be constructed in the earlier stages subject to detailed design in the Functional Layout Plans and Roads and Drainage plans to facilitate lawful point of discharge.

b) Prior to the completion of the development of Stage 1 or 180 lots, which ever is the earliest:

(i) Works for the upgrade and signalisation of the intersection at Upper Kedron Road/Cemetery Road, generally in accordance with the Conceptual Signalled Intersection Upgrade Works Plan TTM Reference 14BRT0323-04, dated 14 Oct 2014. The upgrade to the intersection is to include road works to obtain a satisfactory sight distance to the left for vehicles exiting Cemetery Road into Upper Kedron Road.
(ii) Works for the upgrade and signalisation of the intersection of Upper Kedron Road/Hogarth Road, generally in accordance with Conceptual Signalled Intersection Upgrade Works Plan TTM Reference 14BRT0323-04, dated 14 Oct 2014.

Note: All signalised intersections are required to be designed in accordance with Austroads Part 4A-Unsignalised & Signalised Intersections Design Guidelines. The traffic signal designs need to be approved by the CRU-Signals Operations Section prior to being submitted at the Operation Works stage.

c) Prior to the completion of the development of Stage 1 or 180 lots within the Subject Site, which ever is the earlier:

(i) Works for the widening of Canvey Road on the south approach to Charolais Crescent roundabout to a District Access road standard.
(ii) Construct a Type C pavement and kerb and channel in Hogarth Road on southern approach to McGinn Road

Notes:
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

190(a) Submit Functional Layout Plans
Submit separate functional layout plans showing:
- The extent of the external roadworks; and
- The signal infrastructure layout.

Obtain Preliminary Approval from Development Assessment.

Timing:
Prior to the submission of Roads & Drainage, Signs & Pavement Marking, and Signals Design drawings.

190(b) Submit Roads and Drainage Plans
Submit and obtain endorsement from Development Assessment Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:
Prior to site/operational/building work commencing

190(c) Submit Traffic Signal Design Plans
Submit and obtain endorsement from Development Assessment Traffic Signal Design Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, the Queensland Manual of Uniform Traffic Control Devices and the Austroads Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil. The Signal Design plans are to be signed by Council’s Transport & Traffic, Signals Management Section prior to lodgement.

Timing:
Prior to site/operational/building work commencing
190(d) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment, Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil. 
Timing: 
Prior to site/operational/building work commencing

190(e) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted “on-maintenance” and “off- maintenance” as a Council asset, by Development Assessment. 
Timing: 
Prior to On-Maintenance Inspection

190(f) Submit As Constructed Plans
Submit “As Constructed” plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies. 
Timing: 
Prior to On Maintenance Inspection

190(g) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period. 
Timing: 
Prior to On- Maintenance Acceptance

190(h) Off Maintenance inspection
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be Released. 
Timing: 
On completion of the maintenance period

Comment
The condition specifies the Type D pavement profile for external roadworks upgrades. This profile is in direct conflict with the existing pavement profile which has been constructed in accordance with the previous standard (being a flexible pavement). It is considered unreasonable to condition external upgrade works to roads to be in accordance with a differing road profile from that of the existing road. As such appropriate amendments to the conditions are sought, as below, to provide the flexibility for each external upgrade required to be undertaken to the same profile and pavement type as that existing in that location.

This condition further requires frontage works to Canvey Road in relation to Stage 1D. Stage 1D is the creation of a large future development allotment, and as such is subject to a future Development Application in accordance with the provisions of this preliminary approval. As such, it is considered unreasonable to require upgrade works to be undertaken to the frontage of Canvey Road (adjoining Stage 1D) as part of this ROL. The future application for the use of land within Stage 1D is the most appropriate time to require these works, to avoid duplication of works, or the undertaking of works that will need to be redone as part of future development. The condition has been amended accordingly below.

Council have also sought the submission of road functional plans separate to the lodgement of OPW applications for roadwork. This is considered unreasonable, given a road hierarchy plan has been provided as part of the Development Application package, and that there is no benefit of separating the road functional plan assessment from the OPW assessment of the detailed design. The condition has been amended below to remove this additional unreasonable requirement.

Finally, this condition also requests providing a minimum 12 month maintenance period to works and is then contradicted by the timing provisions (prior to on-maintenance acceptance). The intent of the condition in relation to maintenance periods and timing is appropriately covered under the off-maintenance provisions, and as such the condition has been amended to reflect this.

Proposed Condition
Works for Transport Infrastructure - Non-Trunk External Roadworks
Provide the following non-trunk roadworks with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

a) Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL):
   (i) Construct new Type D concrete kerb and channel and associated drainage along the site frontage of Canvey Road, on a 4.25 metres alignment, taking into account the required road reserve widening to achieve overall road reserve width of 24.0 metres for Canvey Road.
   (ii) Construct Type D road pavement from the lip of the new kerb and channel to the edge of the existing road pavement to Canvey Road frontage with any appropriate tapers (the minimum width of road construction/reconstruction is to be 1.2 metres The construction standard is to adopt the same pavement profile type as the existing constructed road.
   (iii) Provide appropriate intersection treatment including modification to the existing or construction of new median islands at intersections, as may be required and applicable, due to the new road pavement widening and extension works.
   (iv) Provide signs and pavement markings to the new roadworks along the site frontage of Canvey Road.
Note: The above external roadworks to Canvey Road frontages for Stage 1B, and 1C and 1D may have to be constructed in the earlier stages subject to detailed design in the Functional Layout Plans and Roads and Drainage plans to facilitate lawful point of discharge.

b) Prior to the completion of the development of Stage 1 or 180 lots, which ever is the earliest:
   (i) Works for the upgrade and signalisation of the intersection at Upper Kedron Road/Cemetery Road, generally in accordance with the Conceptual Signalised Intersection Upgrade Works Plan, TTM Reference 14BRT0323-04, dated 14 Oct 2014. The upgrade to the intersection is to include road works to obtain a satisfactory sight distance to the left for vehicles exiting Cemetery Road into Upper Kedron Road.
   (ii) Works for the upgrade and signalisation of the intersection of Upper Kedron Road/Hogarth Road, generally in accordance with Conceptual Signalised Intersection Upgrade Works Plan TTM Reference 14BRT0323-04, dated 14 Oct 2014.

Note: All signalised intersections are required to be designed in accordance with Austroads Part 4A-Unsignalised & Signalised Intersections Design Guidelines. The traffic signal designs need to be approved by the CRU-Signals Operations Section prior to being submitted at the Operation Works stage.

c) Prior to the completion of the development of Stage 1 or 180 lots within the Subject Site, which ever is the earlier:
   (i) Works for the widening of Canvey Road on the south approach to Charolais Crescent roundabout to a District Access road standard.
   (ii) Construct a Type C pavement and kerb and channel in Hogarth Road on southern approach to McGinn Road.

Notes:
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

190(a) Submit Functional Layout Plans
Submit separate functional layout plans showing:
- The extent of the external roadworks; and
- The signal infrastructure layout.

Obtain Preliminary Approval from Development Assessment.

Timing:
Prior to Concurrently with the submission of Roads & Drainage, Signs & Pavement Marking, and Signals Design drawings.

190(b) Submit Roads and Drainage Plans
Submit and obtain endorsement from Development Assessment Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:
Prior to site/operational/building work commencing

190(c) Submit Traffic Signal Design Plans
Submit and obtain endorsement from Development Assessment Traffic Signal Design Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil. The Signal Design plans are to be signed by Council’s Transport & Traffic, Signals Management Section prior to lodgement.

Timing:
Prior to site/operational/building work commencing

190(d) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment, Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:
Prior to site/operational/building work commencing

190(e) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted “on-maintenance” and “off-maintenance” as a Council asset, by Development Assessment.

Timing:
Prior to On-Maintenance Inspection

190(f) Submit As Constructed Plans
Submit “As Constructed” plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing:
Prior to On Maintenance Inspection

190(g) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
| 190 | Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies. Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.

Timing: Prior to On-Maintenance Acceptance

190(h) Off Maintenance inspection
On completion of the minimum 12 months maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

Timing: On completion of the maintenance period

191 | Repair Damage To Kerb, Footpath Or Road
Repair any damage to existing kerb and channel, footpath or roadway (including removal of concrete slurry from footways, roads, kerb and channel and stormwater gullies and drainlines) and re-instatement existing traffic signs and pavement markings that have been removed or damaged during any works carried out in association with the approved development.

192 | Works for Transport Infrastructure - Non-Trunk Internal Roadworks
Provide the following Roadworks and Stormwater Drainage with any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, and the following requirements:

(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 50 km/hr maximum);
(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 50 km/hr maximum with provision as an interim bus route, as may be required, for bus access);
(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area.

Notes. Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series).

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

192(a) Submit Functional Layout Drawings
Submit functional layout plans showing the extent of all proposed Roadworks.
Timing: Prior to site/operational/building work commencing
Note. Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

192(b) Submit Roads and Drainage Plans
Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.
Timing: Prior to site/operational/building work commencing

192(c) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, checked and certified by a Registered Professional Engineer of Queensland-Civil.
Timing: Prior to site/operational/building work commencing

192(d) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.
Timing: Prior to On-Maintenance Inspection

192(e) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On-Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
Timing: Prior to On-Maintenance Inspection

192(f) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies.
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.

### 192(g) Off-Maintenance Acceptance

On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.

**Timing:**
On completion of the maintenance period

### Comment

The design speed for 14m wide local roads and 16m neighbourhood roads should be 40km/hr as per the Traffic and Transport PSP (and also the new BCC City Plan Infrastructure Design PSP). As such item (i) and (ii) has been amended to reflect the appropriate speed limit.

Given the nature of the site it is considered that a 50km/hr posted and design speed is more appropriate for the District Access roads and bus routes. Canvey Road is presently posted at 50km/hr, and it is anticipated that with the increase in patronage of this road (and extensions of it) that 50km/hr speed is more desirable. As such the condition has been amended accordingly below.

For clarity we have amended condition 192(a) to ensure that the functional layout drawings are included as part of the operational works package, and not a separate package required prior to this time.

As Council are aware in some instances the design outcomes achieved for the site are performance outcomes that are not specifically in accordance with standard Council specifications and standards. As such the condition has been amended throughout to reflect outcomes agreed with Council through the inclusion of the following words: for as otherwise approved by Council.

Condition 192(f) has also been amended to remove the last bullet point as it is considered that this is covered by the off-maintenance condition that follows in point g).

### Proposed Condition

Provide the following Roadworks, Stormwater Drainage, and any associated services in accordance with an endorsed design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, and the following requirements:

(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum);

(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 450 km/hr maximum with provision as an interim bus route, as may be required, for bus access);

(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area;

(iv) The roads 19.5-24.0 metres wide to be designed and constructed as District Access Roads 1 Bus Route (designed for 85 percentile 560 km/hr maximum); and

(v) Cul-de-sac to be constructed to 9.0 metres radius and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum).

**Notes:**
- Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series) or as otherwise approved by Council.

- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

### 192(a) Submit Functional Layout Drawings

Submit functional layout plans showing the extent of all proposed Roadworks as part of the Operational Works application.

**Timing:**
Prior to site/operational/building work commencing

**Note.**
Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

### 192(b) Submit Roads and Drainage Plans

Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings or as otherwise approved by Council, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
Prior to site/operational/building work commencing

### 192(c) Submit Signs and Pavement Plans

Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
Prior to site/operational/building work commencing

### 192(d) Implement Endorsed Drawings

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.

**Timing:**
Prior to On-Maintenance Inspection

### 192(e) Submit As Constructed Plans

Submit "As Constructed" plans including an asset register and a pre-On-Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**
NDN Application 1 003905687 390 Levitt Road, Upper Kedron Qld 4055
### 192(a) Bioretention Basin Landscaping
Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design). The design must provide for safe egress into and out of the treatment facility.

All Bioretention basins are to:
- provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level,
- provide gross pollutant traps at all stormwater inlets from roads,
- design all outlet pits for a minimum 2 year ARI flow without overtopping spillways, and the spillway designed to safely convey the 50 year ARI peak flow,
- ensure the basin (including embankments and retaining walls) is located outside of the 10 year ARI flood extent within any waterway,
- provide scour control and tail-out channels in accordance with Councils Natural Channel Design Guidelines.

### 192(b) Implement Approved Drawings
Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.

**Timing:** Prior to On-Maintenance Inspection

### 192(c) On-Maintenance Inspection
Contact Development Assessment to arrange an On-Maintenance inspection.

**Timing:** Prior to On-Maintenance Inspection

### 192(d) Off-Maintenance Acceptance
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.

**Timing:**
- Prior to On-Maintenance Acceptance
- On completion of the maintenance period

### 193 Water Quality Treatments in Public Open Space
Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design). The design must provide for safe egress into and out of the treatment facility.

All Bioretention basins are to:
- provide scour control and tail-out channels in accordance with Councils Natural Channel Design Guidelines.

### 193(a) Bioretention Basin Landscaping
Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrently with the engineering drawings.

**Timing:** Prior to site/operational/building work commencing

### 193(b) Implement Approved Drawings
Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.

**Timing:**
- Prior to On-Maintenance Inspection
- Prior to Off-Maintenance Inspection

### 193(c) On-Maintenance Inspection
Contact Development Assessment to arrange an On-Maintenance inspection.

**Timing:**
- Prior to On-Maintenance Inspection
- Prior to Off-Maintenance Inspection

### 193(d) Maintenance Period
Provide the following in relation to the maintenance period:
- The maintenance period will be 24 months upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment. The maintenance period ends when the works are accepted Off-Maintenance by Development Assessment.
- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.
- Submit “As Constructed” plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the approved plans.

**Timing:**
- From acceptance of On-Maintenance period
- From acceptance of Off-Maintenance period

### 193(e) Off-Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection

**Timing:**
- On completion of the maintenance period

**Comment**
The condition seeks the provision of gross pollutant traps (GPTs) at all stormwater inlets from roads. It is considered unreasonable to require this, and it does not accord with the proposed stormwater management strategy. There are substantial construction and maintenance cost implications with an increased number of GPTs. The bullet point requiring the inclusion of GPTs has been deleted as per below.

Requiring the concurrent lodgement of engineering and landscaping plans will create delays for the development. General practice is that the landscape operational works applications are lodged with Council following the lodgement of the engineering drawings. Approval of the engineering drawings does not occur until landscape OPW is lodged. As such the wording has been amended below to allow for the delay in finalising landscape detailed design following completion of the engineering drawings.
The maintenance period for the water quality treatments has been amended to reflect standard practice of 12 months, followed by a 12 month period for planting establishment. It is considered that the standard maintenance periods can be applied to this aspect of the development.

**Proposed Condition**

Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design).

The design must provide for safe egress into and out of the treatment facility.

All Bioretention basins are to:

- provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level,
- provide gross pollutant traps at all stormwater inlets from roads,
- design all outlet pits for a minimum 2 year ARI flow without overtopping spillways, and the spillway designed to safely convey the 50 year ARI peak flow,
- ensure the basin (including embankments and retaining walls) is located outside of the 10 year ARI flood extent within any waterway,
- provide scour control and tail-out channels in accordance with Councils Natural Channel Design Guidelines.

**193(a) Bioretention Basin Landscaping**

Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrently with lodgingment of the engineering drawings.

**Timing:**

Prior to site/operational/building work commencing

**193(b) Implement Approved Drawings**

Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.

**Timing:**

Prior to On-Maintenance Inspection

**193(c) On-Maintenance Inspection**

Contact Development Assessment to arrange an On-Maintenance inspection.

**Timing:**

Prior to On-Maintenance Inspection

**193(d) Maintenance Period**

Provide the following in relation to the maintenance period:

- The maintenance period will be 24 months, followed by a 12 month establishment period for planting upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment.
- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.
- Submit "As Constructed" plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the approved plans.

**Timing:**

From acceptance of On-Maintenance period

**193(e) Off-Maintenance Inspection**

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:**

On completion of the maintenance period

**Works for Stormwater Infrastructure - Non-Trunk**

Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

- Runoff from the site and external catchments is to be managed in accordance with approved engineering plans to ensure there will be no adverse impacts on neighbouring properties.
- All allotments and roads are to be designed and constructed to have the appropriate freeboard to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek/waterway flood event, whichever is the higher flood level.
- A satisfactory lawful point of discharge has been provided via discharge to Council owned land (drainage reserve, road reserve) or stormwater easement designed to accommodate developed flows.
- Extension of existing stormwater culverts on Canvey Road to ultimate road reserve width.

**Notes:**

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

**194(a) Submit Drawings for Endorsement**

Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**

Prior to site/operational/building work commencing

**194(b) Implement Endorsed Drawings**

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

**Timing:**
Prior to On-Maintenance Inspection

194(c) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a Pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
Timing: Prior to On Maintenance Inspection

194(d) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 month maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.
Timing: Prior to On-Maintenance Acceptance

194(e) Off Maintenance Inspection
On completion of the maintenance period undertake an Off- Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.
Timing: On completion of the maintenance period

Comment
The existing culverts located in Canvey Road are adjacent to Stage 1D of the development. Given that this approval does not seek to develop Stage 1D, and will require future development approvals in order to do so, we seek the deletion of any aspects of conditions that require works to be undertaken adjoining Stage 1D. This is to reduce the need to redo construction work when the stage is developed in the future. As the ultimate development proposal is unknown for Stage 1D, it is not possible to condition appropriate works at this time.
It has been confirmed by TTM consultants that the construction of the current road network is sufficient to accommodate the anticipated traffic demand without the need to undertake works to the external network prior to the development of Stage 1D. This condition also requests providing a minimum 12 month maintenance period to works and is then contradicted by the timing provisions (prior to on-maintenance acceptance). The intent of the condition in relation to maintenance periods and timing is appropriately covered under the off-maintenance provisions, and as such the condition has been amended to reflect this

Proposed Condition
Works for Stormwater Infrastructure - Non- Trunk
Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:
- Runoff from the site and external catchments is to be managed in accordance with approved engineering plans to ensure there will be no adverse impacts on neighbouring properties.
- All allotments and roads are to be designed and constructed to have the appropriate freeboard to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek/waterway flood event, whichever is the higher flood level.
- A satisfactory lawful point of discharge has been provided via discharge to Council owned land (drainage reserve, road reserve) or stormwater easement designed to accommodate developed flows.
- Extension of existing stormwater culverts on Canvey Road to ultimate road reserve width.

Notes.
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

194(a) Submit Drawings for Endorsement
Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.
Timing: Prior to site/operational/building work commencing

194(b) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.
Timing: Prior to On-Maintenance Inspection

194(c) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a Pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
Timing: Prior to On Maintenance Inspection

194(d) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works

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### Proposed Condition

- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies.

#### Timing:
Prior to On-Maintenance Acceptance

194(e) Off Maintenance Inspection

On completion of the minimum 12 months maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

#### Timing:
On completion of the maintenance period

195

<table>
<thead>
<tr>
<th>Ponding of stormwater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjacent properties and roads are to be protected from ponding or nuisance from stormwater as a result of the works. Ensure the stormwater runoff from the site does not adversely impact on flooding or drainage (peak discharge and duration up to the 100 year Average Recurrence Interval) of properties that are upstream, downstream or adjacent to the site.</td>
</tr>
<tr>
<td>Notes.</td>
</tr>
<tr>
<td>- If remedial works are required that involve drainage, drawings are to be submitted and approval obtained from Development Assessment, to provide a means to rectify the site drainage.</td>
</tr>
<tr>
<td>- This condition is imposed to ensure that the developer is aware that they are responsible for all remedial works required as a result of any site works and, that they must protect neighbouring properties and roads from ponding and nuisance water from the proposed development.</td>
</tr>
</tbody>
</table>

196

<table>
<thead>
<tr>
<th>Public Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodge street lighting design drawings showing the proposed public lighting system in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and obtain approval from the City Lighting, Asset Services.</td>
</tr>
</tbody>
</table>

196(a) Agreement with Supplier

Enter into an agreement with an electricity supplier and provide a public lighting system in accordance with the above approved lighting design plans.

197

<table>
<thead>
<tr>
<th>Service Conduits and Mains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply and install all service conduits and meet the cost of any alterations to public utility mains, existing mains, services or installations required in connection with the approved development in accordance with the relevant Brisbane Planning Scheme Codes/Policies. This includes:</td>
</tr>
<tr>
<td>- the provision of all services and/or conduits along the full length of any rear allotment access or access easement.</td>
</tr>
<tr>
<td>- the relocation of any fire hydrant and/or valves from the development’s vehicular footway crossings if applicable.</td>
</tr>
<tr>
<td>- the retention and/or relocation of any existing foul water lines that currently exist within the site.</td>
</tr>
<tr>
<td>Note. Applicants should liaise with the appropriate service authorities. Typical underground services and/or conduits to be constructed include power, phone, telecommunications, sewer, stormwater and gas if applicable.</td>
</tr>
</tbody>
</table>

197(a) As Constructed Drawings

Submit to Development Assessment "As Constructed" drawings including an asset register, approved by a Registered Professional Engineer Queensland that are in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and any other relevant infrastructure requirements, showing the works required by this condition.

198

<table>
<thead>
<tr>
<th>Conduit for Brisbane City Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide a single underground conduit (100mm diameter UPVC class PN9) in favour of Brisbane City Council on at least one side of all Neighbourhood Access Roads (Bus Route only), Industrial Access Roads and Major Roads in the Council Road Hierarchy, in accordance with the following:</td>
</tr>
<tr>
<td>- The conduit must be laid in the telecommunication alignment of the footpath, on the kerb side of the Telecommunication Carrier conduit or in an agreed shared trench arrangement with the Telecommunication Carrier and other Utilities as may be relevant, subject to the approval of Development Assessment.</td>
</tr>
<tr>
<td>- The conduit must bypass the Telecommunication Carrier pits.</td>
</tr>
<tr>
<td>- Pits (minimum size, Type 4 as per BCC Drawing UMS 600/031) with lids (as per Drawing UMS 600/030 - but Class B instead of Class C) must be installed at the head ends of the conduit, both sides of road crossings, at intersections and at other locations that may be specified by Council.</td>
</tr>
<tr>
<td>- The conduit must be plugged at each pit.</td>
</tr>
<tr>
<td>- The conduit must be located and installed in such a way that facilitates the installation of cable and additional pits in the future.</td>
</tr>
</tbody>
</table>

198(a) Submit "As Constructed" Drawings

Submit to Development Assessment, "As Constructed" drawings, including an asset register, approved by a Registered Professional Engineer Queensland, and in accordance with the requirements of this condition and the relevant Brisbane Planning Scheme Codes/Policies.

199

<table>
<thead>
<tr>
<th>Telecommunications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit to Development Assessment, documentary evidence issued by a relevant telecommunication carrier to verify that the necessary underground telecommunication services have been supplied within and adjacent to the development.</td>
</tr>
</tbody>
</table>

200

<table>
<thead>
<tr>
<th>Provide Rear Lot Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide access to rear lots, where applicable, in accordance with the following:</td>
</tr>
<tr>
<td>- Construct a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.</td>
</tr>
<tr>
<td>- The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover.</td>
</tr>
</tbody>
</table>

#### Comment

It is considered more relevant and reasonable to require access to rear lots to be constructed in accordance with the Brisbane City Council standard drawings rather than specifying a construction standard in the condition. This allows for amendments to design standards over the life of the project.

#### Proposed Condition

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Provide access to the rear lots in accordance with the following:

- Construct a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
- The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metre wide Type A permanent vehicular crossover. BCC Standard Drawing BSD-2021.

**Standard Advice**

201. **Concurrence Agency Conditions**
   The Department of State Development Infrastructure and Planning as concurrence agency has imposed the conditions contained in the letter dated 2 December 2014.

202. **Construction Noise and Dust Emissions**
   Pursuant to the *Environmental Protection Act 1994*, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emission are accordance with the requirements of the Act.
   The *Environmental Protection Act 1994* prescribes that:
   1. A person must not carry out building work in a way that makes an audible noise:
      - (a) on a business day or Saturday, before 6.30a.m. or after 6.30p.m or
      - (b) on any other day, at any time.
   2. The reference in subsection (1) to a person carrying out building work:
      - (a) includes a person carrying out building work under an owner-builder permit; and
      - (b) otherwise does not include a person carrying out building work at premises used by the person only for residential purposes.

203. **Advice Agency Condition**
   Powerlink acting as an advice agency for the development has imposed conditions contained in the letter dated 18 July 2014.

**Water & Wastewater Services - Concurrence Agency Requirements**

204. **Grant Easements**
   Grant the following easement(s) for water supply or sewerage purposes.
   - (a) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
   - (b) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.
   **Timing:**
   - Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
   **GUIDELINE**
   This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.
   **PROOF OF FULFILMENT**
   Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.
   **Comment**
   It is considered that the timing impacts referenced in this condition may delay plan sealing. Delays may be experienced where live works are still being undertaken after plan sealing but prior to on-maintenance (through the bonding process). As such we seek the reference to *prior to the relevant Council signing the plan of subdivision* to be removed from the timing, as suggested below.
   **Proposed Condition**
   - Grant Easements
     - g) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
     - h) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.
   **Timing:**
   - Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
   **GUIDELINE**
   This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.
   **PROOF OF FULFILMENT**
   Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

205. **Construct Waste Water Non-Trunk Infrastructure System**
Construct a Sewerage Non-Trunk infrastructure system necessary to provide a sewerage connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**
This condition has been imposed to ensure that sewerage infrastructure is in place to serve the development and that each lot has a sewerage property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**
Connection Certification from QUU

### 205(a) Wastewater Network Infrastructure (Non-trunk Infrastructure)
(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*.
(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*.
(c) Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities wastewater network infrastructures.
(d) Transfer ownership of the wastewater reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network and/or property service infrastructure. This includes:
   (i) where not required for existing or future development, removing existing wastewater network and/or property service infrastructure and sealing any connection(s) to remaining reticulation infrastructure;
   (ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
   (iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as specified in current standards.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 205(b) Wastewater Property Service Infrastructure (Non-trunk Infrastructure)
(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*.
(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*.
(c) Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland Urban Utilities wastewater reticulation system.
(d) Each lot must have a separate wastewater property service connection which commands the whole of each lot.
(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.
(f) If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.
(g) Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.
(h) Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

(i) Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words *Sewer Connection 2 M.*

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 205(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first. As indicated

### 205(d) Wastewater Network and Property Service Infrastructure- Sizing
The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

**Timing:**
Prior to the construction of network or property service infrastructure. As indicated

### 205(e) Wastewater Infrastructure- Design and Construction Standards
(a) The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

205(f) Wastewater Network Infrastructure- CCTV Inspection
(a) Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.
(b) CCTV survey must be carried out in accordance with the WSA 05-2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.
(c) The Applicant must repair all defects in accordance with the approved engineering restoration plan and schedule at no cost to Queensland Urban Utilities.

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

205(g) Wastewater Network Infrastructure- Pressure Testing
(a) Conduct pressure/vacuum testing of wastewater mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
(b) Pressure/vacuum testing of wastewater mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.
(c) The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment
Point 205(b)(h) It is considered that imposing the upgrades to existing services that are considered deficient by QUU and not located within the development is an unreasonable imposition on the development. As such we seek this aspect of the condition to be deleted.

Point 205c The impact and compliance with requirements prior to QUU issuing the Connection Certificate should be tied to demonstration of the relevant provisions of the SEQ water and sewerage design and construction codes. Amended wording is provided below to reflect this.

Point 205e The impact and compliance with requirements prior to QUU issuing the Connection Certificate should be tied to demonstration of the relevant provisions of the SEQ water and sewerage design and construction codes. Amended wording is provided below to reflect this.

Proposed Condition
Point 205(b)(h) Delete. Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

205(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

205(e) Wastewater Infrastructure- Design and Construction Standards
The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

206 Live Works for Water Supply and Wastewater
Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

a) All work on or near live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.

b) A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.

c) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.

d) All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.

e) Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.

f) All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.
### Proposed Condition

Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

- All work on or within 1 metre of live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.
- A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.
- Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.
- All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.
- Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.
- All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

### Timing:
- Prior to and at the time of Live Works.
- Prior to and at the time of the End of Maintenance Package.
- In accordance with the SEQ Water Supply and Sewerage Design and Construction Codes at the time of approval.

## Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

### 207(a) Design Approval - Major Works

- Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
- Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

### Timing:
- Prior to the construction of water or wastewater infrastructure.

### 207(b) Pre-Construction Review - Major Works

- Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
- Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.
- No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

### Timing:
- Prior to the construction of water or wastewater infrastructure.

### 207(c) Construction Certification - Major Works

- Submit the As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.
- The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

### Timing:
- Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 207(d) End of Maintenance - Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

### Timing:
- At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

### 207(e) Works Inspections - Major Works

- Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:
- Prior to backfilling of pipe trenches (after embedment has been placed around pipes).
### 207(b) Pre-Construction Review - Major Works

Prior to the construction of water or wastewater infrastructure.

#### Timing:
Prior to and during construction of water or wastewater infrastructure.

#### Comment

The condition requires the works to be inspected by and certified by a suitably qualified RPEQ, as such including these hold points would only add unnecessary time delays to the delivery of the project. The amendments sought to this condition seek to remove any additional hold points by QUU.  

It is additionally requested that the timing sections of this condition are modified (as provided below) so that the timing refers to the compliance of work in accordance with the SEQ water and sewerage design and construction codes at the time of approval. This will avoid any potential issues with rework, redesign, and reconstruction resulting from updated standards after the time of approval. This is effectively to avoid any chance of retrospective changes being sought to work already completed.  

The condition has been amended accordingly below.

#### Proposed Condition

**Major Works for Water Supply and Wastewater Infrastructure**  
Construct major works for water supply and wastewater infrastructure necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

<table>
<thead>
<tr>
<th>207(a) Design Approval - Major Works</th>
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</thead>
</table>
| **a)** Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.  
**b)** Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification). |

#### Timing:
Prior to the construction of water or wastewater infrastructure.

<table>
<thead>
<tr>
<th>207(b) Pre-Construction Review - Major Works</th>
</tr>
</thead>
</table>
| **a)** Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.  
**b)** Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).  
**c)** Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.  
**d)** No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented. |

#### Timing:
Prior to the construction of water or wastewater infrastructure.

<table>
<thead>
<tr>
<th>207(c) Construction Certification - Major Works</th>
</tr>
</thead>
</table>
| **a)** Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).  
**b)** The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities. |

#### Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

<table>
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<tr>
<th>207(d) End of Maintenance - Major Works</th>
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<tbody>
<tr>
<td>Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.</td>
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</tbody>
</table>

#### Timing:
At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

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<tr>
<th>207(e) Works Inspections - Major Works</th>
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</table>
| **a)** Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:  
(i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);  
(ii) Pouring of thrust blocks;  
(iii) Pressure testing of pipelines;  
(iv) Disinfection of water mains; and  
(v) Construction completion inspection. |
b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities shall be given the opportunity to have inspected the works and other (non-Hold Point) works inspections.

c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.

e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

Timing:
Prior to and during construction of water or wastewater infrastructure.

### Construct Water Supply Non-Trunk Infrastructure System

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**
This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**
Connection Certification from QUU

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208(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

(d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

(e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
   (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
   (ii) relocating any valves, fire hydrants and scour(s) from within the limits of vehicular footway crossings;
   (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
   (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

As indicated

208(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.

(d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.

(e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.

(f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.

(g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.

(h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.

(i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.

(j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.

(k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

208(c) Drinking Water Network Infrastructure and Property Service Infrastructure Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

208(d) Drinking Water Network Infrastructure and Property Service Infrastructure – Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

208(e) Drinking Water Infrastructure - Design and Construction Standards

(a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

208(f) Drinking Water Network Infrastructure - Water Quality Testing

(a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

208(g) Drinking Water Network Infrastructure - Pressure Testing

(a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority. The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment

The condition has been amended below to more appropriately manage the timing of compliance in accordance with the SEQ water and sewerage design and construction codes, being the time of approval. This is requested to avoid any potential issues with rework, redesign and reconstruction resulting from updated standards after the time of approval.

Proposed Condition

Construct Water Supply Non-Trunk Infrastructure System

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions at the time of approval:

GUIDELINE

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

PROOF OF FULFILMENT

Connection Certification from QUU

208(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:

(i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure on or within the development site;

(ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;

(iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and

(iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
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<th>208(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)</th>
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<td>c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.</td>
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<td>d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.</td>
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<tr>
<td>e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.</td>
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<td>f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.</td>
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<td>g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.</td>
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<td>h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.</td>
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<td>i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.</td>
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<td>j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.</td>
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<td>k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.</td>
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**Timing:**
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**Timing:**
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**Timing:**
Prior to the construction of network or property service infrastructure.

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<th>208(e) Drinking Water Infrastructure- Design and Construction Standards</th>
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**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

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<td>b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.</td>
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Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

**Timing:**
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

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<th>208(g) Drinking Water Network Infrastructure - Pressure Testing</th>
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</tbody>
</table>

The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

**Timing:**
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

209 Consent and Permits prior to Construction of Water and Wastewater Infrastructure

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

209(a) Land Owner's Consent

(a) Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.

(b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Timing:
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

209(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Timing:
Prior to construction of relevant water or wastewater infrastructure.

Comment
It is considered unreasonable to include references in conditions that relate to documents in Water Approvals that have not been issued to the applicant for consideration. As such we propose amendments to the condition as follows to provide greater certainty for the applicant on the implications of this condition on the delivery of the project.

Proposed Condition
Consent and Permits prior to Construction of Water and Wastewater Infrastructure

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

209(a) Land Owner's Consent

a) Owner's consent to undertake works on the private property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.

b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Timing:
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

209(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Timing:
Prior to construction of relevant water or wastewater infrastructure.

210 Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99 BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Comment
The applicant does not consider this condition to be relevant to this development. The condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and / or in accordance with the standards and guidelines prescribed. It is on this basis that we seek the deletion of this conditions in its entirety.

Proposed Condition
Delete Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
### Temporary Works for Water and Wastewater Infrastructure

- **(a)** Provide temporary water and wastewater infrastructure, if applicable, and all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.
- **(b)** Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.
- **(c)** A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.
- **(d)** Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Terminating Infrastructure for Water and Wastewater

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**Comment**
It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required. As such we seek deletion of this conditions in its entirety.

### Maintenance Period for Water and Wastewater Infrastructure

- **(a)** Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and maintenance schedule (lodged as part of the As- Constructed Package), relevant engineering standards and sound engineering practice.
- **(b)** The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.
- **(c)** Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.
- **(d)** Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.
- **(e)** Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.

**Timing:**
Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

### Maintenance Bond

- **(a)** Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.
- **(b)** The Maintenance Bond must remain valid for the full term of the Maintenance Period.
- **(c)** The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

**Timing:**
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

**Comment**
It is considered that bank guarantees for maintenance periods are to protect against physical defects and faults. It is not considered reasonable to include defects and faults in the design, as QUU will have had the opportunity through the assessment of the DA (conceptual design) and then...
Proposed Condition

a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials and workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.

b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.

c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

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## 215 Payment of Fees and Charges

Pay fees and charges calculated in accordance with the Queensland Urban Utilities Water NetServ Plan.

Timing:
At the times specified in the Queensland Urban Utilities Water NetServ Plan.

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## 216 Additional Payment Condition for Trunk Infrastructure Costs

Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:

- as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water NetServ Plan.
- the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the following:
  - levied charges for the trunk infrastructure; and
  - the trunk infrastructure provided, or to provided, by the applicant.
- the details of trunk infrastructure to be provided is shown in the plan, Figure 2- Proposed Water Supply Infrastructure, Upper Kedron Prepared by Queensland Urban Utilities dated 20 Nov 2014.
- the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734322200.
- this additional trunk infrastructure is not eligible for a refund in accordance with s99BRCY of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Comment

The water trunk infrastructure proposed to support the development is consistent with the QUU Master Plan which was provided by QUU to Calibre Consulting on 16 October 2014. The Approval Conditions 216 makes reference to Figure 2- Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20 November 2014.

QUU have not demonstrated or identified how the proposed development demand is greater than that assumed in the QUU Water NetServ Plan. Additional information is required from QUU to justify any consideration of additional payment of contributions in relation to the water and wastewater infrastructure. From the material provided by QUU during the assessment period, it is considered that the demand on the infrastructure is not beyond that planned by QUU.

It is on this basis that we seek to delete this condition as provided below.

Proposed Condition

Delete Additional Payment Condition for Trunk Infrastructure Costs

Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:

- as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water NetServ Plan.
- the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the following:
  - levied charges for the trunk infrastructure; and
  - the trunk infrastructure provided, or to provided, by the applicant.
- the details of trunk infrastructure to be provided is shown in the plan, Figure 2- Proposed Water Supply Infrastructure, Upper Kedron Prepared by Queensland Urban Utilities dated 20 Nov 2014.
- the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734322200.
- this additional trunk infrastructure is not eligible for a refund in accordance with s99BRCY of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
General/Planning Requirements

<table>
<thead>
<tr>
<th>217</th>
<th>Demolish or Relocate Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings.</td>
</tr>
<tr>
<td></td>
<td><strong>Timing:</strong> Prior to any new building work occurring (MCU or BW) or prior to Council’s notation on the plan of subdivision (ROL).</td>
</tr>
</tbody>
</table>

**Comment**

This is a standard condition and is tied to ensuring the sites are appropriately cleared of existing buildings prior to the creation of the approved development. Prior to any building work occurring is a sufficient time frame without the uncertainty added to timing. The condition has been amended to reflect this.

**Proposed Condition**

Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings.

<table>
<thead>
<tr>
<th>218</th>
<th>Staging of Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 1C cannot be plan sealed until all conditions relating to Stage 1X have been complied with.</td>
</tr>
<tr>
<td></td>
<td><strong>Timing:</strong> All conditions relating to the earlier stage have been complied with.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>219</th>
<th>Approved Drawings &amp; Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A legible copy of the approved drawings and documents bearing “Council Approval” and the Development Approval Conditions package is to be available on site.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This condition is imposed to ensure compliance with the development conditions of approval. The copy of the conditions and drawings should be located in any site management office or with the site foreman. Any copies of conditions or drawings that are illegible shall be deemed to be non compliance with this condition of approval.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>220</th>
<th>Carry Out The Approved Development</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s).</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This development approval may include the location of fences, retaining walls and/or external walls of buildings on the boundary of a lot. This approval does not constitute permission to enter neighbouring properties to carry out the construction (including associated drainage and earthworks) or maintenance activities. Permission to enter neighbouring properties must be obtained from relevant property owners.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>221</th>
<th>Complete All Operational Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Complete all operational work associated with this development approval, including work required by any of the conditions included in the Conditions Package. Such operational work is to be carried out generally in accordance with the approved drawing(s), and/or documents or, if requiring a further approval from the Council, in accordance with the relevant approval(s).</td>
</tr>
</tbody>
</table>

Ecology

<table>
<thead>
<tr>
<th>222</th>
<th>Submit Vegetation Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Submit to Development Assessment and receive approval for a Vegetation Management Plan (VMP). The VMP is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation as per the Ecological Assessment Guidelines (referenced on Council’s website) for the protection, retention and/or management of vegetation on the site and in accordance with the approved Vegetation Retention Plan amended in red on 30 October 2014 and include the following information:</td>
</tr>
<tr>
<td></td>
<td>- The extent of the VMP is to include evaluation of all areas including, proposed road reserves, external works and development areas</td>
</tr>
<tr>
<td></td>
<td>- The location and description of existing vegetation at the interface between the development footprint and the Category 1, 2, 3 and 4 Corridors required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, including species and botanical name plus the height and canopy spread</td>
</tr>
<tr>
<td></td>
<td>- The location and extent of all site works including all proposed infrastructure and areas of earthworks</td>
</tr>
<tr>
<td></td>
<td>- Detailed design of all civil works is to be cognisant of environmental values. Alternative solutions may be required in some instances, to protect significant vegetation (e.g. alternative service alignments, variations to batter slopes and tunnel boring)</td>
</tr>
<tr>
<td></td>
<td>- The location and description of all vegetation to be retained and that to be removed</td>
</tr>
<tr>
<td></td>
<td>- Methods of physical identification of trees/vegetation to be retained</td>
</tr>
<tr>
<td></td>
<td>- A description of all measures to be used to protect vegetation and habitat features to be retained during construction, including protective fencing</td>
</tr>
<tr>
<td></td>
<td>- A description of all pruning and tree surgery works (to AS 4373/96) to maintain health and stability of trees and reduce potential hazards for future residents</td>
</tr>
<tr>
<td></td>
<td>- The location and extent of storage and stockpile areas for cleared vegetation and site mulch</td>
</tr>
<tr>
<td></td>
<td>- A description of all methods to salvage and/or re-use cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works</td>
</tr>
<tr>
<td></td>
<td>- Details of all measures to protect and recover fauna during clearing operations, including: presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures.</td>
</tr>
</tbody>
</table>

**222(a) Arrange Pre-start Meeting**

Once measures are in place to identify and protect vegetation on site (such as tree protection fencing), arrange a pre-start meeting with the Development Assessment.

**222(b) Implement Approved Plan**

Implement and carry out the works in accordance with the approved VMP.

**Timing:** Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL), and then to be maintained

**222(a) Arrange Pre-start Meeting**

Once measures are in place to identify and protect vegetation on site (such as tree protection fencing), arrange a pre-start meeting with the Development Assessment.
Timing: When protection measures are in place and prior to site / operational / building works occurring

As indicated

222(b) Implement Approved Plan
Implement and carry out the works in accordance with the approved VMP.

Timing: Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL), and then to be maintained

223 Submit Rehabilitation Plan
Submit to Development Assessment and receive approval for a Rehabilitation Plan. The Rehabilitation Plan is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation that includes at least the following information for the area identified on Concept Rehabilitation Plan amended in red 30/10/2014: This Rehabilitation Plan is to include all rehabilitation works for stages 1A, 1B, and 1C as identified on Proposal Plan_Stage One Overall Canvey Road, Upper Kedron (Drawing No. CDW01_44C) as amended in red.

- Description of proposed rehabilitation, including earthworks, restoration methods (revegetation and assisted regeneration where appropriate);
- Details of the proposed rehabilitation schedule, staging, including site preparation, planting and establishment: plant species names, stock size, quantities, locations; a maintenance program (5 years) for all rehabilitation works;
- Details of rehabilitation outcomes; performance monitoring and assessment (minimum 9 visits within the first 24 months every 4 to 6 weeks); survival thresholds (minimum 90% survival required); replacement planting triggers (minimum requirement to keep survival above 90% and replacement within 4 weeks of issue being identified); target minimum tree height and canopy cover to be achieved at the end of 5 year maintenance period;
- Stabilisation methods for all areas of exposed soil surface;
- Details of special habitat features to be provided for the enhancement/restoration of habitat values including: coarse woody debris (e.g. root balls; hollows; logs; branches) to be salvaged from clearing activities and reused; nest boxes (best industry practice). A minimum of 10 boxes per ha required to be installed in dedication corridors to achieve a hollow density of 32 hollows per ha. Additional nest boxes will be required in areas to have a low natural hollow density. Consultation with an experienced fauna consultant is required to determine the location and type of next box required, and appropriate nest box density for each area of corridor to be dedicated; nest box installation and maintenance, monitoring and reporting will also be required over a 5 year maintenance period. Habitat features such as nest boxes are to be provided for each stage during preparation works for site rehabilitation.
- Specification notes on site preparation; plant quality assurance including local provenance; plant stock handling; planting methodology; mulching; threat management (including tree guarding 1.600mm corflute with hardwood stake; watering as required to prevent plant stress); weed management; tree guard removal and maintenance; establishment and maintenance. All restoration works are to be in accordance with the SEQ Ecological Restoration Framework and industry best practice.
- Evidence that the rehabilitation plan has been prepared by a bushland restoration specialist/ecologist with a minimum of 5 years experience in ecological restoration.
- Evidence that the delivery of rehabilitation works will be undertaken by a bushland restoration specialist with a minimum of 5 years experience in ecological restoration. Bushland restoration works to target areas that are currently deficient of an existing vegetation structure and floristic composition that is commensurate with the Regional Ecosystem identified on the site or an alternative Regional Ecosystem as determined by a suitably qualified and experienced bushland restoration practitioner or Ecologist with a minimum of 5 years experience in ecological restoration. Rehabilitation methods must use a bushland restoration approach that will ultimately aim to achieve a vegetation structure and floristic composition commensurate with the Regional Ecosystem identified on the site. This will be achieved by including the establishment of as many flora species from all strataums (tree, shrub, and ground layer) as commercially available; removal and management of all exotic flora species within the maintenance period; introduction of coarse woody debris and leaf litter from clearing site as appropriate. Alternative regional ecosystems may be appropriate for areas with landforms influenced by unnatural levels of soil moisture or altered landform. Regional Ecosystems Technical Descriptions and Biocondition Benchmarks documentation will be used to guide planting density, flora species selection, flora species dominance and distribution. Planting densities higher than those recorded in Regional Ecosystem Technical Descriptions will be appropriate in more open areas to account for 10% mortality and to assist with the development of a robust canopy.

223(a) Implement Approved Plan
Carry out rehabilitation works in accordance with the approved Rehabilitation Plan.

Timing: While site/operational/building work is occurring and then to be maintained

223(b) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance.

- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.

Timing: Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL)

223(c) On Maintenance Period
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing: 5 years from acceptance on maintenance period

223(d) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off- Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing: On completion of the maintenance period

224 Fauna Spotter
A Fauna Spotter, qualified by the relevant Queensland State Government Authority, shall inspect the site to ensure identification of any wildlife (fauna or habitat features (e.g. nests, tree hollows) prior to clearing.

224(a) Prior to Vegetation Clearing
Clearing operations and other site works must not commence until the Fauna Spotter has certified that the site has been fully inspected and any necessary fauna protection measures or relocation procedures implemented. Submit to Development Assessment a Fauna Spotter Report to demonstrate compliance with this condition.

**224(b) Fauna Spotter on Site**
The fauna spotter is to be present on site during all clearing operations to monitor works and to respond to any situations that may arise as determined by Development Assessment, based on the findings of the fauna spotter's pre-clearing certification report.

**224(c) Fauna in Work Area**
If any animals are identified in trees to be removed during clearing operations, work shall cease immediately on that tree. The Fauna Spotter must supervise the relocation of any identified animal prior to clearing operations recommencing.

**224(d) Certification**
Provide certification that works have been undertaken in accordance with this condition.

225 **Natural Assets Local Law (NALL) - On Site**
Lodge and receive approval from Development Assessment, an application to Carry Out Works on Protected Vegetation on the site.

226 **Submit Wildlife Movement Solutions Plan**
Submit to Development Assessment and receive approval for a Wildlife Movement Solutions Plan (WMSP). The WMSP is to include an overall plan of all Wildlife Movement Solutions (WMS) planned for the development including the WMS identified on the Wildlife Movement Solutions Concept Plan amended in red on 31/10/2014. Detailed design drawings are required for each development stage with WMS infrastructure.

Submit an overall WMSP and detailed WMSP and report for Stage 1C outlining wildlife movement solutions infrastructure in conjunction with operational work approvals. Obtain approval from the Delegate, Development Assessment for the detailed report and plans. The detailed design for each structure is to be in the form of scaled plans and supporting documentation. Design options must be integrated with required exclusion fencing and include warning signage at crossing points. The detailed designs must also be generally in accordance with the Fauna Sensitive Road Design Manual - Volume 2: Preferred Practices developed by the Department of Mains Roads. The plans must include, but not be limited to, the following information:
- Description of the fauna exclusion/movement fences
- Location of warning signage at crossing points;
- Description hardwood ledges and other structures that must be installed inside the culverts.
- Description of location, dimensions and openness of the structure to enable wildlife to enter the structure;
- Description of the topography and vegetation type to be planted at entry points to the culverts. The vegetation must attract target species (wallabies, possums, koalas, echidnas, etc.) to the structure and provide food source and shelter. Clear and workable plans representing rehabilitation on the ground including details of the proposed rehabilitation schedule, staging, plant species, stock size, densities, quantities and locations;
- Description of proposed rehabilitation, including earthwork, methods and objectives;
- A detailed 5 year maintenance period and monitoring program is to be provided to maintain the vegetation at the entry points to the culvert;
- Include details of special habitat features to be provided for the enhancement/restoration of habitat values;
- Description of the weed management program; and
- Details of associated fauna furniture must be included to provide opportunities for a broad range of species to roads.

226(a) **Implement approved plan**
Construction of the wildlife movement solutions and the road network is to occur in accordance with approved designs.

Timing: While site/operational/building work is occurring and then to be maintained

226(b) **On Maintenance Inspection**
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.

Timing: Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

226(c) **On Maintenance Period**
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period. Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing: 5 years from acceptance of on maintenance period

226(d) **Off Maintenance Inspection**
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection. Timing: On completion of the maintenance period

227 **Arboricultural Requirements**
The following arboricultural requirements are to be performed to ensure the long-term health and safety of trees to be retained:

227(a) **Site Works**
In consultation with Development Assessment, the Arborist is to direct the civil works contractor in relation to any service installation activities utilising alternative technologies such as directional-boring or under-boring using vacuum excavation or air-spade. The Arborist must be a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture).

227(b) Certification
Submit to Development Assessment, certification from a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) that all necessary arboricultural works have been carried out in accordance with the requirements of all parts of this condition.

227(c) Vegetation Pruning
Any necessary pruning, tree surgery and other maintenance works to maintain health and stability of any trees to be retained, and to reduce potential hazards for future residents, is to be carried out in consultation with Development Assessment. All works must be performed by a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) in accordance with the Australian Standard 4373/96 for Pruning of Amenity Trees.

### 228 Land for Ecological and Waterway Corridors Infrastructure

Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27 February 2014, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red). With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances.

Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

**Comment**
We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced Infrastructure Agreement.

**Proposed Condition**

**Land for Ecological and Waterway Corridors Infrastructure**

Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red). With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances.

Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

### 229 Bushfire Management Plan

i) Implement and carry out the works in accordance with approved Bushfire Management Plan Stages 1 and 2 prepared by Place Design received 15/10/2014;

ii) Submit certification to Development Assessment certifying that the approved Bushfire Management Plan has been implemented.

### 230 Stormwater Quality - Submit Management Plan

Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SBSMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010. The water quality treatment strategy is to be generally in accordance with approved plan B14159.W-SK01 Concept Stormwater Quality Management Plan For Stage 1 & 2 by Brown Consulting QLD dated 14th October 2014. The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, build-outs or other speed control devices) in the streetscape of all areas within Stage 1A, 1B, and 1C consisting of street tree pits, and bioretention basins. Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical GuidelinesQL and located outside of the developed 10 year ARFI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap.

**Proposed Condition**

**Stormwater Quality - Submit Management Plan**

Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SBSMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010. The water quality treatment strategy is to be generally in accordance with approved plan B14159.W-SK01 Concept Stormwater Quality Management Plan For Stage 1 & 2 by Brown Consulting QLD dated 14th October 2014. The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, build-outs or other speed control devices) in the streetscape of all areas within Stage 1A, 1B, and 1C consisting of street tree pits, and bioretention basins.
**Landscape Architecture & Open Space Planning**

<table>
<thead>
<tr>
<th>231</th>
<th><strong>Landscape Works in Corridor</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below: As indicated</td>
</tr>
</tbody>
</table>

**231(a) Submit Plan for Works in Corridor**
Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and the approved drawings. The Landscape Management and Site Works Plan must document the following:

**EXISTING SITE CONDITIONS**
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing underground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

**SITE PREPARATION**
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

**NEW WORKS**
- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embellishments chosen from Council’s standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

**COSTING AND MAINTENANCE PROGRAM**
The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

**Timing:** Prior to site/operational work commencing

**231(b) Pre Start Meeting**
Arrange with Development Assessment for a Pre Start meeting.

**Timing:** Prior to site/operational work commencing

**231(c) Construct Approved Works**
Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

**Timing:** Prior to acceptance of works on maintenance
### 231(d) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.
Timing: Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

### 231(e) On Maintenance Period
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.
Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.
Timing: 5 years from acceptance of on maintenance period

### 231(f) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

#### Comment
During the assessment of the application it was agreed with Council that the analysis of the 2 year, 5 year and 100 year floodlines was sufficient. As such, it is considered unnecessary to require further analysis against the 10 year, 20 year and 50 year floodlines, and have therefore deleted these from this condition.
Furthermore, the agreement to undertake a 5 year maintenance period was understood to be in relation to the areas of the site being rehabilitated, to ensure the protection and longevity of these particular species. It is not considered appropriate for a 5 year maintenance period to be enforced on the balance open space and landscape works within the corridors. On this basis the condition has been amended below to reflect a 2 year maintenance period on landscaped areas and a 5 year period on rehabilitation areas only.

#### Proposed Condition
Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

#### Submit Plan for Works in Corridor
Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the, the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and generally in accordance with the approved drawings. Landscape Concept 1 Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK17b. The Landscape Management and Site Works Plan must document the following:

### EXISTING SITE CONDITIONS
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

### SITE PREPARATION
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on maintenance.

### NEW WORKS
- 2yr, 5yr, 10yr, 20yr, 50yr, and 100yr flood lines;
- Corridor embellishments chosen from Council’s standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

**COSTING AND MAINTENANCE PROGRAM**

The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

**Timing:**
Prior to site/operational work commencing

**231(b) Pre Start Meeting**

Arrange with Development Assessment for a Pre Start meeting.

**Timing:**
Prior to site/operational work commencing

**231(c) Construct Approved Works**

Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

**Timing:**
Prior to acceptance of works on maintenance

**231(d) On Maintenance Inspection**

Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

**Timing:**
Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

**231(e) On Maintenance Period**

Provide 2 year maintenance to the landscape works and 5 years to the rehabilitation works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

**Timing:**
2 year maintenance to the landscape works and 5 years to the rehabilitation works from acceptance of on maintenance period

**231(f) Off Maintenance Inspection**

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

<table>
<thead>
<tr>
<th><strong>232</strong></th>
<th><strong>Landscape Works in Road Reserve</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>232(a) Submit Detailed Plan</strong></td>
<td>Submit to Asset Services and receive approval for a Street Tree Plan that provides details of street tree planting. Provide trees to all street frontages at spacings complying with the relevant Brisbane Planning Scheme Codes/Policies, or a minimum of one (1) tree per additional allotment frontage, whichever is the greater.</td>
</tr>
<tr>
<td><strong>232(b) Implement Approved Plan</strong></td>
<td>Submit to the Development Assessment and receive approval for a detailed Landscape Plan for works in the road reserve. The plan is to be prepared at a scale of 1:100 by a suitably qualified and experienced Landscape Architect, and must comply with the relevant Brisbane Planning Scheme Code/Policy. The plan must include the following: WORKS</td>
</tr>
<tr>
<td><strong>233</strong></td>
<td><strong>Provide Street Tree(s)</strong></td>
</tr>
<tr>
<td><strong>233(a) Maintain Tree(s)</strong></td>
<td>Maintain street trees for a period of 12 months after planting. At the end of the 12 month maintenance period contact Asset Services to arrange an Off Maintenance inspection.</td>
</tr>
</tbody>
</table>
Engineering

234 Filling and Excavation

All proposed earthworks are to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the following requirements. For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council's assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

234(a) Submit Earthworks Plan

Submit and obtain endorsement from Development Assessment an earthworks plan prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ-Civil). The Earthworks Plan should include the following:

- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.

Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, repaving, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

234(b) Suitable Fill Material

All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

234(c) Implement Endorsed Plan

Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

Comment

We seek the following amendments to the wording of this condition to reflect the performance based design solutions proposed in the engineering services report submitted as part of the development application. During assessment of the application Council confirmed their support for performance based design solutions for construction, where the standard Council codes and design standards could not be achieved.
It is considered that the amended wording reflects this position and appropriately references the performance based outcomes that have been discussed and resolved with Council.

Proposed Condition
Filling and Excavation
All proposed earthworks are to be carried out generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies where possible and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council’s assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

234(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, "Civil Engineering Services Report B14159.CER01.AN.jm (Revisions D)" by Brown Consulting QLD dated 9th August 2014 checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ- Civil).

The Earthworks Plan should include the following:

- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.

Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

234(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

234(c) Implement Endorsed Plan
Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

235 Construction Management Plan
Prepare a Construction Management Plan for the subject site in accordance with the following requirements.

Note. This condition is imposed when construction activities need to be limited to manage the impact on the surrounding area. This condition is intended to apply throughout the period of site preparation to the completion of the development.

235(a) Construction Management Plan - For Endorsement
Submit to Development Assessment for endorsement, a Construction Management Plan for the demolition, excavation and construction phases of the approved development. Separate Construction Management Plans may be appropriate for the individual components. The Construction Management Plan is to be in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Workplace Health and Safety Legislation requirements, Environmental Protection Act, the requirements of any Concurrence Agency and any other relevant legislative requirements. The Construction Management Plan is to provide the following details and address impacts, where applicable:

- Provision for pedestrian management including alternative pedestrian routes, past or around the site;
- Location of and impacts on any Council or other authority’s assets on and external to the site. Council assets include water, sewer, stormwater, street trees and kerb side allocation signs and line marking such as bus stops, loading zones and parking meters and/or ticket dispensers. Details of street trees are to include location, species, trunk and canopy size;
- Temporary vehicular access points of frequency of use;
- Existing and proposed kerb-side allocation signs and line marking (such as bus stops, loading zones and parking meters and or ticket dispensers);
- Provision for loading and unloading materials including the location of any remote loading sites;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- How materials are to be loaded/unloaded and potential impacts on existing street trees;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- Location of proposed external hoardings and gantries;
- Employee and visitor parking areas;
- Anticipated staging, programming;
- Provision for fire exit routes for other uses on the subject or adjoining sites;
- Details that identify and define phases of construction considered necessary to be conducted out of normal business hours (where normal hours are defined as Monday to Saturday between 6:30am and 6:30pm excluding public holidays).

Notes.
- Approval for footpath closures and/or temporary vehicle access will only be considered where it can be demonstrated that no reasonable alternative can be provided due to site constraints and that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are not compromised.
Subject to the provisions of this condition, implement and maintain the approved Construction Management Plan.

235(f) Construction Management Plan - Implement the Plan

- Normal business hours 6:30am and 6:30pm Monday to Saturday.
- Notify Development Assessment for any work activity identified broadly in the endorsed Construction Management Plan to be conducted out of normal business hours.
- Legible copies of the Construction Management Plan and current permits are to be kept on site and be made available on request at all times during construction.

235(e) Construction Management Plan - Out of Hours Works to be Performed

- Applications will be assessed on the basis of road and footpath network operating conditions prevailing at the time. Council will consider impacts of other construction works or events that occur during the life of the permit.
- All fees are to be paid in full prior to any permit being granted by Council. Council may revoke any permits at any time for non-compliance with requirements or if it considers that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are likely to be compromised during the construction project.

235(d) Construction Management Plan - Plans on Site

- All fees are to be paid in full prior to any permit being granted by Council. Council may revoke any permits at any time for non-compliance with requirements or if it considers that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are likely to be compromised during the construction project.

235(c) Construction Management Plan - Works in Road

- Endorsement of the Construction Management Plan does not allow the carrying out of specific work activities for any phase of construction.
- Gantry erection.
- Overcoming clearway restrictions;
- Restricted work zones (subject to relaxation of clearway hours and resolution of alternate kerb side allocation including bus zones);
- Temporary lane closures;
- Proposed Condition

On-site Erosion (high risk)

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

236(a) Prepare ESC Plan and Program

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC. Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request. At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council Compliance and Regulatory Services at:

CARS-ESC@brisbane.qld.gov.au

Timing: Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

236(b) Implement Certified ESC Plan and Program

Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion. The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

Comment

It is considered unnecessary to require sediment and erosion control measures to be certified by both RPEQ and CPESC, as such we have amended the condition to reflect the most appropriate certified engineer to sign off on these aspects of the development. By including a requirement for double certification only adds time delays and costs that are considered unreasonable.

Additionally, it is considered a further time delay to require material to be lodged at least 10 days prior to a pre-start meeting on site. All material is in accordance with the OPW approval and therefore has been cited by officers previously. Provided all material is provided prior to the pre-start meeting so all parties have correct versions is considered sufficient. The wording of the condition has been amended accordingly.

Proposed Condition

On-site Erosion (high risk)

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

115(a) Prepare ESC Plan and Program

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.
### 237 Protect Existing Infrastructure
Where there is existing infrastructure in the vicinity of the proposed work, then the new work must not damage or compromise the working ability of the existing infrastructure. Should it be required to provide alterations to public utility mains, existing mains, services or installations, then the developer is required to meet the costs of the alteration(s), which is to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

#### 237(a) As Constructed Drawings
Submit to Development Assessment "As Constructed" drawings including an asset register, showing all new and/or rectification works required by this condition. These works must be certified by a Registered Professional Engineer of Queensland-Civil that they are in accordance with the relevant Brisbane Planning Scheme Codes/Policies and any other relevant infrastructure requirements.

### 238 Waterway Corridor
Materials, equipment or structures (including but not limited to material stockpiles, sheds, concrete areas, landscaping materials, etc.) of any description must not be located within the waterway corridor unless specifically shown on the approved drawings.

### 239 Dedicate As Road - Non Trunk
Dedicate as road the following requirements:
- a) the areas shown as new roads on the approved drawings and documents, including land along the full frontage of the Subject Site to Canvey Road, to achieve an overall road reserve width of 24 metres;
- b) Areas, where required, to provide for external works in association with shared pedestrian access; and
- c) All corner truncations as six (6) metre by six (6) metre by three (3) equal chord truncations.

**Note:** This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

### 240 Provide Certified Site Survey Levels
Submit to Development Assessment, "As Constructed" plans approved by a Registered Surveyor (in accordance with the relevant Brisbane Planning Scheme Codes/Policies) showing finished surface level information over the completed development. The survey information is required to show surface levels and site contours at 1 metre intervals. All levels are to be shown as Reduced Levels to the "Australian Height Datum" (AHD).

### 241 Remove Improvements & Obstructions From Truncation and Dedication
Remove all improvements (fences, gates, letter boxes, garden beds and plots and other constructed items etc.) and obstructions (existing earth banks, vegetation etc.) from the area of the corner truncation(s) and/or area of dedicated road and restate the area as footway in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Note:** The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service, utility or asset owner will be required. Council permission is required if street trees, stormwater gullies/drains, water or sewer and swales are affected.

### 242 Retaining Walls
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:
- i. All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.
- ii. All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.
- iii. Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall.
- iv. Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.
- v. Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This set back may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.
- vi. Retaining walls that retain fill and are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall unless an alternative has been approved by Council.
- vii. Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.
- viii. Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.
- ix Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

#### 242(a) Certification of Retaining Walls
Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

**At least 10 days prior to either the pre-start meeting or commencement of site works:** Submit copies of all required documentation, including design certificates to Council's Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

**Timing:**
Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

#### 115(b) Implement Certified ESC Plan and Program
Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:**
While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

Comment
The proposal plans that have been approved by Council do not nominate the location of anticipated guard rails on the top of retaining walls. In some areas having a minimum 500mm setback for a guard rail may negatively impact on the design outcome. As such we have sought changes to the wording of this condition to provide sufficient flexibility for alternative design solutions to be considered in order to appropriately respond to the uniqueness of this site.

Additionally amendments to the wording of this condition sought in relation to intra-block retaining walls. In order to limit the extent of dead space between allotments it is sought to increase the maximum height of a retaining wall to 3m (as has been discussed with Council) and limit the stepping requirements to one third of the height, rather than the conditioned half the height. It is considered that this will be a better design outcome and solution in the instances where retaining walls greater than 1.5m are required.

The amendments to the condition are provided below.

Proposed Condition
Retaining Walls
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

(i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.

(ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.

(iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall unless otherwise approved by Council.

(iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 3.0m in height are to be vertically and horizontally tiered by a dimension of one third of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.

(v) Retaining walls to stabilise excavation are to be constructed so that dead space encroachment into the neighbouring property. This set back may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.

(vi) Retaining walls that retain fill and are greater than 3.0m in height are to be vertically and horizontally tiered by a dimension of one third of the height of the retaining wall unless an alternative has been approved by Council.

(vii) Runoff from surface drains and subsurface drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.

(viii) Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

(ix) Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

242(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

243
Granting Easements
Grant the following easements:

i. Easements for underground drainage, overland flow and access purposes as may be required, in favour of Brisbane City Council.

ii. Easements over that part of Stages 1A, 1B, 1C and 1D within the proposed Waterway Corridors affected by the 100 year Average Recurrence Interval (ARI) flooding, in favour of Brisbane City Council.

Note: This condition is imposed to provide access, maintenance of services and to protect drainage paths if required. Easements in favour of the Brisbane City Council are required to have the necessary easement documentation prepared (free of costs and compensation to Council) by the Brisbane City Council. Easements in favour of the Brisbane City Council are required to have the necessary documentation prepared by the applicant’s private solicitors. Easements are to be shown on a Survey Plan and lodged with the Plan Sealing Unit. Enquiries regarding any legal documentation can be directed to the Plan Sealing Unit, Development Assessment (ph: 3403 8888).

244
Service Crossings of Waterways
All service crossings of creek/waterways are to be located below ground level or attached to an approved crossing structure (eg road crossing) where located within the 100 year ARI flood extent. This is to ensure these crossings do not to impede floodwaters or create scour of the creek/waterway and to protect the service against damage by flood debris.

245
Minimum Floor or Pad Levels
Design and construct all proposed pad levels and roads to have the appropriate freeboard in accordance with Brisbane Planning Scheme Codes/Policies to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI Creek/waterway flood event, whichever is the higher flood level. Flood immunity requirements for other development (including relevant infrastructure, floor levels, parks, substations and ancillary structures) is to meet the requirements of Brisbane Planning Scheme Codes/Policies. (Note: flooding within all Category 1, 2 and 3 waterways and Cedar Creek is defined as Creek/waterway flooding for the purpose of this condition).

245(a) Certification
Provide certification and/or As-Constructed plans from a Registered Surveyor that confirm the development complies with the requirements of this condition.

246
Flooding & Stormwater Detention
Construct the Stage 1 North Detention area and Stage 1 South waterway crossing in accordance with the approved Flood Investigation report (Issue B) prepared by Brown Consulting QLD and dated 14th October 2014, ensuring:

i) culvert crossings of waterways utilise reinforced concrete box culverts, arch culverts or bridges in accordance with Councils Natural Channel Design Guidelines,

ii) culverts incorporate debris deflector headwalls to minimise blockages and incorporate scour control at inlets and outlets,

iii) roads on embankments of stormwater detention areas are designed to be safe for a minimum 500 year ARI flow,

iv) stormwater detention areas are designed to reduce runoff to the public areas and incorporate (where required) appropriate fencing, batter grades, depth markers and flood warning signs to ensure safety of the public.

246(a) Submit Flood Study
Submit and obtain endorsement from Development Assessment for an updated Flood Study prepared and certified by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies, QUDM and Australian Rainfall and Runoff. The flood study is to be specific to Stage 1 and Stage 2 local flooding within the waterways and the Stage 1 North and Stage 1 South stormwater detention areas (as noted within the approved Flood Investigation by Brown Consulting QLD) and incorporate design earthworks, details for all detention basin outlets and provide a severe storm analysis as per QUDM requirements.

Timing: prior to site/operational/building work commencing.

246(b) Submit Drawings for Endorsement
Submit and obtain endorsement from Development Assessment, engineering drawings for the Stage 1 North detention area and Stage 1 South waterway crossing (as nominated in the approved Flood Investigation report (Issue B) by Brown Consulting QLD and dated 14th October 2014) prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing.

246(c) Implement Approved Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

Timing: Prior to On-Maintenance Inspection.

246(d) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing: Prior to On Maintenance Inspection.

246(e) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment.
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works.
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies.
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.


246(f) Off Maintenance Acceptance
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

Timing: On completion of the maintenance period.

246(g) Geotechnical Certification
Submit to Development Assessment a geotechnical report with testing, recommendations and certification by a Registered Professional Engineer of Queensland (Geotechnical) that supports the design and construction of the Stage 1 North and South stormwater detention area embankments and road crossings. The geotechnical report is to certify that the detention basin embankments have been suitably designed to safely manage expected hydrostatic and hydrodynamic forces associated with ponding of stormwater behind the embankments to prevent failure (including piping failures).

Timing: Prior to site/operational/building work commencing.

Comment
Point 246(e) has been re-worded to provide more certainty for the applicant on what standard works will be assessed against, being those approved through OPW assessment. The amended condition is provided below.

Point 246(e) bullet point 4 has been removed, as it is considered that this has been covered by the Off Maintenance requirements set out in condition 246(f). The amendments to the condition are provided below.

Proposed Condition
Construct the Stage 1 North Detention area and Stage 1 South waterway crossing in accordance with the approved Flood Investigation report (Issue B) prepared by Brown Consulting QLD and dated 14th October 2014, ensuring:
(i) culvert crossings of waterways utilise reinforced concrete box culverts, arch culverts or bridges in accordance with Councils Natural Channel Design Guidelines,
(ii) culverts incorporate debris deflector headwalls to minimise blockages and incorporate scour control at inlets and outlets,
(iii) roads on embankments of stormwater detention areas are designed to be safe for a minimum 500 year ARI flow,
(iv) stormwater detention areas are designed to reduce access by the public to these areas and incorporate (where required) appropriate fencing, batter grades, depth markers and flood warning signs to ensure safety of the public.

Timing:
a) For construction of the Stage 1 North Stormwater Detention area to prior to Council's notation of the plan of subdivision (ROL) for Stage 1A, 1B or 1C whichever is the earliest; and
b) For construction of the Stage 1 South waterway crossing to prior to Council's notation of the plan of subdivision (ROL) Stage 1A.

Note:
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

246(a) Submit Flood Study
Submit and obtain endorsement from Development Assessment for an updated Flood Study prepared and certified by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies, QUDM and Australian Rainfall and Runoff.
The flood study is to be specific to Stage 1 and Stage 2 local flooding within the waterways and the Stage 1 North and Stage 1 South stormwater detention areas (as noted within the approved Flood Investigation by Brown Consulting QLD) and incorporate design earthworks, details for all detention basin outlets and provide a severe storm analysis as per QUDM requirements.

Timing: Prior to site/operational/building work commencing.
<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
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<tbody>
<tr>
<td>246(b) Submit Drawings for Endorsement</td>
<td>Submit and obtain endorsement from Development Assessment, engineering drawings for the Stage 1 North detention area and Stage 1 South waterway crossing (as nominated in the approved Flood Investigation report (Issue B) by Brown Consulting QLD and dated 14th October 2014) prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil. Timing: Prior to site/operational/building work commencing</td>
</tr>
<tr>
<td>246(c) Implement Approved Drawings</td>
<td>Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted &quot;on maintenance&quot; and &quot;off maintenance&quot; as a Council asset, by Development Assessment. Timing: Prior to On-Maintenance Inspection</td>
</tr>
<tr>
<td>246(d) Submit As Constructed Plans</td>
<td>Submit &quot;As Constructed&quot; plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies. Timing: Prior to On Maintenance Inspection</td>
</tr>
<tr>
<td>246(e) On Maintenance Acceptance</td>
<td>Provide the following in relation to the on maintenance acceptance of the asset: - Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment - Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works at the time of Operational Works assessment. - Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies. - Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period. Timing: Prior to On-Maintenance Acceptance</td>
</tr>
<tr>
<td>246(f) Off Maintenance Acceptance</td>
<td>On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released. Timing: On completion of the maintenance period.</td>
</tr>
<tr>
<td>246(g) Geotechnical Certification</td>
<td>Submit to Development Assessment a geotechnical report with testing, recommendations and certification by a Registered Professional Engineer of Queensland (Geotechnical) that supports the design and construction of the Stage 1 North and South stormwater detention area embankments and road crossings. The geotechnical report is to certify that the detention basin embankments have been suitably designed to safely manage expected hydrostatic and hydrodynamic loads associated with ponding of stormwater behind the embankments to prevent failure (including piping failures). Timing: Prior to site/operational/building work commencing.</td>
</tr>
<tr>
<td>247 Stormwater Outlets in Waterways</td>
<td>Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline &quot;Stormwater Outlets in Parks and Waterways 2003/0. Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings.</td>
</tr>
<tr>
<td>248(a) Certification</td>
<td>Provide certification from a Registered Professional Engineer Queensland that the development has been constructed in accordance with the approved hydraulic report.</td>
</tr>
<tr>
<td>249 Construct Footpath Non-Trunk</td>
<td>Construct a 1.2 metre wide footpath to the following: 1. Along one side of all 16 metres wide neighbourhood access roads, 2. Along the entire site frontage of Canvey Road, 3. Along both sides of the new District Access Road (Canvey Road extension), all in accordance with the relevant Brisbane Planning Scheme Codes/Policies. Notes: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.</td>
</tr>
<tr>
<td>249(a) Submit As Constructed Plans</td>
<td>Submit to Development Assessment &quot;As Constructed&quot; plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with relevant Brisbane Planning Scheme Codes/Policies. Timing: Upon completion of the work.</td>
</tr>
</tbody>
</table>
Refuse and recycling bins for the proposed development are to be collected from the kerb side unless alternative refuse collection arrangements are made with Brisbane City Council's Waste Services. Bin collection pads are to be constructed, for purposes of storing the bins on collection days, as may be required for the rear lots. The pads are to be located behind the kerbs, alongside the rear access pavement, measuring 2.0m x 0.8m (catering for 1 general and 1 recycling bin) for each dwelling.

**251 Works for Transport Infrastructure - Non-Trunk External Roadworks**

Provide the following non-trunk roadworks with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

a) Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notification of the plan of subdivision (ROL):
   i. Construct new Type D concrete kerb and channel and associated drainage along the site frontage of Canvey Road, on a 4.25 metres alignment, taking into account the required road reserve widening to achieve overall road reserve width of 24.0 metres for Canvey Road.
   ii. Construct Type D road pavement from the lip of the new kerb and channel to the edge of the existing road pavement to Canvey Road frontage with any appropriate tapers (the minimum width of road construction/reconstruction is to be 1.2 metres)

b) Prior to the completion of the development of Stage 1 or 180 lots, which ever is the earliest:
   i. Works for the upgrade and signalisation of the intersection at Upper Kedron Road/Cemetery Road, generally in accordance with the Conceptual Signalised Intersection Upgrade Works Plan, TTM Reference 14BRT0323-04, dated 14 Oct 2014. The upgrade to the intersection is to include road works to obtain a satisfactory sight distance to the left for vehicles exiting Cemetery Road into Upper Kedron Road.
   ii. Works for the upgrade and signalisation of the intersection of Upper Kedron Road/Hogarth Road, generally in accordance with Conceptual Signalised Intersection Upgrade Works Plan TTM Reference 14BRT0323-04, dated 14 Oct 2014.

Note: All signalised intersections are required to be designed in accordance with Austroads Part 4A-Unsignalised & Signalised Intersections Design Guidelines. The traffic signal designs need to be approved by the CRU-Signals Operations Section prior to being submitted at the Operation Works stage.

c) Prior to the completion of the development of Stage 1 or 180 lots within the Subject Site, which ever is the earlier:
   i. Works for the widening of Canvey Road on the south approach to Charolais Crescent roundabout to a District Access road standard.
   ii. Construct a Type C pavement and kerb and channel in Hogarth Road on southern approach to McGinn Road

Notes:
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

**251(a) Submit Functional Layout Plans**

Submit separate functional layout plans showing:
- The extent of the external roadworks; and
- The signal infrastructure layout.

Obtain Preliminary Approval from Development Assessment.

Timing: Prior to the submission of Roads & Drainage, Signs & Pavement Marking, and Signals Design drawings.

**251(b) Submit Roads and Drainage Plans**

Submit and obtain endorsement from Development Assessment Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing

**251(c) Submit Traffic Signal Design Plans**

Submit and obtain endorsement from Development Assessment Traffic Signal Design Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil. The Signal Design plans are to be signed by Council's Transport & Traffic, Signals Management Section prior to lodgement.

Timing: Prior to site/operational/building work commencing

**251(d) Submit Signs and Pavement Plans**

Submit and obtain endorsement from Development Assessment, Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing

**251(e) Implement Endorsed Drawings**

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.

Timing: Prior to On-Maintenance Inspection

**251(f) Submit As Constructed Plans**
251(g) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On- Maintenance inspection and those arising during the maintenance period.

Timing: Prior to On- Maintenance Acceptance

251(h) Off Maintenance inspection
On completion of the maintenance period undertake an Off- Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

Timing: On completion of the maintenance period

Comment
The condition specifies the Type D pavement profile for external roadworks upgrades. This profile is in direct conflict with the existing pavement profile which has been constructed in accordance with the previous standard (being a flexible pavement). It is considered unreasonable to condition external upgrade works to roads to be in accordance with a differing road profile from that of the existing road. As such appropriate amendments to the conditions are sought, as below, to provide the flexibility for each external upgrade required to be undertaken to the same profile and pavement type as that existing in that location.

This condition further requires frontage works to Canvey Road in relation to Stage 1D. Stage 1D is the creation of a large future development allotment, and as such is subject to a future Development Application in accordance with the provisions of this preliminary approval. As such, it is considered unreasonable to require upgrade works to be undertaken to the frontage of Canvey Road (adjoining Stage 1D) as part of this ROL. The future application for the use of land within Stage 1D is the most appropriate time to require these works, to avoid duplication of works, or the undertaking of works that will need to be redone as part of future development. The condition has been amended accordingly below.

Council have also sought the submission of road functional plans separate to the lodgement of OPW applications for roadwork. This is considered unreasonable, given a road hierarchy plan has been provided as part of the Development Application package, and that there is no benefit of separating the road functional plan assessment from the OPW assessment of the detailed design. The condition has been amended below to remove this additional unreasonable requirement.

Finally, this condition also requests providing a minimum 12 month maintenance period to works and is then contradicted by the timing provisions (prior to on-maintenance acceptance). The intent of the condition in relation to maintenance periods and timing is appropriately covered under the off-maintenance provisions, and as such the condition has been amended to reflect this.

Proposed Condition
Works for Transport Infrastructure - Non-Trunk External Roadworks
Provide the following non-trunk roadworks with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

a) Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL):
   (i) Construct new Type D concrete kerb and channel and associated drainage along the site frontage of Canvey Road, on a 4.25 metres alignment, taking into account the required road reserve widening to achieve overall road reserve width of 24.0 metres for Canvey Road.
   (ii) Construct Type D road pavement from the lip of the new kerb and channel to the edge of the existing road pavement to Canvey Road frontage with any appropriate tapers (the minimum width of road construction/reconstruction is to be 1.2 metres. The construction standard is to adopt the same pavement profile type as the existing constructed road.
   (iii) Provide appropriate intersection treatment including modification to the existing or construction of new median islands at intersections, as may be required and applicable, due to the new road pavement widening and extension works.
   (iv) Provide signs and pavement markings to the new roadworks along the site frontage of Canvey Road.

Note: The above external roadworks to Canvey Road frontages for Stage 1B, and 1C and 1D may have to be constructed in the earlier stages subject to detailed design in the Functional Layout Plans and Roads and Drainage plans to facilitate lawful point of discharge.

b) Prior to the completion of the development of Stage 1 or 180 lots, which ever is the earliest:
   (i) Works for the upgrade and signalisation of the intersection at Upper Kedron Road/Cemetery Road, generally in accordance with the Conceptual Signalled Intersection Upgrade Works Plan, TTM Reference 14BRT0323-04, dated 14 Oct 2014. The upgrade to the intersection is to include road works to obtain a satisfactory sight distance to the left for vehicles exiting Cemetery Road into Upper Kedron Road.
   (ii) Works for the upgrade and signalisation of the intersection of Upper Kedron Road/Hogarth Road, generally in accordance with Conceptual Signalled Intersection Upgrade Works Plan TTM Reference 14BRT0323-04, dated 14 Oct 2014.

Note: All signalised intersections are required to be designed in accordance with Austroads Part 4A-Unsignalised & Signalised Intersections Design Guidelines. The traffic signal designs need to be approved by the CRU-Signals Operations Section prior to being submitted at the Operation Works stage.

c) Prior to the completion of the development of Stage 1 or 180 lots within the Subject Site, which ever is the earlier:
   (i) Works for the widening of Canvey Road on the south approach to Charolais Crescent roundabout to a District Access road standard.
### 251(a) Submit Functional Layout Plans
Submit separate functional layout plans showing:
- The extent of the external roadworks; and
- The signal infrastructure layout.

**Timing:**
- Prior to Concurrently with the submission of Roads & Drainage, Signs & Pavement Marking, and Signals Design drawings.

### 251(b) Submit Roads and Drainage Plans
Submit and obtain endorsement from Development Assessment Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
- Prior to site/operational/building work commencing

### 251(c) Submit Traffic Signal Design Plans
Submit and obtain endorsement from Development Assessment Traffic Signal Design Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil. The Signal Design plans are to be signed by Council's Transport & Traffic, Signals Management Section prior to lodgement.

**Timing:**
- Prior to site/operational/traffic, signals management section

### 251(d) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment, Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
- Prior to site/operational/building work commencing

### 251(e) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.

**Timing:**
- Prior to On-Maintenance Inspection

### 251(f) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**
- Prior to On Maintenance Inspection

### 251(g) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.

**Timing:**
- Prior to On Maintenance Acceptance

### 251(h) Off Maintenance inspection
On completion of the minimum 12 months maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

**Timing:**
- On completion of the maintenance period
Repair any damage to existing kerb and channel, footpath or roadway (including removal of concrete slurry from footways, roads, kerb and channel and stormwater gullies and drainlines) and re-instatement existing traffic signs and pavement markings that have been removed or damaged during any works carried out in association with the approved development.

**253 Works for Transport Infrastructure - Non-Trunk Internal Roadworks**

Provide the following Roadworks and Stormwater Drainage with any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, and the following requirements:

(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 50 km/hr maximum);
(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 50 km/hr maximum with provision as an interim bus route, as may be required, for bus access);
(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area.

Notes.
Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series).

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

253(a) *Submit Functional Layout Drawings*
Submit functional layout plans showing the extent of all proposed Roadworks.
Timing: Prior to site/operational/building work commencing
Note. Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

253(b) *Submit Roads and Drainage Plans*
Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.
Timing: Prior to site/operational/building work commencing

253(c) *Submit Signs and Pavement Plans*
Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, checked and certified by a Registered Professional Engineer of Queensland-Civil.
Timing: Prior to site/operational/building work commencing

253(d) *Implement Endorsed Drawings*
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off- maintenance" as a Council asset, by Development Assessment.
Timing: Prior to On-Maintenance Inspection

253(e) *Submit As Constructed Plans*
Submit "As Constructed" plans including an asset register and a pre-On- Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
Timing: Prior to On-Maintenance Inspection

253(f) *On Maintenance Acceptance*
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.

Timing: Prior to On-Maintenance Acceptance

253(g) *Off-Maintenance Acceptance*
On completion of the maintenance period undertake an Off- Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off- Maintenance Inspection. If the inspection is successful the maintenance security will be released.
Timing: On completion of the maintenance period

Comment
The design speed for 14m wide local roads and 16m neighbourhood roads should be 40km/hr as per the Traffic and Transport PSP (and also the new BCC City Plan Infrastructure Design PSP). As such item (i) and (ii) has been amended to reflect the appropriate speed limit.
Given the nature of the site it is considered that a 50km/hr posted and design speed is more appropriate for the District Access roads and bus routes. Canvey Road is presently posted at 50km/hr, and it is anticipated that with the increase in patronage of this road (and extensions of it) that 50km/hr speed is more desirable. As such the condition has been amended accordingly below.

For clarity we have amended condition 253(a) to ensure that the functional layout drawings are included as part of the operational works package, and not a separate package required prior to this time.

As Council are aware in some instances the design outcomes achieved for the site are performance outcomes that are not specifically on accordance with standard Council specifications and standards. As such the condition has been amended throughout to reflect outcomes agreed with Council through the inclusion of the following words: *as otherwise approved by Council*. Condition 253(f) has also been amended to remove the last bullet point as it is considered that this is covered by the off-maintenance condition that follows in point g).

### Proposed Condition

**Provide the following Roadworks, Stormwater Drainage, and any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council**, and the following requirements:

1. The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum);
2. The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 450 km/hr maximum with provision as an interim bus route, as may be required, for bus access);
3. A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area;
4. The roads 19.5–24.0 metres wide to be designed and constructed as District Access Roads 1 Bus Route (designed for 85 percentile 560 km/hr maximum); and
5. Cul-de-sac to be constructed to 9.0 metres radius and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum).

**Notes:**

- Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series) or as otherwise approved by Council.
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>253(a)</strong></td>
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<tr>
<td>Timing:</td>
<td>Prior to site/operational/building work commencing</td>
</tr>
<tr>
<td>Note:</td>
<td>Obtain preliminary approval from Development Assessment, prior to the submission of Roads &amp; Drainage and Signs &amp; Pavement Marking.</td>
</tr>
<tr>
<td><strong>253(b)</strong></td>
<td>Submit Roads and Drainage Plans</td>
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<tr>
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<tr>
<td><strong>253(c)</strong></td>
<td>Submit Signs and Pavement Plans</td>
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<td>Submit and obtain endorsement from Development Assessment Signs &amp; Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, checked and certified by a Registered Professional Engineer of Queensland-Civil.</td>
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<td>Timing:</td>
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<tr>
<td><strong>253(d)</strong></td>
<td>Implement Endorsed Drawings</td>
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<tr>
<td>Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted “on-maintenance” and “off-maintenance” as a Council asset, by Development Assessment.</td>
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<td>Timing:</td>
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<tr>
<td><strong>253(e)</strong></td>
<td>Submit As Constructed Plans</td>
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<tr>
<td>Submit &quot;As Constructed&quot; plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.</td>
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<td>Timing:</td>
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<tr>
<td><strong>253(f)</strong></td>
<td>On Maintenance Acceptance</td>
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<td>Provide the following in relation to the on maintenance acceptance of the asset:</td>
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<td>- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment</td>
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<td>- Provide a minimum 12-months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.</td>
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<tr>
<td><strong>253(g)</strong></td>
<td>Off-Maintenance Acceptance</td>
</tr>
<tr>
<td>254 Water Quality Treatments in Public Open Space</td>
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<tr>
<td>--------------------------------------------------</td>
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<tr>
<td>Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design). The design must provide for safe egress into and out of the treatment facility. All Bioretention basins are to:</td>
<td></td>
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<tr>
<td>- provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level,</td>
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<tr>
<td>- provide gross pollutant traps at all stormwater inlets from roads,</td>
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<tr>
<td>- design all outlet pits for a minimum 2 year ARI flow without overtopping spillways, and the spillway designed to safely convey the 50 year ARI peak flow,</td>
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<tr>
<td>- ensure the basin (including embankments and retaining walls) is located outside of the 10 year ARI flood extent within any waterway,</td>
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<tr>
<td>- provide scour control and tail-out channels in accordance with Councils Natural Channel Design Guidelines.</td>
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<tr>
<th>254(a) Bioretention Basin Landscaping</th>
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<tr>
<td>Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrently with the engineering drawings. Timing: Prior to site/operational/building work commencing</td>
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<tr>
<th>254(b) Implement Approved Drawings</th>
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<tbody>
<tr>
<td>Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.</td>
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<tr>
<th>254(c) On-Maintenance Inspection</th>
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<tr>
<td>Contact Development Assessment to arrange an On-Maintenance inspection.</td>
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<tr>
<th>254(d) Maintenance Period</th>
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<th>254(e) Off-Maintenance Inspection</th>
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<tbody>
<tr>
<td>On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.</td>
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<tr>
<td>The condition seeks the provision of gross pollutant traps (GPTs) at all stormwater inlets from roads. It is considered unreasonable to require this, and it does not accord with the proposed stormwater management strategy. There are substantial construction and maintenance cost implications with an increased number of GPTs. The bullet point requiring the inclusion of GPTs has been deleted as per below. Requiring the concurrent lodgement of engineering and landscaping plans will create delays for the development. General practice is that the landscape operational works applications are lodged with Council following the lodgement of the engineering drawings. Approval of the engineering drawings does not occur until landscape OPW is lodged. As such the wording has been amended below to allow for the delay in finalising landscape detailed design following completion of the engineering drawings. The maintenance period for the water quality treatments has been amended to reflect standard practice of 12 months, followed by a 12 month period for planting establishment. It is considered that the standard maintenance periods can be applied to this aspect of the development.</td>
</tr>
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### 254 On-Maintenance Inspection

**254(c) On-Maintenance Inspection**
Contact Development Assessment to arrange an On-Maintenance inspection.

**Timing:**
Prior to On-Maintenance Inspection

**254(d) Maintenance Period**
Provide the following in relation to the maintenance period:
- The maintenance period will be **24 months**, followed by a **12 month establishment period for planting** upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment.
- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (i.e., generally in excess of 180 mm/h) before it will be accepted off maintenance.
- Submit "As Constructed" plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the approved plans.

**Timing:**
Prior to On-Maintenance Inspection

### 254(e) Off-Maintenance Inspection

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:**
On completion of the maintenance period.

### Works for Stormwater Infrastructure - Non-Trunk

Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:
- Runoff from the site and external catchments is to be managed in accordance with approved engineering plans to ensure there will be no adverse impacts on neighbouring properties.
- All allotments and roads are to be designed and constructed to have the appropriate freeboard to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek/waterway flood event, whichever is the higher flood level.
- A satisfactory lawful point of discharge has been provided via discharge to Council owned land (drainage reserve, road reserve) or stormwater easement designed to accommodate developed flows.
- Extension of existing stormwater culverts on Canvey Road to ultimate road reserve width.
- Canvey Road is to be designed with a minimum 10 year ARI minor system design. New drainage in Canvey Road is to ensure the major flow will not impact flood immunity of existing properties on Canvey Road, particularly those located downslope of the proposed Stage 1C intersection in the existing road low-point. Existing gullies are to be upgraded if necessary.

**Notes:**
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

### 255 Submit Drawings for Endorsement

Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
Prior to site/operational/building work commencing

### 255(b) Implement Endorsed Drawings

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

**Timing:**
Prior to On-Maintenance Inspection

### 255(c) Submit As Constructed Plans

Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**
Prior to On Maintenance Inspection

### 255(d) On Maintenance Acceptance

Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

**Timing:**
Prior to On-Maintenance Acceptance

### 255(e) Off Maintenance Inspection

On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

**Timing:**
On completion of the maintenance period

**Comment**
The existing culverts located in Canvey Road are adjacent to Stage 1D of the development. Given that this approval does not seek to develop Stage 1D, and will require future development approvals in order to do so, we seek the deletion of any aspects of conditions that require works to be undertaken adjoining Stage 1D. This is to reduce the need to redo construction work when the stage is developed in the future. As the ultimate development proposal is unknown for Stage 1D, it is not possible to condition appropriate works at this time.

It has been confirmed by TTM consultants that the construction of the current road network is sufficient to accommodate the anticipated traffic demand without the need to undertake works to the external network prior to the development of Stage 1D. This condition also requests providing a minimum 12 month maintenance period to works and is then contradicted by the timing provisions (prior to on-maintenance acceptance). The intent of the condition in relation to maintenance periods and timing is appropriately covered under the off-maintenance provisions, and as such the condition has been amended to reflect this.

**Proposed Condition**

**Works for Stormwater Infrastructure - Non-Trunk**

Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

- Runoff from the site and external catchments is to be managed in accordance with approved engineering plans to ensure there will be no adverse impacts on neighbouring properties.
- All allotments and roads are to be designed and constructed to have the appropriate freeboard to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek/waterway flood event, whichever is the higher flood level.
- A satisfactory lawful point of discharge has been provided via discharge to Council owned land (drainage reserve, road reserve) or stormwater easement designed to accommodate developed flows.
- Extension of existing stormwater culverts on Canvey Road to ultimate road reserve width.

Notes.

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

**255(a) Submit Drawings for Endorsement**

Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**

Prior to site/operational/building work commencing

**255(b) Implement Endorsed Drawings**

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

**Timing:**

Prior to On-Maintenance Inspection

**255(c) Submit As Constructed Plans**

Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**

Prior to On Maintenance Inspection

**255(d) On Maintenance Acceptance**

Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies

**Timing:**

Prior to On-Maintenance Inspection

**255(e) Off Maintenance Inspection**

On completion of the minimum 12 months maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

**Timing:**

On completion of the maintenance period

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**Notes:**

- Ponding of stormwater runoff from the site does not adversely impact on flooding or drainage (peak discharge and duration up to the 100 year Average Recurrence Interval) of properties that are upstream, downstream or adjacent to the site.

**257 Public Lighting**

Adjoining properties and roads are to be protected from ponding or nuisance from stormwater as a result of the works. Ensure the stormwater ponding and nuisance from stormwater runoff from the site does not adversely impact on flooding or drainage (peak discharge and duration up to the 100 year Average Recurrence Interval) of properties that are upstream, downstream or adjacent to the site.

Notes:

- If remedial works are required that involve drainage, drawings are to be submitted and approval obtained from Development Assessment, to provide a means to rectify the site drainage.
- This condition is imposed to ensure that the developer is aware that they are responsible for all remedial works required as a result of any site works and, that they must protect neighbouring properties and roads from ponding and nuisance water from the proposed development.

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Lodge street lighting design drawings showing the proposed public lighting system in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and obtain approval from the City Lighting, Asset Services.

257(a) Agreement with Supplier
Enter into an agreement with an electricity supplier and provide a public lighting system in accordance with the above approved lighting design plans.

Service Conduits and Mains
Supply and install all service conduits and meet the cost of any alterations to public utility mains, existing mains, services or installations required in connection with the approved development in accordance with the relevant Brisbane Planning Scheme Codes/Policies. This includes:
- the provision of all services and/or conduits along the full length of any rear allotment access or access easement.
- the relocation of any fire hydrant and/or valves from the development’s vehicular footway crossings if applicable.
- the retention and/or relocation of any existing foul water lines that currently exist within the site.

Note. Applicants should liaise with the appropriate service authorities. Typical underground services and/or conduits to be constructed include power, phone, telecommunications, sewer, stormwater and gas if applicable.

258(a) As Constructed Drawings
Submit to Development Assessment “As Constructed” drawings including an asset register, approved by a Registered Professional Engineer Queensland that are in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and any other relevant infrastructure requirements, showing the works required by this condition.

Conduit for Brisbane City Council
Provide a single underground conduit (100mm diameter UPVC class PN9) in favour of Brisbane City Council on at least one side of all Neighbourhood Access Roads (Bus Route only), Industrial Access Roads and Major Roads in the Council Road Hierarchy, in accordance with the following:
- The conduit must be laid in the telecommunication alignment of the footpath, on the kerb side of the Telecommunication Carrier conduit or in an agreed shared trench arrangement with the Telecommunication Carrier and other Utilities as may be relevant, subject to the approval of Development Assessment.
- The conduit must bypass the Telecommunication Carrier pits.
- Pits (minimum size, Type 4 as per BCC Drawing UMS 600/031) with lids (as per Drawing UMS 600/030 - but Class B instead of Class C) must be installed at the head ends of the conduit, both sides of road crossings, at intersections and at other locations that may be specified by Council.
- The conduit must be plugged at each pit.
- The conduit must be located and installed in such a way that facilitates the installation of cable and additional pits in the future.

259(a) Submit “As Constructed” Drawings
Submit to Development Assessment, BCC Constructed Drawings, including an asset register, approved by a Registered Professional Engineer Queensland, and in accordance with the requirements of this condition and the relevant Brisbane Planning Scheme Codes/Policies.

Telecommunications
Submit to Development Assessment, documentary evidence issued by a relevant telecommunication carrier to verify that the necessary underground telecommunication services have been supplied within and adjacent to the development.

Provide Rear Lot Access
Provide access to the rear lot in accordance with the following:
- Construct a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
- The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover.

Comment
It is considered more relevant and reasonable to require access to rear lots to be constructed in accordance with the Brisbane City Council standard drawings rather than specifying a construction standard in the condition. This allows for amendments to design standards over the life of the project.

Proposed Condition
Provide access to the rear lot in accordance with the following by Constructing a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover, BCC Standard Drawing BSD-2021.

Standard Advice

262 Concurrence Agency Conditions
The Department of State Development Infrastructure and Planning as concurrence agency has imposed the conditions contained in the letter dated 2 December 2014.

263 Construction Noise and Dust Emissions
Pursuant to the Environmental Protection Act 1994, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emission are accordance with the requirements of the Act. The Environmental Protection Act 1994 prescribes that:
(1) A person must not carry out building work in a way that makes an audible noise
(a) on a business day or Saturday, before 6.30a.m. or after 6.30p.m; or
(b) on any other day, at any time.
(2) The reference in subsection (1) to a person carrying out building work
(a) includes a person carrying out building work under an owner-builder permit; and
(b) otherwise does not include a person carrying out building work at premises used by the person only for residential purposes.

264 Advice Agency Condition
Powerlink acting as an advice agency for the development has imposed conditions contained in the letter dated 18 July 2014.

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Grant Easements

Grant the following easement(s) for water supply or sewerage purposes.

(a) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.

(b) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

GUIDELINE

This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

PROOF OF FULFILMENT

Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

Comment

It is considered that the timing impacts referenced in this condition may delay plan sealing. Delays may be experienced where live works are still being undertaken after plan sealing but prior to on-maintenance (through the bonding process). As such we seek the reference to prior to the relevant Council signing the plan of subdivision to be removed from the timing, as suggested below.

Proposed Condition

Grant Easements

Grant the following easement(s) for water supply or sewerage purposes.

i) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.

j) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

GUIDELINE

This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

PROOF OF FULFILMENT

Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

Construct Waste Water Non-Trunk Infrastructure System

Construct a Sewerage Non-Trunk infrastructure system necessary to provide a sewerage connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

GUIDELINE

This condition has been imposed to ensure that sewerage infrastructure is in place to serve the development and that each lot has a sewerage property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

PROOF OF FULFILMENT

Connection Certification from QUU

266(a) Wastewater Network Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities wastewater network infrastructures.

(d) Transfer ownership of the wastewater reticulation system (nontrunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network and/or property service infrastructure. This includes:

(i) where not required for existing or future development, removing existing wastewater network and/or property service infrastructure and sealing any connection(s) to remaining reticulation infrastructure;

(ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and

(iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as specified in current standards.
Timing: Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

266(b) Wastewater Property Service Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland Urban Utilities wastewater reticulation system.

(d) Each lot must have a separate wastewater property service connection which commands the whole of each lot.

(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.

(f) If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

(g) Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

(h) Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

(i) Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words #Public Sewer Connection 2 M.

Timing: Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

266(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing: Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

266(d) Wastewater Network and Property Service Infrastructure- Sizing

The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

Timing: Prior to the construction of network or property service infrastructure.

266(e) Wastewater Infrastructure- Design and Construction Standards

a) The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing: Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

266(f) Wastewater Network Infrastructure - CCTV Inspection

(a) Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.

(b) CCTV survey must be carried out in accordance with the WSA 05-2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.

(c) The Applicant must repair all defects in accordance with the approved engineering restoration plan and schedule at no cost to Queensland Urban Utilities.

Timing: Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

266(g) Wastewater Network Infrastructure - Pressure Testing

(a) Conduct pressure/vacuum testing of wastewater mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Pressure/vacuum testing of wastewater mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

(c) The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).
Point 266c) Wastewater Infrastructure- Design and Construction Standards

The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Proposed Condition

266c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Proposed Condition

Point 266c) Delete. Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface level or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

266(e) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

268(a) Design Approval - Major Works
(a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
(b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).
Timing: Prior to the construction of water or wastewater infrastructure.

268(b) Pre-Construction Review - Major Works
(a) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
(b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).
(c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.
(d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.
Timing: Prior to the construction of water or wastewater infrastructure.

268(c) Construction Certification - Major Works
(a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).
(b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.
Timing: Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

268(d) End of Maintenance - Major Works
Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.
Timing: At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

268(e) Works Inspections - Major Works
(a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:
   (i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);
   (ii) Pouring of thrust blocks;
   (iii) Pressure testing of pipelines;
   (iv) Disinfection of water mains;
   (v) Construction completion inspection.
(b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities has inspected the works and other (non-Hold Point) works inspections.
(c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.
(d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.
(e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.
Timing: Prior to and during construction of water or wastewater infrastructure.

Comment
The condition requires the works to be inspected by and certified by a suitably qualified RPEQ, as such including these hold points would only add unnecessary time delays to the delivery of the project. The amendments sought to this condition seek to remove any additional hold points by QUU.
It is additionally requested that the timing sections of this condition are modified (as provided below) so that the timing refers to the compliance of work in accordance with the SEQ water and sewerage design and construction codes at the time of approval. This will avoid any potential issues with rework, redesign, and reconstruction resulting from updated standards after the time of approval. This is effectively to avoid any chance of retrospective changes being sought to work already completed.
The condition has been amended accordingly below.

Proposed Condition
Major Works for Water Supply and Wastewater Infrastructure
Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

268(a) Design Approval - Major Works
(a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
(b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).
Timing:
Prior to the construction of water or wastewater infrastructure.

268(b) Pre-Construction Review - Major Works

a) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Schedule a pre-start meeting with at least 3 business days’ notice to enable Queensland Urban Utilities to attend (if required).

c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.

d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

Timing:
Prior to the construction of water or wastewater infrastructure.

268(c) Construction Certification - Major Works

a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).

b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

268(d) End of Maintenance - Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

268(e) Works Inspections - Major Works

a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:

(i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);

(ii) Pouring of thrust blocks;

(iii) Pressure testing of pipelines;

(iv) Disinfection of water mains; and

(v) Construction completion inspection.

b) Queensland Urban Utilities may identify, at the pre-start meeting or at any other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities shall be given the opportunity to inspect the works and other (non-Hold Point) works inspections.

c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.

e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

Timing:
Prior to and during construction of water or wastewater infrastructure.

269

Construct Water Supply Non-Trunk Infrastructure System

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

GUIDELINE
This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

PROOF OF FULFILMENT
Connection Certification from QUU

269(a) Drinking Water Network Infrastructure (Non-Trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRD of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRC of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

(d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

(e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:

(i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;

(ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
(iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
(iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

269(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)
(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
(d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
(e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
(f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
(g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
(h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
(i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development’s proposed vehicular footway crossings.
(j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
(k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

269(c) Drinking Water Network Infrastructure and Property Service Infrastructure – Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

269(d) Drinking Water Network Infrastructure and Property Service Infrastructure – Sizing
The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

269(e) Drinking Water Infrastructure - Design and Construction Standards
(a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

269(f) Drinking Water Network Infrastructure- Water Quality Testing
(a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
(b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

269(g) Drinking Water Network Infrastructure - Pressure Testing
(a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
(b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority. The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).
### Proposed Condition

#### Construct Water Supply Non-Trunk Infrastructure System

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions at the time of approval:

**GUIDELINE**

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**

Connection Certification from QUU

#### 269(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

- This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
- Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
  - where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure **on or within the development site**;
  - relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
  - raising or lowering mains to current standards if development works change the depth of cover on these works; and
  - where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

#### 269(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

- This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
- Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
- Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
- Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
- Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
- If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water mains or valves from within the limits of the development's proposed vehicular footway crossings.
- Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
- Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

#### 269(c) Drinking Water Network Infrastructure and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.
Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

269(d) Drinking Water Network Infrastructure and Property Service Infrastructure-Sizing
The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

269(e) Drinking Water Infrastructure - Design and Construction Standards
a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

269(f) Drinking Water Network Infrastructure- Water Quality Testing
a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.

Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

269(g) Drinking Water Network Infrastructure - Pressure Testing
a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

b) Pressure testing of water mains must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registered testing authority.

The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

270 Consent and Permits prior to Construction of Water and Wastewater Infrastructure
The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

270(a) Land Owner's Consent
(a) Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.

(b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Timing:
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

270(b) External Agency Approvals and other Authorisations
The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Timing:
Prior to construction of relevant water or wastewater infrastructure.

Comment
It is considered unreasonable to include references in conditions that relate to documents in Water Approvals that have not been issued to the applicant for consideration. As such we propose amendments to the condition as follows to provide greater certainty for the applicant on the implications of this condition on the delivery of the project.

Proposed Condition
Consent and Permits prior to Construction of Water and Wastewater Infrastructure
The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

270(a) Land Owner's Consent
a) Owner's consent to undertake works on the private property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

**Timing:**
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

### Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

- a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.
- d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Comment

The applicant does not consider this condition to be relevant to this development. The condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and/or in accordance with the standards and guidelines prescribed. It is on this basis that we seek the deletion of this conditions in its entirety.

### Proposed Condition

Delete: **Land Dedication for Non-Trunk Water and Wastewater Infrastructure**

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

- a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.
- d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Temporary Works for Water and Wastewater Infrastructure

(a) Provide temporary water and wastewater infrastructure, if applicable, and all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.
(b) Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.
(c) A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.
(d) Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Terminating Infrastructure for Water and Wastewater

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner's consent.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Comment

The applicant does not consider the condition for non-trunk infrastructure to be relevant to this development as the condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and/or in accordance with the standards and guidelines prescribed. It is on this basis that we seek the deletion of this conditions in its entirety.
It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required. As such we seek deletion of this conditions in its entirety.

**Proposed Condition**

**Delete Terminating Infrastructure for Water and Wastewater**

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

<table>
<thead>
<tr>
<th>274</th>
<th>Maintenance Period for Water and Wastewater Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and maintenance schedule (lodged as part of the As- Constructed Package), relevant engineering standards and sound engineering practice.</td>
<td></td>
</tr>
<tr>
<td>(b) The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.</td>
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<tr>
<td>(c) Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.</td>
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</tr>
<tr>
<td>(d) Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.</td>
<td></td>
</tr>
<tr>
<td>(e) Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.</td>
<td></td>
</tr>
</tbody>
</table>

**Timing:**

Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

<table>
<thead>
<tr>
<th>275</th>
<th>Maintenance Bond</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.</td>
<td></td>
</tr>
<tr>
<td>(b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.</td>
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</tr>
<tr>
<td>(c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.</td>
<td></td>
</tr>
</tbody>
</table>

**Timing:**

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

**Proposed Condition**

- a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials and workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.
- b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.
- c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

**Timing:**

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

<table>
<thead>
<tr>
<th>276</th>
<th>Payment of Fees and Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay fees and charges calculated in accordance with the Queensland Urban Utilities Water Netserv Plan.</td>
<td></td>
</tr>
</tbody>
</table>

**Timing:**

At the times specified in the Queensland Urban Utilities Water Netserv Plan.

<table>
<thead>
<tr>
<th>277</th>
<th>Additional Payment Condition for Trunk Infrastructure Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:</td>
<td></td>
</tr>
<tr>
<td>(a) as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water Netserv Plan.</td>
<td></td>
</tr>
<tr>
<td>(b) the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the following:</td>
<td></td>
</tr>
<tr>
<td>(i) levied charges for the trunk infrastructure; and</td>
<td></td>
</tr>
<tr>
<td>(ii) the trunk infrastructure provided, or to provided, by the applicant.</td>
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</tr>
<tr>
<td>(c) the details of trunk infrastructure to be provided is shown in the plan, Figure 2- Proposed Water Supply Infrastructure, Upper Kedron.</td>
<td></td>
</tr>
<tr>
<td>(d) the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provide, please contact Queensland Urban Utilities development services team on 0734322200.</td>
<td></td>
</tr>
<tr>
<td>(e) this additional trunk infrastructure is not eligible for a refund in accordance with s99BRCY of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.</td>
<td></td>
</tr>
</tbody>
</table>

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**Comment**

It is considered that bank guarantees for maintenance periods are to protect against physical defects and faults. It is not considered reasonable to include defects and faults in the design, as QUU will have had the opportunity through the assessment of the DA (conceptual design) and then additionally through the OPW process to review and comment on the detailed design proposed. As such a bank guarantee associated with works should only cover defects and faults not associated with the approved detailed design. The amended wording to the condition is provided below.

**Proposed Condition**

- a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials and workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.
- b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.
- c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

**Timing:**

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.
The water trunk infrastructure proposed to support the development is consistent with the QUU Master Plan which was provided by QUU to Calibre Consulting on 16 October 2014. The Approval Conditions 277 makes reference to Figure 2– Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20 November 2014. QUU have not demonstrated or identified how the proposed development demand is greater than that assumed in the QUU Water Netserv Plan. Additional information is required from QUU to justify any consideration of additional payment of contributions in relation to the water and wastewater infrastructure. From the material provided by QUU during the assessment period, it is considered that the demand on the infrastructure is not beyond that planned by QUU.

It is on this basis that we seek to delete this condition as provided below

Complete All Operational Work

Prior to any new building work occurring (MCU or BW) or prior to Council’s notation on the plan of subdivision (ROL)

Timing:
the removal of all existing concrete slabs, foundations and footings.

Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes

the removal of all existing concrete slabs, foundations and footings.

Timing:
Prior to any new building work occurring (MCU or BW) or prior to Council’s notation on the plan of subdivision (ROL)

Approved Drawings & Documents

A legible copy of the approved drawings and documents bearing “Council Approval” and the Development Approval Conditions package is to be available on site.

Note.
This condition is imposed to ensure compliance with the development conditions of approval. The copy of the conditions and drawings should be located in any site management office or with the site foreman. Any copies of conditions or drawings that are illegible shall be deemed to be non compliance with this condition of approval.

Proposed Condition
Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes

the removal of all existing concrete slabs, foundations and footings.

Timing:
Prior to any new building work occurring (MCU or BW) or prior to Council’s notation on the plan of subdivision (ROL)

Staging of Development

Stage 1D cannot be sealed/until all conditions relating to Stage 1X have been complied with.

Timing:
All conditions relating to the earlier stage have been complied with.

Permit to which these conditions relate Ì DA SPA ROL Subdivision of Land Stage 1D

General/Planning Requirements

Demolish or Relocate Buildings
Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes

the removal of all existing concrete slabs, foundations and footings.

Timing:
Prior to any new building work occurring (MCU or BW) or prior to Council’s notation on the plan of subdivision (ROL)

Proposed Condition
Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes

the removal of all existing concrete slabs, foundations and footings.

Timing:
Prior to any new building work occurring (MCU or BW) or prior to Council’s notation on the plan of subdivision (ROL)

Carry Out The Approved Development

Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s).

Note.
This development approval may include the location of fences, retaining walls and/or external walls of buildings on the boundary of a lot. This approval does not constitute permission to enter neighbouring properties to carry out the construction (including associated drainage and earthwork(s) or maintenance activities. Permission to enter neighbouring properties must be obtained from relevant property owners.

NDN Application Ì A003905687 Ì 390 Levitt Road, Upper Kedron Qld 4055
| Conditions Package. Such operational work is to be carried out generally in accordance with the approved drawing(s), and/or documents or, if requiring a further approval from the Council, in accordance with the relevant approval(s). |

### Ecology

<table>
<thead>
<tr>
<th>283</th>
<th>Submit Vegetation Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit to Development Assessment and receive approval for a Vegetation Management Plan (VMP). The VMP is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation as per the Ecological Assessment Guidelines (referenced on Council’s website) for the protection, retention and / or management of vegetation on the site and in accordance with the approved Vegetation Retention Plan amended in red on 30 October 2014 and include the following information:</td>
<td></td>
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<tr>
<td>- The extent of the VMP is to include evaluation of all areas including, proposed road reserves, external works and development areas</td>
<td></td>
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<tr>
<td>- The location and description of existing vegetation at the interface between the development footprint and the Category 1, 2, 3 and 4 Corridors required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, including species and botanical name plus the height and canopy spread</td>
<td></td>
</tr>
<tr>
<td>- The location and extent of all site works including all proposed infrastructure and areas of earthworks</td>
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</tr>
<tr>
<td>- Detailed design of all civil works is to be cognisant of environmental values. Alternative solutions may be required in some instances, to protect significant vegetation (e.g. alternative service alignments, variations to batter slopes and tunnel boring)</td>
<td></td>
</tr>
<tr>
<td>- The location and description of all vegetation to be retained and that to be removed</td>
<td></td>
</tr>
<tr>
<td>- Methods of physical identification of trees/vegetation to be retained</td>
<td></td>
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<tr>
<td>- A description of all measures to be used to protect vegetation and habitat features to be retained during construction, including protective fencing</td>
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</tr>
<tr>
<td>- A description of all pruning and tree surgery works (to AS 4373/96) to maintain health and stability of trees and reduce potential hazards for future residents</td>
<td></td>
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<tr>
<td>- The location and extent of storage and stockpile areas for cleared vegetation and site mulch</td>
<td></td>
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<tr>
<td>- A description of all methods to salvage and/or re-use cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works</td>
<td></td>
</tr>
<tr>
<td>- Details of all measures to protect and recover fauna during clearing operations, including; presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>283(a)</th>
<th>Arrange Pre-start Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once measures are in place to identify and protect vegetation on site (such as tree protection fencing), arrange a pre-start meeting with the Development Assessment.</td>
<td></td>
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</tbody>
</table>

**Timing:** When protection measures are in place and prior to site / operational / building works occurring |

<table>
<thead>
<tr>
<th>283(b)</th>
<th>Implement Approved Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement and carry out the works in accordance with the approved VMP.</td>
<td></td>
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</tbody>
</table>

**Timing:** Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL), and then to be maintained |

<table>
<thead>
<tr>
<th>283(c)</th>
<th>Certify Approved Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit to Development Assessment certification that the approved VMP has been implemented.</td>
<td></td>
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</tbody>
</table>

**Timing:** Certification to be submitted upon completion of each phase of the approved VMP |

<table>
<thead>
<tr>
<th>284</th>
<th>Submit Rehabilitation Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit to Development Assessment and receive approval for a Rehabilitation Plan. The Rehabilitation Plan is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation that includes at least the following information for the area identified on Concept Rehabilitation Plan amended in red 30/10/2014. This Rehabilitation Plan is to include all rehabilitation works for stages 1A, 1B, and 1C as identified on Proposal Plan_Stage One Overall Canvey Road, Upper Kedron (Drawing No. CDW01_44C) as amended in red.</td>
<td></td>
</tr>
</tbody>
</table>

- Description of proposed rehabilitation, including earthworks, restoration methods (revegetation and assisted regeneration where appropriate); |
- Details of the proposed rehabilitation schedule, staging, including site preparation, planting and establishment; plant species names, stock size, quantities, locations; a maintenance program (5 years) for all rehabilitation works; |
- Details of rehabilitation outcomes; performance monitoring and assessment (minimum 9 visits within the first 24 months every 4 to 6 weeks); survival thresholds (minimum 90% survival required); replacement planting triggers (minimum requirement to keep survival above 90% and replacement within 4 weeks of issue being identified); target minimum tree height and canopy cover to be achieved at the end of 5 year maintenance period; |
- Stabilisation methods for all areas of exposed soil surface; |
- Details of special habitat features to be provided for the enhancement/restoration of habitat values including; coarse woody debris (e.g. root balls; hollows; logs; branches) to be salvaged from clearing activities and reused; nest boxes (best industry practice). A minimum of 10 boxes per ha required to be installed in dedication corridors to achieve a hollow density of 32 hollows per ha. Additional nest boxes will be required in areas having a low natural hollow density. Consultation with an experienced fauna consultant is required to determine the location and type of next box required, and appropriate nest box density for each area of corridor to be dedicated; nest box installation and maintenance, monitoring and reporting will also be required over a 5 year maintenance period. Habitat features such as nest boxes are to be provided for each stage during preparation works for site rehabilitation. |
- Specification notes on site preparation; plant quality assurance including local provenance; plant stock handling; planting methodology; mulching; threat management (including tree guarding) 600mm corflute with hardwood stake; watering as required to prevent plant stress; weed management; tree guard removal and maintenance; establishment and maintenance. All restoration works are to be in accordance with the SEQ Ecological Restoration Framework and industry best practice. |
- Evidence that the rehabilitation plan has been prepared by a bushland restoration specialist/ecologist with a minimum of 5 years experience in ecological restoration. |
- Evidence that the delivery of rehabilitation works will be undertaken by a bushland restoration specialist with a minimum of 5 years experience in ecological restoration. Bushland rehabilitation works to target areas that are currently deficient of an existing vegetation structure and floristic composition that is commensurate with the Regional Ecosystem identified on the site or an alternative Regional Ecosystem as
284(a) Implement Approved Plan

Carry out rehabilitation works in accordance with the approved Rehabilitation Plan.

Timing: While site/operational building work is occurring and then to be maintained.

284(b) On Maintenance Inspection

Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:

- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.

Timing: Prior to commencement of use (MCU) or to Council’s notation on the plan of subdivision (ROL).

284(c) On Maintenance Period

Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Carry out rehabilitation works in accordance with the approved Rehabilitation Plan.

Timing: On completion of the maintenance period.

284(d) Off Maintenance Inspection

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing: 5 years from acceptance of on maintenance period.

285 Fauna Spotter

A Fauna Spotter, qualified by the relevant Queensland State Government Authority, shall inspect the site to ensure identification of any wildlife (fauna) or habitat features (e.g. nests, tree hollows) prior to clearing.

285(a) Prior to Vegetation Clearing

Clearing operations and other site works must not commence until the Fauna Spotter has certified that the site has been fully inspected and any necessary fauna protection measures or relocation procedures implemented. Submit to Development Assessment a Fauna Spotter Report to demonstrate compliance with this condition.

285(b) Fauna Spotter on Site

The fauna spotter is to be present on site during all clearing operations to monitor works and to respond to any situations that may arise as determined by Development Assessment, based on the findings of the fauna spotter’s pre-clearing certification report.

285(c) Fauna in Work Area

If any animals are identified in trees to be removed during clearing operations, work shall cease immediately on that tree. The Fauna Spotter must supervise the relocation of any identified animal prior to clearing operations recommencing.

285(d) Certification

Provide certification that works have been undertaken in accordance with this condition.

286 Natural Assets Local Law (NALL) - On Site

Lodge and receive approval from Development Assessment, an application to Carry Out Works on Protected Vegetation on the site.

287 Submit Wildlife Movement Solutions Plan

Submit to Development Assessment and receive approval for a Wildlife Movement Solutions Plan (WMSP). The WMSP is to include an overall plan of all Wildlife Movement Solutions (WMS) planned for the development including the WMS identified on the Wildlife Movement Solutions Concept Plan amended on 31/10/2014. Detailed design drawings are required for each development stage with WMS infrastructure.

Submit an overall WMSP and detailed WMSP and report for Stage 1D outlining wildlife movement solutions infrastructure in conjunction with operational work approvals. Obtain approval from the Delegate, Development Assessment for the detailed report and plans. The detailed design for each structure is to be in the form of scaled plans and supporting documentation. Design options must be integrated with required exclusion fencing and include warning signage at crossing points. The detailed designs must also be generally in accordance with the Fauna Sensitive Road Design Manual - Volume 2: Preferred Practices developed by the Department of Mains Roads. The plans must include, but not be limited to, the following information:

- Description of the fauna exclusion/movement fences
- Location of warning signage at crossing points;
- Description hardwood ledges and other structures that must be installed inside the culverts.
- Description of location, dimensions and openness of the structure to enable wildlife to enter the structure;
- Description of the topography and vegetation type to be planted at entry points to the culverts. The vegetation must attract target species (wallabies, possums, koalas, echidnas, etc.) to the structure and provide food source and shelter. Clear and workable plans representing rehabilitation on the ground including details of the proposed rehabilitation schedule, staging, plant species, stock size, densities, quantities and locations;
- Description of proposed rehabilitation, including earthwork, methods and objectives;
- A detailed 5 year maintenance period and monitoring program is to be provided to maintain the vegetation at the entry points to the culvert;
- Include details of special habitat features to be provided for the enhancement/restoration of habitat values;
- Description of the weed management program; and
- Details of associated fauna furniture must be included to provide opportunities for a broad range of species to roads.

287(a) Implement approved plan
Construction of the wildlife movement solutions and the road network is to occur in accordance with approved designs.

Timing:
While site/operational/building work is occurring and then to be maintained

287(b) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.

Timing:
Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL)

287(c) On Maintenance Period
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing:
5 years from acceptance of on maintenance period

287(d) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off- Maintenance Inspection.

Timing: On completion of the maintenance period

288 Arboricultural Requirements
The following arboricultural requirements are to be performed to ensure the long-term health and safety of trees to be retained:

288(a) Site Works
In consultation with Development Assessment, the Arborist is to direct the civil works contractor in relation to any service installation activities utilising alternative technologies such as directional-boring or under-boring using vacuum excavation or air-spade. The Arborist must be a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture).

288(b) Certification
Submit to Development Assessment, certification from a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) that all necessary arboricultural works have been carried out in accordance with the requirements of all parts of this condition.

288(c) Vegetation Pruning
Any necessary pruning, tree surgery and other maintenance works to maintain health and stability of any trees to be retained, and to reduce potential hazards for future residents, is to be carried out in consultation with Development Assessment. All works must be performed by a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) in accordance with the Australian Standard 4373/96 for Pruning of Amenity Trees.

289 Land for Ecological and Waterway Corridors Infrastructure
Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27 February 2014, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan_Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red). With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances.

Note:
This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

Comment
We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced Infrastructure Agreement.
Proposed Condition
Landscape Architecture & Open Space Planning

Landscape Works in Corridor

Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

291(a) Submit Plan for Works in Corridor

Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1D Corridor in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and the approved drawings Landscape Concept 1 Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK170.

The Landscape Management and Site Works Plan must document the following:

EXISTING SITE CONDITIONS
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

SITE PREPARATION
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

NEW WORKS
- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embellishments chosen from Council\# standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

COSTING AND MAINTENANCE PROGRAM

The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

Timing:
- Prior to site/operational work commencing

291(b) Pre Start Meeting

Arrange with Development Assessment for a Pre Start meeting.
**EXISTING SITE CONDITIONS**

<table>
<thead>
<tr>
<th>NEW WORKS</th>
<th>SITE PREPARATION</th>
</tr>
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<tbody>
<tr>
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</table>

**NB Application** A003905687 390 Levitt Road, Upper Kedron Qld 4055
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

COSTING AND MAINTENANCE PROGRAM

The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

Timing:
Prior to site/operational work commencing

110(b) Pre Start Meeting
Arrange with Development Assessment for a Pre Start meeting.

Timing:
Prior to site/operational work commencing

110(c) Construct Approved Works
Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

Timing:
Prior to acceptance of works on maintenance

110(d) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

Timing:
Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

110(e) On Maintenance Period
Provide 2 year maintenance to the landscape works and 5 years’ maintenance to the rehabilitation works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Timing:
On completion of the maintenance period

110(f) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing:
On completion of the maintenance period

292
Submit to Asset Services and receive approval for a Street Tree Plan that provides details of street tree planting. Provide trees to all street frontages at spacings complying with the relevant Brisbane Planning Scheme Codes/Policies, or a minimum of one (1) tree per additional allotment frontage, whichever is the greater.

292(a) Implement Approved Plan
Install new street tree(s) in accordance with the approved plan. Contact Asset Services to arrange an On Maintenance inspection and obtain written confirmation that the street tree(s) have been planted in accordance with the approved Street Tree Plan.

292(b) Maintain Tree(s)
Maintain street trees for a period of 12 months after planting. At the end of the 12 month maintenance period contact Asset Services to arrange an Off Maintenance inspection.

293 Landscape Works in Road Reserve
Provide Landscape Works to contribute to the amenity of the development.

293(a) Submit Detailed Plan
Submit to the Development Assessment and receive approval for a detailed Landscape Plan for works in the road reserve. The plan is to be prepared at a scale of 1:100 by a suitably qualified and experienced Landscape Architect, and must comply with the relevant Brisbane Planning Scheme Code/Policy. The plan must include the following:

WORKS
- The extent of proposed soft and hard landscape within proposed Council land
- Location and description of fencing, retaining walls, entry statements, bollards, etc.
- Existing and proposed finished levels to external works particularly in critical areas (eg. top and toe of retaining walls and steps)
- Description/details of critical design elements where applicable (eg. proposed surface treatments, stabilisation of batters, water features, etc)
- Landscape treatments to storm water devices, revegetated areas, buffers, roundabouts, swales etc.
- Basic specification notes on plan for all proposed landscape works
- RPEQ certified drawings for structural work where required

PLANTING
- A planting schedule listing proposed plants by botanical names, quantities, pot size, height, spread and calliper at time of planting

COSTING AND MAINTENANCE PROGRAM
The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan; and
- Details of a 12 month Maintenance Plan for all proposed landscape works.

Note. This condition does not refer to Parks or Street Trees. A Street Tree Plan is to be sent to the Arboriculturist, Asset Services for approval.

Timing: Prior to building work above ground level commencing (MCU), or prior to operational work commencing (ROL)

293(b) Implement the Approved Plan
Carry out the works in the approved detailed Landscape Plan.

Timing:
Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL)

293(c) On Maintenance Inspection
Contact Development Assessment to arrange an On Maintenance inspection. The following information is to be provided to Development Assessment prior to the onmaintenance inspection:
- certification by a registered Professional Engineer (with demonstrated structural experience) for all new structures requiring construction certification
- evidence of Public Liability Insurance.

Timing:
Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL)

293(d) Maintenance Period
Provide 12 months' maintenance to the works from the time the works are accepted On Maintenance by Council. Maintain the landscape in accordance with an approved maintenance program and rectify all defects identified at the On-Maintenance inspection and those arising during the maintenance period. Lodge a bond for the maintenance period. The bond is to be calculated in accordance with the relevant Brisbane Planning Scheme Codes/Policies. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing:
From acceptance of On Maintenance period

293(e) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing:
On completion of the maintenance period

Engineering

294 Filling and Excavation
All proposed earthworks are to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council’s assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.
294(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ-Civil).

The Earthworks Plan should include the following:
- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads;
- Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

294(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

294(c) Implement Endorsed Plan
Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

Comment
We seek the following amendments to the wording of this condition to reflect the performance based design solutions proposed in the engineering services report submitted as part of the development application. During assessment of the application Council confirmed their support for performance based design solutions for construction, where the standard Council codes and design standards could not be achieved. It is considered that the amended wording reflects this position and appropriately references the performance based outcomes that have been discussed and resolved with Council.

Proposed Condition
Filling and Excavation
All proposed earthworks are to be carried out generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies where possible and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

294(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ-Civil).

The Earthworks Plan should include the following:
- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.
295(a) Construction Management Plan - For Endorsement

This condition is imposed when construction activities need to be limited to manage the impact on the surrounding area. This condition is intended to apply throughout the period of site preparation to the completion of the development.

295(b) Construction Management Plan - Pre-start Meeting

Arrange a pre-start meeting with the Development Assessment.

295(c) Construction Management Plan - Works in Road

Obtain relevant approvals to carry out any works within the road reserve required by the approved Construction Management Plan:
- Temporary lane closures;
- Restricted work zones (subject to relaxation of clearway hours and resolution of alternate kerb side allocation including bus zones);
- Overcoming clearway restrictions;
- Gantry erection.

Notes:
- Approval for footpath closures and/or temporary vehicle access will only be considered where it can be demonstrated that no reasonable alternative can be provided due to site constraints and that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are not compromised.
- Proposed arrangements utilising any part of the road reserve for construction related activities, for example, on street work zones, overhead gantries, hoardings or pedestrian diversions, are subject to separate application fees and rental fees.
- The Construction Management Plan may require modification, at Council’s discretion, to reflect changes in relevant legislation and industry best practice prevailing at the time of the permit application and throughout the construction program.
- Endorsement of the Construction Management Plan does not allow the carrying out of specific work activities for any phase of construction outside of normal business hours (where normal hours are defined as Monday to Saturday between 6:30am and 6:30pm excluding public holidays).

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprioritising, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

294(b) Suitable Fill Material

All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

294(c) Implement Endorsed Plan

Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.
- Applications will be assessed on the basis of road and footpath network operating conditions prevailing at the time. Council will consider the impacts of other construction works or events that occur during the life of the permit.
- All fees are to be paid in full prior to any permit being granted by Council. Council may revoke any permits at any time for non-compliance with requirements or if it considers that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are likely to be compromised during the construction project.

### 295(d) Construction Management Plan - Plans on Site

Legible copies of the Construction Management Plan and current permits are to be kept on site and be made available on request at all times during construction.

### 295(e) Construction Management Plan - Out of Hours Works to be Performed

Notify Development Assessment for any work activity identified broadly in the endorsed Construction Management Plan to be conducted out of normal business hours 6:30am and 6:30pm Monday to Saturday.

### 295(f) Construction Management Plan - Implement the Plan

Subject to the provisions of this condition, implement and maintain the approved Construction Management Plan.

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### 296 On-site Erosion (high risk)

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:**

While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

#### 296(a) Prepare ESC Plan and Program

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes.

The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.

Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council's Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

**Timing:**

Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

#### 296(b) Implement Certified ESC Plan and Program

Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion.

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:**

While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

**Comment**

It is considered unnecessary to require sediment and erosion control measures to certified by both RPEQ and CPESC, as such we have amended the condition to reflect the most appropriate certified engineer to sign off on these aspects of the development. By including a requirement for double certification only adds time delays and costs that are considered unreasonable.

Additionally, it is considered a further time delay to require material to be lodged at least 10 days prior to a pre-start meeting on site. All material is in accordance with the OPW approval and therefore has been cited by officers previously. Provided all material is provided prior to the pre-start meeting so all parties have correct versions is considered sufficient. The wording of the condition has been amended accordingly.

**Proposed Condition**

**On-site Erosion (high risk)**

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:**

While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

#### 115(a) Prepare ESC Plan and Program

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.

Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council's Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

**Timing:**

Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

#### 115(b) Implement Certified ESC Plan and Program
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<th>Section</th>
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<td>Remove Improvements &amp; Obstructions From Truncation and Dedication</td>
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<td>302</td>
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**Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion.**

The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:**
While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

- [297(a) As Constructed Drawings](#)
  - Submit to Development Assessment "As Constructed" drawings including an asset register, showing all new and/or rectification works required by this condition. These works must be certified by a Registered Professional Engineer of Queensland-Civil that they are in accordance with the relevant Brisbane Planning Scheme Codes/Policies and any other relevant infrastructure requirements.

- [298 Waterway Corridor](#)
  - Dedicate as road the following requirements:
    - (i) The areas shown as new roads on the approved drawings and documents, including land along the full frontage of the Subject Site to Canvey Road and Levitt Road, to achieve overall road reserve widths of 24 metres
    - (ii) All corner truncations as six (6) metre by six (6) metre by three (3) equal chord truncations.

**Comment:**
This condition relates to road widening of Levitt Road along the full site frontage to achieve an overall width of 24 metres. The proposed development will not contribute sufficient traffic to justify a district access classified road standard (allowing direct lot property access). The existing road reserve is approximately 20.1m which is sufficient for a district access road with no property access provided. As such we consider that point 9d) should be removed completely.

- [300] Provide Certified Site Survey Levels
  - Submit to Development Assessment, “As Constructed” plans approved by a Registered Surveyor (in accordance with the relevant Brisbane Planning Scheme Codes/Policies) showing finished surface level information over the completed development. The survey information is required to show surface levels and site contours at 1 metre intervals. All levels are to be shown as reduced Levels to the “Australian Height Datum” (AHD).

- [301 Remove Improvements & Obstructions From Truncation and Dedication](#)
  - Remove all improvements (fences, gates, letter boxes, garden beds and plots and other constructed items etc.) and obstructions (existing earth banks, vegetation etc.) from the area of the corner truncation(s) and/or area of dedicated road and reinstate the area as footway in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Note:** This condition is imposed under [Section 665 of the Sustainable Planning Act 2009](#).

- [302 Retaining Walls](#)
  - Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:
    - (i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.
    - (ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.
    - (iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall.
    - (iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.
    - (v) Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.
    - (vi) Retaining walls that retain fill and are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall unless an alternative has been approved by Council.

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302(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

Comment
The proposal plans that have been approved by Council do not nominate the location of anticipated guard rails on the top of retaining walls. In some areas having a minimum 500mm setback for a guard rail may negatively impact on the design outcome. As such we have sought changes to the wording of this condition to provide sufficient flexibility for alternative design solutions to be considered in order to appropriately respond to the uniqueness of this site.

Additionally amendments to the wording of this condition area sought in relation to intra-block retaining walls. In order to limit the extent of dead-space between allotments it is sought to increase the maximum height of a retaining wall to 3m (as has been discussed with Council) and limit the stepping requirements to one third of the height, rather than the conditioned half the height. It is considered that this will be a better design outcome and solution in the instances where retaining walls greater than 1.5m are required.

The amendments to the condition are provided below.

Proposed Condition
Retaining Walls
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

(i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.

(ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.

(iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall unless otherwise approved by Council.

(iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m – 3.0m in height are to be vertically and horizontally tiered by a dimension of half one third of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.

(v) Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.

(vi) Retaining walls that retain fill and are greater than 1.5m – 3.0m in height are to be vertically and horizontally tiered by a dimension of half one third of the height of the retaining wall unless an alternative has been approved by Council.

(vii) Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.

(viii) Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

(ix) Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

302(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

303 Granting Easements
Grant the following easement(s):

i Easement for overland flow path and open cut drainage through 16m wide channel (or as may be required) through Balance Lot 4002 in favour of Brisbane City Council.

ii Easement for overland flow through Balance Lot 4002 in favour of Brisbane City Council.

iii Easement for open cut drainage in proposed overland flow path through Lot 4002 or as may be required, in favour of Brisbane City Council.

Note: This condition is imposed to provide access, maintenance of services and to protect drainage paths if required. Easements in favour of the Brisbane City Council are required to have the necessary easement documentation prepared (free of costs and compensation to Council) by the Brisbane City Council. Easements not in favour of the Brisbane City Council are required to have the necessary documentation prepared by the applicant’s private solicitors. Easements are to be shown on a Survey Plan and lodged with the Plan Sealing Unit. Enquiries regarding any legal documentation can be directed to the Plan Sealing Unit, Development Assessment (ph: 3403 8888).

304 Service Crossings of Waterways
All service crossings of creek/waterways are to be located below ground level or attached to an approved crossing structure (eg road crossing) where located within the 100 year ARI flood event. This is to ensure these crossings do not to impede floodwaters or create scour of the creek/waterway and to protect the service against damage by flood debris.

305 Minimum Floor or Pad Levels
Design and construct Lot 4001 to have the appropriate freeboard in accordance with Brisbane Planning Scheme Codes/Policies to ensure flood immunity during a 50 year ARI local flood event or a 100 year ARI Creek/waterway flood event, whichever is the higher flood level. Flood immunity requirements for other development (including relevant infrastructure, floor levels, parks, substations and ancillary structures) is to meet the requirements of Brisbane Planning Scheme Codes/Policies.

Note:
Flooding within all Category 1, 2 and 3 waterways and Cedar Creek is defined as Creek/waterway flooding for the purpose of this condition

306 Stormwater Outlets in Waterways
Provide certification and/or As-Constructed plans from a Registered Surveyor that confirm the development complies with the requirements of this condition.
Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Council’s guideline. Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings.

**307 Stormwater - Hydraulic Report**

Submit to development assessment and obtain approval for an updated Site Based Stormwater Management Plan. This plan is to provide a detailed 2D hydraulic analysis of the Stage 1D area and is to ensure the base of any proposed stormwater channel/swales are located outside of the standard 4.25m ultimate road verge within Levitt Road and Canvey Road. The interface of all proposed channel/swales to a road reserve is to be a batter with a grade no steeper than 1V:4H for maintenance and designed to be safe.

**307(a) Certification**

Provide certification from a Registered Professional Engineer Queensland that the development has been constructed in accordance with the approved hydraulic report.

**Comment**

It is considered unreasonable for the Council to require stormwater infrastructure to be wholly located outside of road reserve areas. Provided adequate space is available for the provision of any footpaths and infrastructure services, then there should be no restriction on including channels and swales within the verge. The conditions have been amended accordingly below.

**Proposed Condition**

Submit to development assessment and obtain approval for an updated Site Based Stormwater Management Plan. This plan is to provide a detailed 2D hydraulic analysis of the Stage 1D area and is to ensure the base of any proposed stormwater channel/swales are located outside of the standard 4.25m ultimate road verge within Levitt Road and Canvey Road where there is sufficient room ensuring all other road verge infrastructure is accommodated. The interface of all proposed channel/swales to a road reserve is to be a batter with a grade no steeper than 1V:4H for maintenance and designed to be safe.

**307(a) Certification**

Provide certification from a Registered Professional Engineer Queensland that the development has been constructed in accordance with the approved hydraulic report.

**308 Landscape Works in Corridor**

Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

231(a) Submit Plan for Works in Corridor

Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and the approved drawings.

Landscape Concept Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK17. The Landscape Management and Site Works Plan must document the following:

**EXISTING SITE CONDITIONS**

- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing underground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

**308(a) Submit As Constructed Plans**

Submit to Development Assessment “As Constructed” plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**

Upon completion of the work.

**309 Works for Transport Infrastructure - Non-Trunk External Roadworks**

Provide the following non-trunk roadworks with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS design standards:

a) Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL): Construct new Type D concrete kerb and channel and associated drainage along the site frontage of Canvey Road, on a 4.25 metres alignment, taking into account the required road reserve widening to achieve overall road reserve width of 24.0 metres for Canvey Road.

i; Construct Type D road pavement from the lip of the new kerb and channel to the edge of the existing road pavement to Canvey Road frontage with any appropriate tapers (the minimum width of road construction/reconstruction is to be 1.2 metres)

ii; Provide appropriate intersection treatment including modification to the existing or construction of new median islands at intersections, as may be required and applicable, due to the new road pavement widening and extension works.

iv; Provide signs and pavement markings to the new roadworks along the site frontage of Canvey Road.

Note: The above external roadworks to Canvey Road frontages for Stage 1B, 1C and 1D may have to be constructed in the earlier stages subject to detailed design in the Functional Layout Plans and Roads and Drainage plans to facilitate lawful point of discharge.

b) Prior to the completion of the development of Stage 1 or 180 lots, which ever is the earliest:

i; Works for the upgrade and signalisation of the intersection at Upper Kedron Road/Cemetery Road, generally in accordance with the Conceptual Signalised Intersection Upgrade Works Plan, TTM Reference 14BRT0323-04, dated 14 Oct 2014. The upgrade to the intersection is to include road works to obtain a satisfactory sight distance to the left for vehicles exiting Cemetery Road into Upper Kedron Road.

ii; Works for the upgrade and signalisation of the intersection of Upper Kedron Road/Hogarth Road, generally in accordance with Conceptual Signalised Intersection Upgrade Works Plan TTM Reference 14BRT0323-04, dated 14 Oct 2014.
c) Prior to the completion of the development of Stage 1 or 180 lots within the Subject Site, which ever is the earlier:

i. Works for the widening of Canvey Road on the south to Charolaïs Crescent roundabout to a District Access road standard.

ii. Construct a Type C pavement and kerb and channel in Hogarth Road on southern approach to McGinn Road

Notes:
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Details</th>
</tr>
</thead>
</table>
| **309(a)** Submit Functional Layout Plans | Submit separate functional layout plans showing:  
- The extent of the external roadworks; and  
- The signal infrastructure layout. Obtain Preliminary Approval from Development Assessment.  
Timing: Prior to the submission of Roads & Drainage, Signs & Pavement Marking, and Signals Design drawings. |
| **309(b)** Submit Roads and Drainage Plans | Submit and obtain endorsement from Development Assessment Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.  
Timing: Prior to site/operational/building work commencing |
| **309(c)** Submit Traffic Signal Design Plans | Submit and obtain endorsement from Development Assessment Traffic Signal Design Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil. The Signal Design plans are to be signed by Council’s Transport & Traffic, Signals Management Section prior to lodgement.  
Timing: Prior to site/operational/building work commencing |
| **309(d)** Submit Signs and Pavement Plans | Submit and obtain endorsement from Development Assessment, Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil.  
Timing: Prior to site/operational/building work commencing |
| **309(e)** Implement Endorsed Drawings | Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted “on-maintenance” and “off-maintenance” as a Council asset, by Development Assessment.  
Timing: Prior to On-Maintenance Inspection |
| **309(f)** Submit As Constructed Plans | Submit “As Constructed” plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.  
Timing: Prior to On Maintenance Inspection |
| **309(g)** On Maintenance Acceptance | Provide the following in relation to the on maintenance acceptance of the asset:  
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment  
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works  
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies  
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.  
Timing: Prior to On-Maintenance Acceptance |
| **309(h)** Off Maintenance inspection | On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.  
Timing: On completion of the maintenance period |

**Comment**

The condition specifies the Type D pavement profile for external roadworks upgrades. This profile is in direct conflict with the existing pavement profile which has been constructed in accordance with the previous standard (being a flexible pavement). It is considered unreasonable to condition external upgrade works to roads to be in accordance with a differing road profile from that of the existing road. As such appropriate amendments to the conditions are sought, as below, to provide the flexibility for each external upgrade required to be undertaken to the same profile and pavement type as that existing in that location.

This condition further requires frontage works to Canvey Road in relation to Stage 1D. Stage 1D is the creation of a large future development allotment, and as such is subject to a future Development Application in accordance with the provisions of this preliminary approval. As such, it is considered unreasonable to require upgrade works to be undertaken to the frontage of Canvey Road (adjoining Stage 1D) as part of this ROL. The future application for the use of land within Stage 1D is the most appropriate time to require these works, to avoid duplication of works, or the undertaking of works that will need to be redone as part of future development. The condition has been amended accordingly below.

Council have also sought the submission of road functional plans separate to the lodgement of OPW applications for roadwork. This is considered unreasonable, given a road hierarchy plan has been provided as part of the Development Application package, and that there is no
benefit of separating the road functional plan assessment from the OPW assessment of the detailed design. The condition has been amended below to remove this additional unreasonable requirement.

Finally, this condition also requests providing a minimum 12 month maintenance period to works and is then contradicted by the timing provisions (prior to on-maintenance acceptance). The intent of the condition in relation to maintenance periods and timing is appropriately covered under the off-maintenance provisions, and as such the condition has been amended to reflect this.

### Proposed Condition

**Works for Transport Infrastructure - Non-Trunk External Roadworks**

Provide the following non-trunk roadworks with any associated drainage, site access, services, signs and markings in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the *Queensland Manual of Uniform Traffic Control Devices* and the *AUSTROADS* design standards:

<table>
<thead>
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<th>Proposed Condition</th>
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<tbody>
<tr>
<td><strong>a)</strong> Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL):</td>
</tr>
<tr>
<td>i) Construct new Type D concrete kerb and channel and associated drainage along the site frontage of Canvey Road, on a 4.25 metres alignment, taking into account the required road reserve widening to achieve overall road reserve width of 24.0 metres for Canvey Road.</td>
</tr>
<tr>
<td>ii) Construct Type D road pavement from the lip of the new kerb and channel to the edge of the existing road pavement to Canvey Road frontage with any appropriate tapers (the minimum width of road construction/reconstruction is to be 1.2 metres). The construction standard is to adopt the same pavement profile type as the existing constructed road.</td>
</tr>
<tr>
<td>iii) Provide appropriate intersection treatment including modification to the existing or construction of new median islands at intersections, as may be required and applicable, due to the new road pavement widening and extension works.</td>
</tr>
<tr>
<td>iv) Provide signs and pavement markings to the new roadworks along the site frontage of Canvey Road.</td>
</tr>
</tbody>
</table>

Note: The above external roadworks to Canvey Road frontages for Stage 1B, and 1C and 1D may have to be constructed in the earlier stages subject to detailed design in the Functional Layout Plans and Roads and Drainage plans to facilitate lawful point of discharge.

| b) Prior to the completion of the development of Stage 1 or 180 lots, which ever is the earliest: |
| i) Works for the upgrade and signalisation of the intersection at Upper Kedron Road/Cemetery Road, generally in accordance with the Conceptual Signalised Intersection Upgrade Works Plan, TTM Reference 14BRT0323-04, dated 14 Oct 2014. The upgrade to the intersection is to include road works to obtain a satisfactory sight distance to the left for vehicles exiting Cemetery Road into Upper Kedron Road. |
| ii) Works for the upgrade and signalisation of the intersection of Upper Kedron Road/Hogarth Road, generally in accordance with Conceptual Signalised Intersection Upgrade Works Plan TTM Reference 14BRT0323-04, dated 14 Oct 2014. |

Note: All signalised intersections are required to be designed in accordance with Austroads Part 4A-Unsignalised & Signalised Intersections Design Guidelines. The traffic signal designs need to be approved by the CRU-Signals Operations Section prior to being submitted at the Operation Works stage.

| c) Prior to the completion of the development of Stage 1 or 180 lots within the Subject Site, which ever is the earlier: |
| i) Works for the widening of Canvey Road on the south approach to Charolais Crescent roundabout to a District Access road standard. |
| ii) Construct a Type C pavement and kerb and channel in Hogarth Road on southern approach to Gilmour Road. |

Notes:

This condition is imposed under Section 665 of the *Sustainable Planning Act 2009*.

**309(a) Submit Functional Layout Plans**

Submit separate functional layout plans showing:
- The extent of the external roadworks; and
- The signal infrastructure layout.

**Obtain Preliminary Approval from Development Assessment.**

**Timing:**

*Prior to Concurrently with* the submission of Roads & Drainage, Signs & Pavement Marking, and Signals Design drawings.

**309(b) Submit Roads and Drainage Plans**

Submit and obtain endorsement from Development Assessment Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**

Prior to site/operational/building work commencing

**309(c) Submit Traffic Signal Design Plans**

Submit and obtain endorsement from Development Assessment Traffic Signal Design Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, the *Queensland Manual of Uniform Traffic Control Devices* and the *AUSTROADS* Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil. The Signal Design plans are to be signed by Council's Transport & Traffic, Signals Management Section prior to lodgement.

**Timing:**

Prior to site/operational/building work commencing

**309(d) Submit Signs and Pavement Plans**
Submit and obtain endorsement from Development Assessment, Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications, the Queensland Manual of Uniform Traffic Control Devices and the AUSTROADS Design Standards; checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:
Prior to site/operational/building work commencing

309(e) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.

Timing:
Prior to On-Maintenance Inspection

309(f) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing:
Prior to On Maintenance Inspection

309(g) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies

Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.

Timing:
Prior to On-Maintenance Acceptance

309(h) Off Maintenance inspection
On completion of the minimum 12 months maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

Timing:
On completion of the maintenance period

310 Repair Damage To Kerb, Footpath Or Road
Repair any damage to existing kerb and channel, footpath or roadway (including removal of concrete slurry from footways, roads, kerb and channel and stormwater gullies and drainlines) and re-installation existing traffic signs and pavement markings that have been removed or damaged during any works carried out in association with the approved development.

311 Works for Stormwater Infrastructure - Non- Trunk
Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure:

- Runoff from the site and external catchments is to be managed in accordance with approved plan B14159.W-SK03 Flood Mitigation Works by Brown Consulting QLD dated 13th October 2014,
- Lot 4001 is to be designed and constructed to have the appropriate freeboard to ensure it will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek event, whichever is the higher flood level,
- Construction of new stormwater channel along frontage of Levitt Road to existing culverts at Canvey Road. This channel including baffers is located outside of the standard 4.25m road The interface of this channel to road reserve is to be a grassed batter no steeper than 1V:4H,
- Construction of stormwater inlets, pipes and 16m wide stormwater channel/swales within balance lot 4002 secured by easement in favour of Brisbane City Council,
- Extension of existing culverts in Caney Road to ultimate road reserve width.

Notes.
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

311(a) Submit Drawings for Endorsement
Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:
Prior to site/operational/building work commencing

311(b) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

Timing:
Prior to On-Maintenance Inspection

311(c) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing:
Prior to On Maintenance Inspection
311(d) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.
Timing: Prior to On-Maintenance Acceptance

311(e) Off Maintenance Inspection
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.
Timing: On completion of the maintenance period

Comment
It is considered unreasonable for the Council to require stormwater infrastructure to be wholly located outside of road reserve areas. Provided adequate space is available for the provision of any footpaths and infrastructure services, then there should be no restriction on including channels and swales within the verge. The conditions has been amended accordingly below

Proposed Condition
Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure:
- Runoff from the site and external catchments is to be managed in accordance with approved plan B14159.W-5K03 (Flood Mitigation Works) by Brown Consulting QLD dated 13th October 2014.
- Lot 4001 is to be designed and constructed to have the appropriate freeboard to ensure it will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek event, whichever is the higher flood level.
- Construction of new stormwater channel along frontage of Levitt Road to existing culverts at Canvey Road. This channel including batters is to be located outside of the standard 4.25m road verge should there not be sufficient room to accommodate within the road reserve. The interface of this channel to road reserve is to be a grassed batter no steeper than 1V:4H.
- Construction of stormwater inlets, pipes and 16m wide stormwater channel/swales within balance lot 4002 secured by easement in favour of Brisbane City Council.
- Extension of existing culverts in Caney Road to ultimate road reserve width.

Notes.
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

311(a) Submit Drawings for Endorsement
Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.
Timing: Prior to site/operational/building work commencing

311(b) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.
Timing: Prior to On-Maintenance Inspection

311(c) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
Timing: Prior to On Maintenance Inspection

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Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.
Timing: Prior to On-Maintenance Acceptance

311(e) Off Maintenance Inspection
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.
Timing: On completion of the maintenance period

312 Ponding of stormwater
Adjoining properties and roads are to be protected from ponding or nuisance from stormwater as a result of the works. Ensure the stormwater runoff from the site does not adversely impact on flooding or drainage (peak discharge and duration up to the 100 year Average Recurrence Interval) of properties that are upstream, downstream or adjacent to the site.
Notes.
- If remedial works are required that involve drainage, drawings are to be submitted and approval obtained from Development Assessment, to provide a means to rectify the site drainage.
- This condition is imposed to ensure that the developer is aware that they are responsible for all remedial works required as a result of any site works and, that they must protect neighbouring properties and roads from ponding and nuisance water from the proposed development.

NDN Application I A003905687 I 390 Levitt Road, Upper Kedron Qld 4055
### Public Lighting
Lodge street lighting design drawings showing the proposed public lighting system in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and obtain approval from the City Lighting, Asset Services.

**313(a) Agreement with Supplier**
Enter into an agreement with an electricity supplier and provide a public lighting system in accordance with the above approved lighting design plans.

### Service Conduits and Mains
Supply and install all service conduits and meet the cost of any alterations to public utility mains, existing mains, services or installations required in connection with the approved development in accordance with the relevant Brisbane Planning Scheme Codes/Policies. This includes:
- the provision of all services and/or conduits along the full length of any rear allotment access or access easement.
- the relocation of any fire hydrant and/or valves from the development’s vehicular footway crossings if applicable.
- the retention and/or relocation of any existing foul water lines that currently exist within the site.

Note: Applicants should liaise with the appropriate service authorities. Typical underground services and/or conduits to be constructed include power, phone, telecommunications, sewer, stormwater and gas if applicable.

**314(a) As Constructed Drawings**
Submit to Development Assessment "As Constructed" drawings including an asset register, approved by a Registered Professional Engineer Queensland that are in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and any other relevant infrastructure requirements, showing the works required by this condition.

### Conduit for Brisbane City Council
Provide a single underground conduit (100mm diameter UPVC class PN9) in favour of Brisbane City Council on at least one side of all Neighbourhood Access Roads (Bus Route only), Industrial Access Roads and Major Roads in the Council Road Hierarchy, in accordance with the following:
- The conduit must be laid in the telecommunication alignment of the footpath, on the kerb side of the Telecommunication Carrier conduit or in an agreed shared trench arrangement with the Telecommunication Carrier and other Utilities as may be relevant, subject to the approval of Development Assessment.
- The conduit must bypass the Telecommunication Carrier pits.
- Pits (minimum size, Type 4 as per BCC Drawing UMS 600/031) with lids (as per Drawing UMS 600/030 but Class B instead of Class C) must be installed at the dead ends of the conduit, both sides of road crossings, at intersections and at other locations that may be specified by Council.
- The conduit must be plugged at each pit.
- The conduit must be located and installed in such a way that facilitates the installation of cable and additional pits in the future.

**315(a) As Constructed Drawings**
Submit to Development Assessment "As Constructed" drawings, including an asset register, approved by a Registered Professional Engineer Queensland, and in accordance with the requirements of this condition and the relevant Brisbane Planning Scheme Codes/Policies.

### Telecommunications
Submit to Development Assessment, documentary evidence issued by a relevant telecommunication carrier to verify that the necessary underground telecommunication services have been supplied within and adjacent to the development.

### Concurrence Agency Conditions
The Department of State Development Infrastructure and Planning as concurrence agency has imposed the conditions contained in the letter dated 2 December 2014.

### Construction Noise and Dust Emissions
Pursuant to the Environmental Protection Act 1994, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emission are accordance with the requirements of the Act. The Environmental Protection Act 1994 prescribes that:
1. A person must not carry out building work in a way that makes an audible noise—
   - (a) on a business day or Saturday, before 6.30a.m. or after 6.30p.m; or
   - (b) on any other day, at any time.
2. The reference in subsection (1) to a person carrying out building work—
   - (a) includes a person carrying out building work under an owner-builder permit; and
   - (b) otherwise does not include a person carrying out building work at premises used by the person only for residential purposes.

### Advice Agency Condition
Powerlink acting as an advice agency for the development has imposed conditions contained in the letter dated 18 July 2014.

### Water & Wastewater Services

**Concurrence Agency Requirements**

**Grant Easements**
Grant the following easement(s) for water supply or sewerage purposes.
- (a) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
- (b) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**GUIDELINE**
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

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### PROOF OF FULFILMENT
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

**Comment**
It is considered that the timing impacts referenced in this condition may delay plan sealing. Delays may be experienced where live works are still being undertaken after plan sealing but prior to on-maintenance (through the bonding process). As such we seek the reference to prior to the relevant Council signing the plan of subdivision to be removed from the timing, as suggested below.

### Proposed Condition
**Grant Easements**
Grant the following easement(s) for water supply or sewerage purposes.

k) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.

l) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**GUIDELINE**
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

### PROOF OF FULFILMENT
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

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### 321 Construct Waste Water Non-Trunk Infrastructure System
Construct a Sewerage Non-Trunk infrastructure system necessary to provide a sewerage connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**
This condition has been imposed to ensure that sewerage infrastructure is in place to serve the development and that each lot has a sewerage property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

### PROOF OF FULFILMENT
Connection Certification from QUU

#### 321(a) Wastewater Network Infrastructure (Non-trunk Infrastructure)
(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities wastewater network infrastructures.

(d) Transfer ownership of the wastewater reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network infrastructure and/or property service infrastructure. This includes:

- (i) where not required for existing or future development, removing existing wastewater network and/or property service infrastructure and sealing any connection(s) to remaining reticulation infrastructure;
- (ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
- (iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as specified in current standards.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

#### 321(b) Wastewater Property Service Infrastructure (Non-trunk Infrastructure)
(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland Urban Utilities wastewater reticulation system.

(d) Each lot must have a separate wastewater property service connection which commands the whole of each lot.

(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.

(f) If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

(g) Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.
(h) Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

(i) Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words "Sewer Connection 2 M.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

321(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

321(d) Wastewater Network and Property Service Infrastructure- Sizing
The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

321(e) Wastewater Infrastructure- Design and Construction Standards
(a) The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

321(f) Wastewater Network Infrastructure- CCTV Inspection
(a) Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.

(b) CCTV survey must be carried out in accordance with the WSA 05-2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.

(c) The Applicant must repair all defects in accordance with the approved engineering restoration plan and schedule at no cost to Queensland Urban Utilities.

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Connection Completion Notification and confirming that the Maintenance Period has commenced.

321(g) Wastewater Network Infrastructure- Pressure Testing
(a) Conduct pressure/vacuum testing of wastewater mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Pressure/vacuum testing of wastewater mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

(c) The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Connection Completion Notification and confirming that the Maintenance Period has commenced.

Comment
Point 321(b)(h) It is considered that imposing the upgrades to existing services that are considered deficient by QUU and not located within the development is an unreasonable imposition on the development. As such we seek this aspect of the condition to be deleted.

Point 321(c) The impact and compliance with requirements prior to QUU issuing the Connection Certificate should be tied to demonstration of the relevant provisions of the SEQ water and sewerage design and construction codes. Amended wording is provided below to reflect this.

Proposed Condition
Point 321(b)(h) Delete. Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

321(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 321(c) Wastewater Infrastructure- Design and Construction Standards
The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 322 Live Works for Water Supply and Wastewater

Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

(a) All work on or near live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.

(b) A live infrastructure asset is an asset that either carries water or sewage or is connected unpluged to an asset that carries water or sewage. An asset is unpluged when there is no plug, closed valve or other blocking device between the asset and a live asset.

(c) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.

(d) All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.

(e) Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.

(f) All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

**Timing:**
Prior to and at the time of Live Works.

#### Comment
We seek amendments to this condition to provide certainty on when QUU must be notified about works within the vicinity of their live QUU infrastructure. It is considered that the definition of ‘near’ is not clear enough to determine when QUU will need to be notified of works. AS such we seek amendments to the condition as follows.

Additionally we have added further clarity to the timing, to provided certainty and direction for the engineers, both designing and assessing compliance.

**Proposed Condition**

Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

- ee) All work on or **within 1 metre** of live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.
- ff) A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.
- gg) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.
- hh) All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.
- ii) Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.
- jj) All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

**Timing:**
Prior to and at the time of Live Works **in accordance with the SEQ Water Supply and Sewerage Design and Construction Codes at the time of approval**.

### 323 Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

323(a) Design Approval- Major Works

- (a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
- (b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

**Timing:**
Prior to the construction of water or wastewater infrastructure.

323(b) Pre-Construction Review - Major Works

- (a) Submit pre-construction plans and associated supporting information (Pre- Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
- (b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).
- (c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre- Construction Package if necessary.
- (d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

**Timing:**
Prior to the construction of water or wastewater infrastructure.
323(b) Pre-Construction Review - Major Works
Prior to the construction of water or wastewater infrastructure.

Timing:
- Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

323(c) Construction Certification- Major Works
(a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).
(b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

Timing:
- Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

323(d) End of Maintenance- Major Works
Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
- At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

323(e) Works Inspections - Major Works
(a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:
(i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);
(ii) Pouring of thrust blocks;
(iii) Pressure testing of pipelines;
(iv) Disinfection of water mains; and
(v) Construction completion inspection.
(b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities has inspected the works and other (non-Hold Point) works inspections.
(c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified it that its personnel to be present.
(d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.
(e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

Timing:
- Prior to and during construction of water or wastewater infrastructure

Comment
The condition requires the works to be inspected by and certified by a suitably qualified RPEQ, as such including these hold points would only add unnecessary time delays to the delivery of the project. The Amendments sought to this condition seek to remove any additional hold points by QUU.

It is additionally requested that the timing sections of this condition are modified (as provided below) so that the timing refers to the compliance of work in accordance with the SEQ water and sewerage design and construction codes at the time of approval. This will avoid any potential issues with rework, redesign, and reconstruction resulting from updated standards after the time of approval. This is effectively to avoid any chance of retrospective changes being sought to work already completed.

The condition has been amended accordingly below.

Proposed Condition

Major Works for Water Supply and Wastewater Infrastructure
Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

323(a) Design Approval- Major Works
(a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

Timing:
- Prior to the construction of water or wastewater infrastructure.

323(b) Pre-Construction Review- Major Works
(a) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
(b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).
(c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.
(d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

Timing:
- Prior to the construction of water or wastewater infrastructure.

323(c) Construction Certification- Major Works
(a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).
(b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

Timing:
- Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council
Prior to and during construction of water or wastewater infrastructure.

324(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)
(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
(d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
(e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
(f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
(g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
(h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
(i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development’s proposed vehicular footway crossings.
(j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.

(k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

324(c) Drinking Water Network Infrastructure and Property Service Infrastructure

Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

324(d) Drinking Water Network Infrastructure and Property Service Infrastructure

Sizing
The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

324(e) Drinking Water Infrastructure - Design and Construction Standards

(a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

(b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

324(f) Drinking Water Infrastructure - Water Quality Testing

(a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

324(g) Drinking Water Network Infrastructure - Pressure Testing

(a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Water mains must be tested by the National Association of Testing Authorities Australia (NATA) registered testing authority. The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As Constructed Package).

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment
The condition has been amended below to more appropriately manage the timing of compliance in accordance with the SEQ water and sewerage design and construction codes, being the time of approval. This is requested to avoid any potential issues with rework, redesign and reconstruction resulting from updated standards after the time of approval.

Proposed Condition

Construct Water Supply Non-Trunk Infrastructure System

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions at the time of approval:

GUIDELINE
This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

PROOF OF FULFILMENT

Connection Certification from QUU

324(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCF of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
   (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure on or within the development site;
   (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
   (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
   (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

324(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRD1 of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.
j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

324(c) Drinking Water Network Infrastructure and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

324(d) Drinking Water Network Infrastructure and Property Service Infrastructure-Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

324(e) Drinking Water Infrastructure - Design and Construction Standards

a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

324(f) Drinking Water Network Infrastructure- Water Quality Testing

a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.

Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.
<table>
<thead>
<tr>
<th>325</th>
<th>Consent and Permits prior to Construction of Water and Wastewater Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>325(a) Land Owner's Consent</strong></td>
<td>The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:</td>
</tr>
<tr>
<td></td>
<td>(a) Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.</td>
</tr>
<tr>
<td></td>
<td>(b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.</td>
</tr>
<tr>
<td><strong>Timing:</strong></td>
<td>Prior to submitting the Pre-Construction Package and at the pre-start meeting.</td>
</tr>
</tbody>
</table>

| 325(b) External Agency Approvals and other Authorisations | The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities. |
| **Timing:** | Prior to construction of relevant water or wastewater infrastructure. |

| **Comment** | It is considered unreasonable to include references in conditions that relate to documents in Water Approvals that have not been issued to the applicant for consideration. As such we propose amendments to the condition as follows to provide greater certainty for the applicant on the implications of this condition on the delivery of the project. |

### Proposed Condition

**Consent and Permits prior to Construction of Water and Wastewater Infrastructure**

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

(a) Owner's consent to undertake works on the private property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.

(b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

**Timing:**

Prior to submitting the Pre-Construction Package and at the pre-start meeting.

(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

**Timing:**

Prior to construction of relevant water or wastewater infrastructure.

### Proposed Condition

**Land Dedication for Non-Trunk Water and Wastewater Infrastructure**

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

(d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Comment

The applicant does not consider this condition to be relevant to this development. The condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and / or in accordance with the standards and guidelines prescribed.

It is on this basis that we seek the deletion of this conditions in its entirety.
### Delete Land Dedication for Non-Trunk Water and Wastewater Infrastructure

<table>
<thead>
<tr>
<th>Condition</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.</td>
</tr>
<tr>
<td>b)</td>
<td>This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.</td>
</tr>
<tr>
<td>c)</td>
<td>Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.</td>
</tr>
<tr>
<td>d)</td>
<td>The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.</td>
</tr>
</tbody>
</table>

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Temporary Works for Water and Wastewater Infrastructure

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Provide temporary water and wastewater infrastructure, if applicable, and all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.</td>
</tr>
<tr>
<td>b)</td>
<td>Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.</td>
</tr>
<tr>
<td>c)</td>
<td>A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.</td>
</tr>
<tr>
<td>d)</td>
<td>Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.</td>
</tr>
</tbody>
</table>

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Terminating Infrastructure for Water and Wastewater

**Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.**

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Maintenance Period for Water and Wastewater Infrastructure

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and maintenance schedule (lodged as part of the As-Constructed Package), relevant engineering standards and sound engineering practice.</td>
</tr>
<tr>
<td>b)</td>
<td>The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.</td>
</tr>
<tr>
<td>c)</td>
<td>Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.</td>
</tr>
<tr>
<td>d)</td>
<td>Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.</td>
</tr>
<tr>
<td>e)</td>
<td>Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.</td>
</tr>
</tbody>
</table>

**Timing:**
Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

### Maintenance Bond

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.</td>
</tr>
<tr>
<td>b)</td>
<td>The Maintenance Bond must remain valid for the full term of the Maintenance Period.</td>
</tr>
<tr>
<td>c)</td>
<td>The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.</td>
</tr>
</tbody>
</table>

**Timing:**
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

**Comment**
It is considered that bank guarantees for maintenance periods are to protect against physical defects and faults. It is not considered reasonable to include defects and faults in the design, as QUU will have had the opportunity through the assessment of the DA (conceptual design) and then
Proposed Condition

a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials and workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.

b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.

c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

Payment of Fees and Charges
Pay fees and charges calculated in accordance with the Queensland Urban Utilities Water Netserv Plan.

Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs.

(a) as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water Netserv Plan.

(b) the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the following:

(i) levied charges for the trunk infrastructure; and

(ii) the trunk infrastructure provided, or to be provided, by the applicant.

(c) the details of trunk infrastructure to be provided is shown in the plan, Figure 2- Proposed Water Supply Infrastructure, Upper Kedron.

(d) the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734322200.

(e) the additional trunk infrastructure is not eligible for a refund in accordance with s99BRCY of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Comment
The water trunk infrastructure proposed to support the development is consistent with the QUU Master Plan which was provided by QUU to Calibre Consulting on 16 October 2014. The Approval Conditions 332 makes reference to Figure 2- Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20 Nov 2014.

QUU have not demonstrated or identified how the proposed development demand is greater than that assumed in the QUU Water Netserv Plan.

Additional information is required from QUU to justify any consideration of additional payment of contributions in relation to the water and wastewater infrastructure. From the material provided by QUU during the assessment period, it is considered that the demand on the infrastructure is not beyond that planned by QUU.

It is on this basis that we seek to delete this condition as provided below.

Proposed Condition
Delete Additional Payment Condition for Trunk Infrastructure Costs

Payment of additional cost in the amount of $2.35 million is to be made to Queensland Urban Utilities in accordance with the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 Chapter 4C Part 7 Division 4 Sub-Division 2 Conditions for Additional Trunk Infrastructure Costs as follows:

(a) as the connection will generate infrastructure demand of more than that required to service the type, scale or intensity of future development assumed in the Queensland Urban Utilities Water Netserv Plan.

(b) the connection will impose additional trunk infrastructure costs on Queensland Urban Utilities after taking into account the following:

(i) levied charges for the trunk infrastructure; and

(ii) the trunk infrastructure provided, or to be provided, by the applicant.

(c) the details of trunk infrastructure to be provided is shown in the plan, Figure 2- Proposed Water Supply Infrastructure, Upper Kedron prepared by Queensland Urban Utilities dated 20 Nov 2014.

(d) the applicant may, instead of making the payment, elect to provide part or all of the trunk infrastructure; for details of any requirement of the trunk infrastructure and when it must be provided, please contact Queensland Urban Utilities development services team on 0734322200.

(e) the additional trunk infrastructure is not eligible for a refund in accordance with s99BRCY of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Permit to which these conditions apply T DA SPA ROL Subdivision of Land Stage 2A

General/Planning Requirements

Demolish or Relocate Buildings

NDN Application T A003905687 T 390 Levitt Road, Upper Kedron Qld 4055
| Ecology |
|------------------|------------------|
| **335.** Submit Vegetation Management Plan |
| Submit to Development Assessment and receive approval for a Vegetation Management Plan (VMP). The VMP is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation as per the Ecological Assessment Guidelines (referenced on Council's website) for the protection, retention and/or management of vegetation on the site and in accordance with the approved Vegetation Retention Plan amended in red on 30 October 2014 and include the following information: |
| - The extent of the VMP is to include evaluation of all areas including, proposed road reserves, external works and development areas |
| - The location and description of existing vegetation at the interface between the development footprint and the Category 1, 2, 3 and 4 Corridors required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, including species and botanical name plus the height and canopy spread |
| - The location and extent of all site works including all proposed infrastructure and areas of earthworks |
| - Detail design of all civil works is to be cognisant of environmental values. Alternative solutions may be required in some instances, to protect significant vegetation (e.g. alternative service alignments, variations to batter slopes and tunnel boring) |
| - The location and description of all vegetation to be retained and that to be removed |
| - Methods of physical identification of trees/vegetation to be retained |
| - A description of all measures to be used to protect vegetation and habitat features to be retained during construction, including protective fencing |
| - A description of all pruning and tree surgery works (to AS 4373/96) to maintain health and stability of trees and reduce potential hazards for future residents |
| - The location and extent of storage and stockpile areas for cleared vegetation and site mulch |
| - A description of all methods to salvage and/or re-use cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works |
| - Details of all measures to protect and recover fauna during clearing operations, including presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures. |

335(a) **Arrange Pre-start Meeting**

Once measures are in place to identify and protect vegetation on site (such as tree protection fencing), arrange a pre-start meeting with the Development Assessment.

Timing: When protection measures are in place and prior to site / operational / building works occurring

335(b) **Implement Approved Plan**

Implement and carry out the works in accordance with the approved VMP.

Timing: Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL), and then to be maintained

335(c) **Certify Approved Works**

Submit to Development Assessment certification that the approved VMP has been implemented.

Timing: Certification to be submitted upon completion of each phase of the approved VMP

339 **Submit Rehabilitation Plan**

Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings.

Timing: Prior to any new building work occurring (MCU or BW) or prior to Council's notation on the plan of subdivision (ROL)

**Comment**

This is a standard condition and is tied to ensuring the sites are appropriately cleared of existing buildings prior to the creation of the approved development. Prior to any building work occurring is a sufficient time frame without the uncertainty added to timing. The condition has been amended to reflect this.

**Proposed Condition**

Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings.

Timing: Prior to any new building work occurring (MCU or BW) or prior to Council's notation on the plan of subdivision (ROL)
Timing: On completion of the maintenance period
Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond.

339(d) Off-Maintenance Inspection
As indicated payment lodged with Council. Timing: 5 years from acceptance of on-maintenance period
Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary
Lodge a bond for the on-maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The
with the approved plans and rectify all defects identified at the on-maintenance inspection and those arising during the on-maintenance period.
Monitoring and reporting will also be required over a 5 year maintenance period. Habitat features such as nest boxes are to be provided for each stage during
preparation works for site rehabilitation.
- Specification notes on site preparation; plant quality assurance including local provenance; plant stock handling; planting methodology;
mulching; threat management (including tree guarding 1 600mm corflute with hardwood stake; watering as required to prevent plant stress);
weed management; tree guard removal and maintenance; establishment and maintenance. All restoration works are to be in accordance with the
SEQ Ecological Restoration Framework and industry best practice.
- Evidence that the rehabilitation plan has been prepared by a bushland restoration specialist/ecologist with a minimum of 5 years experience in
ecological restoration.
- Evidence that the delivery of rehabilitation works will be undertaken by a bushland restoration specialist with a minimum of 5 years
experience in ecological restoration. Bushland restoration works to target areas that are currently deficient of an existing vegetation structure and
floristic composition that is commensurate with the Regional Ecosystem identified on the site or an alternative Regional Ecosystem as
determined by a suitably qualified and experienced bushland restoration practitioner or Ecologist with a minimum of 5 years experience in
ecological restoration. Rehabilitation methods must use a bushland restoration approach that will ultimately aim to achieve a vegetation structure
and floristic composition commensurate with the Regional Ecosystem identified on the site. This will be achieved by including the
establishment of as many flora species from all strataums (tree, shrub, and ground layer) as commercially available; removal and management of
all exotic flora species within the maintenance period; introduction of coarse woody debris and leaf litter from clearing site as appropriate.
Alternative regional ecosystems may be appropriate for areas with landforms influenced by unnatural levels of soil moisture or altered landform.

Regional Ecosystems Technical Descriptions and Biocondition Benchmarks documentation will be used to guide planting density, flora species
selection, flora species dominance and distribution. Planting densities higher than those recorded in Regional Ecosystem Technical Descriptions
will be appropriate in more open areas to account for 10% mortality and to assist with the development of a robust canopy.

339(a) Implement Approved Plan
Carry out rehabilitation works in accordance with the approved Rehabilitation Plan.
Timing: While site/operational/building work is occurring and then to be maintained

339(b) On-Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been
accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on
maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience in ecological restoration. Submit to Development Assessment a Fauna Specialist Report to
demonstrate compliance with this condition.
339(c) On-Maintenance Period
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance
with the approved plans and rectify all defects identified at the on-maintenance inspection and those arising during the on-maintenance period.
Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The
Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary
payment lodged with Council. Timing: 5 years from acceptance of on maintenance period
As indicated

339(d) Off-Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.
Timing: On completion of the maintenance period

340 Fauna Spotter
A Fauna Spotter, qualified by the relevant Queensland State Government Authority, shall inspect the site to ensure identification of any wildlife
(fauna) or habitat features (e.g. nests, tree hollows) prior to clearing.

340(a) Prior to Vegetation Clearing
Clearing operations and other site works must not commence until the Fauna Spotter has certified that the site has been fully inspected and any
necessary fauna protection measures or relocation procedures implemented. Submit to Development Assessment a Fauna Spotter Report to
demonstrate compliance with this condition.

340(b) Fauna Spotter on Site
NDN Application T A003905687 T 390 Levitt Road, Upper Kedron Qld 4055
Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond.

342 Off Maintenance Inspection
Timing: 5 years from acceptance of on maintenance period

Payment lodged with Council. The maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:

- Details of the fauna exclusion/movement fences
- Location of warning signage at crossing points;
- Description of location, dimensions and openness of the structure to enable wildlife to enter the structure;
- Location of warning signage at crossing points;
- Description of the fauna spotter
- Details of associated fauna furniture must be included to provide opportunities for a broad range of species to roads.

342(a) Implement approved plan
Construction of the wildlife movement solutions and the road network is to occur in accordance with approved designs.

Timing: While site/operational/building work is occurring and then to be maintained

342(b) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance.

The following information must be provided to Development Assessment prior to the works being accepted on maintenance:

- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.

Timing: Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

342(c) On Maintenance Period
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing: 5 years from acceptance of on maintenance period

342(d) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing: On completion of the maintenance period

343 Bushfire Protection Zone
Maintain the Bushfire Asset Protection Zones (APZ) indicated on Figure 3: Bushfire Risk Treatments, received 15/10/2014 and in accordance with an approved Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014;

- Exclusion of habitable buildings or any flammable structures from the area
- Maintenance of fuel load and vegetation structure; and
- Maintenance of access to APZ for fire fighting purposes

343(a) Survey and peg the BPZ
Survey and peg all boundaries of the Bushfire Asset Protection Zone (APZ)
Enter into a Covenant by Registration pursuant to Section 97A of the Land Title Act (1994) with Brisbane City Council as Covenantee. The Covenant is to be able to be immediately registered in the Department of Environment and Resource Management, and is to be in term satisfactory to the Manager, Brisbane City Legal Practice, to ensure management of bushfire risk within the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014.

Provide a survey plan immediately registrable with the Department of Natural Resources and Mines in accordance with the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014 at the same time as providing the covenant.

This Covenant must detail the responsibilities, liabilities, measures, remedies and intents as necessary to ensure the appropriate management of bushfire risk within the covenant area. The Covenant shall address the following issues:

- Appropriate management of bushfire risk in accordance with the approved Bushfire Management Plan in the Covenant area;
- including provision of building standards AS3959 Construction of buildings in bushfire-prone areas to specified Bushfire Attack Level (BAL) ratings.

**Comment**
Amendments to this condition are sought to clarify timing of covenants. The condition seeks covenants to be immediately registered in the Department of Environment and Resource Management. It is considered reasonable to require covenants to be placed on titles at time of registering titles with the relevant State Government body.

Additionally the first paragraph of the condition references the DER on when the relevant government department is Department of Natural Resources and Mines (DNRM).

**Proposed Condition**

**Bushfire Management Covenant**

Enter into a Covenant by Registration pursuant to Section 97A of the Land Title Act (1994) with Brisbane City Council as Covenantee. The Covenant is to be able to be immediately registered in the Department of Environment and Resource Management, Department of Natural Resources and Mines and is to be in term satisfactory to the Manager, Brisbane City Legal Practice, to ensure management of bushfire risk within the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014.

Provide a survey plan immediately registrable with the Department of Natural Resources and Mines in accordance with the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014 at the same time as providing the covenant.

This Covenant must detail the responsibilities, liabilities, measures, remedies and intents as necessary to ensure the appropriate management of bushfire risk within the covenant area. The Covenant shall address the following issues:

- Appropriate management of bushfire risk in accordance with the approved Bushfire Management Plan in the Covenant area;
- including provision of building standards AS3959 Construction of buildings in bushfire-prone areas to specified Bushfire Attack Level (BAL) ratings.

**Arboricultural Requirements**

The following arboricultural requirements are to be performed to ensure the long-term health and safety of trees to be retained:

- **345(a) Site Works**
  In consultation with Development Assessment, the Arborist is to direct the civil works contractor in relation to any service installation activities utilising alternative technologies such as directional-boring or under-boring using vacuum excavation or air-spade. The Arborist must be a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture).

- **345(b) Certification**
  Submit to Development Assessment, certification from a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) that all necessary arboricultural works have been carried out in accordance with the requirements of all parts of this condition.

- **345(c) VegetationPruning**
  Any necessary pruning, tree surgery and other maintenance works to maintain health and stability of any trees to be retained, and to reduce potential hazards for future residents, is to be carried out in consultation with Development Assessment. All works must be performed by a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) in accordance with the Australian Standard 4373/96 for Pruning of Amenity Trees.

**Land for Ecological and Waterway Corridors Infrastructure**

Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27 February 2014 which forms the land depicted as Category 3 Corridor & Category 2 Corridor as shown on Approved Plan Proposal Plan, Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red). With the exception of drainage infrastructure (Category 3 Corridor only) and crossings approved by the Council the land is to be free of encumbrances. Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

**Comment**
We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced Infrastructure Agreement.

**Proposed Condition**

**Land for Ecological and Waterway Corridors Infrastructure**

Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan, Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red). With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances. Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.
347 Bushfire Management Plan

i) Implement and carry out the works in accordance with approved Bushfire Management Plan I Stages 1 and 2 prepared by Place Design received 15/10/2014;

ii) Submit certification to Development Assessment certifying that the approved Bushfire Management Plan has been implemented.

348 Stormwater Quality - Submit Management Plan

Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SBSMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010 and be generally in accordance with approved plan B14159.W-SK01 Concept Stormwater Quality Management Plan For Stage 1 & 2 by Brown Consulting QLD dated 14th October 2014. The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, buildouts or other speed control devices) in the streetscape of all areas within Stage 2A, 2B, and 2C consisting of street tree WSUD pits, and bioretention basins. WSUD devices in the road reserve are to be located to ensure no services are constructed through the device or filter material. Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap.

348(a) Implement Approved Plan

Implement and maintain the approved Site Based Stormwater Quality Management Plan.

348(b) Certification

Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.

Comment

The BCC has amended to reflect these points as provided below.

The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, buildouts or other speed control devices) in the streetscape of all areas within Stage 2A, 2B, and 2C consisting of street tree WSUD pits, and bioretention basins. WSUD devices in the road reserve are to be located to ensure no services are constructed through the device or filter material. Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap.

109(a) Implement Approved Plan

Implement and maintain the approved Site Based Stormwater Quality Management Plan.

109(b) Certification

Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.

Landscape Architecture & Open Space Planning

349 Landscape Works in Corridor

Undertake works in the Category 2 & 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

349(a) Submit Plan for Works in Corridor

Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the Corridor in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and the approved drawings Landscape Concept I Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK17b. The Landscape Management and Site Works Plan must document the following:

EXISTING SITE CONDITIONS

- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing underground and above ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

SITE PREPARATION

- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and

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- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

**NEW WORKS**
- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embellishments chosen from Council's standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilization/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

**COSTING AND MAINTENANCE PROGRAM**
The plans are to provide details of a costing and maintenance program, including the following:
- An Itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

**Timing:** Prior to site/operational work commencing

349(b) Pre Start Meeting
Arrange with Development Assessment for a Pre Start meeting.
**Timing:** Prior to site/operational work commencing

349(c) Construct Approved Works
Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.
**Timing:** Prior to acceptance of works on maintenance

349(d) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

**Timing:** Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

349(e) On Maintenance Period
Provide 5 years’ maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area.

The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

**Timing:** 5 years months from acceptance of on maintenance Period

349(f) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond.
Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:** On completion of the maintenance period

**Comment**
During the assessment of the application it was agreed with Council that the analysis of the 2 year, 5 year and 100 year floodlines was sufficient. As such, it is considered unnecessary to require further analysis against the 10 year, 20 year and 50 year floodlines, and have therefore deleted these from this condition.

Furthermore, the agreement to undertake a 5 year maintenance period was understood to be in relation to the areas of the site being rehabilitated, to ensure the protection and longevity of these particular species. It is not considered appropriate for a 5 year maintenance period to be enforced on the balance open space and landscape works within the corridors. On this basis the condition has been amended below to reflect a 2 year maintenance period on landscaped areas and a 5 year period on rehabilitation areas only.

**Proposed Condition**
Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below.
Submit Plan for Works in Corridor
Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the, the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and generally in accordance with the approved drawings/Landscape Concept 1 Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK17@. The Landscape Management and Site Works Plan must document the following:

EXISTING SITE CONDITIONS
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

SITE PREPARATION
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points; and
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

NEW WORKS
- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embellishments chosen from Council’s standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

COSTING AND MAINTENANCE PROGRAM
The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

Timing:
Prior to site/operational work commencing

349(b) Pre Start Meeting
Arrange with Development Assessment for a Pre Start meeting.

Timing:
Prior to site/operational work commencing

349(c) Construct Approved Works
Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

Timing:
Prior to acceptance of works on maintenance

349(d) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

Timing:
Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

349(e) On Maintenance Period
Provide 2 year maintenance to the landscape works and 5 year maintenance to the rehabilitation works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on-maintenance inspection and those arising during the on maintenance period.

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### Timing:

**2 year maintenance to the landscape works and 5 years to the rehabilitation works** from acceptance of on maintenance period

#### 349(f) Off Maintenance Inspection

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:**

On completion of the maintenance period

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<table>
<thead>
<tr>
<th>350</th>
<th>Provide Street Tree(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit to Asset Services and receive approval for a Street Tree Plan that provides details of street tree planting. Provide trees to all street frontages at spacings complying with the relevant Brisbane Planning Scheme Codes/Policies, or a minimum of one (1) tree per additional allotment frontage, whichever is the greater.</td>
<td></td>
</tr>
</tbody>
</table>

#### 350(a) Implement Approved Plan

Install new street tree(s) in accordance with the approved plan. Contact Asset Services to arrange an On Maintenance inspection and obtain written confirmation that the street tree(s) have been planted in accordance with the approved Street Tree Plan.

#### 350(b) Maintain Tree(s)

Maintain street trees for a period of 12 months after planting. At the end of the 12 month maintenance period contact Asset Services to arrange an Off Maintenance inspection.

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<table>
<thead>
<tr>
<th>351(a) Submit Detailed Plan</th>
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</thead>
<tbody>
<tr>
<td>Submit to the Development Assessment and receive approval for a detailed Landscape Plan for works in the road reserve. The plan is to be prepared at a scale of 1:100 by a suitably qualified and experienced Landscape Architect, and must comply with the relevant Brisbane Planning Scheme Code/Policy. The plan must include the following:</td>
</tr>
<tr>
<td><strong>WORKS</strong></td>
</tr>
<tr>
<td>- The extent of proposed soft and hard landscape within proposed Council land</td>
</tr>
<tr>
<td>- Location and description of fencing, retaining walls, entry statements, bollards, etc.</td>
</tr>
<tr>
<td>- Existing and proposed finished levels to external works particularly in critical areas (eg. top and toe of retaining walls and steps) -</td>
</tr>
<tr>
<td>Description/details of critical design elements where applicable (eg. Proposed surface treatments, stabilisation of batters, water features, etc) -</td>
</tr>
<tr>
<td>- Landscape treatments to storm water devices, revegetated areas, buffers, roundabouts, swales etc. -</td>
</tr>
<tr>
<td>- Basic specification notes on plan for all proposed landscape works</td>
</tr>
<tr>
<td>- RPEQ certified drawings for structural work where required</td>
</tr>
<tr>
<td><strong>PLANTING</strong></td>
</tr>
<tr>
<td>- A planting schedule listing proposed plants by botanical names, quantities, pot size, height, spread and calliper at time of planting</td>
</tr>
</tbody>
</table>

#### 351(b) Implement the Approved Plan

Carry out the works in the approved detailed Landscape Plan.

**Timing:** Prior to building work above ground level commencing (MCU), or prior to operational work commencing (ROL)

#### 351(c) On Maintenance Inspection

Contact Development Assessment to arrange an On Maintenance inspection. The following information is to be provided to Development Assessment prior to the onmaintenance inspection:

- certification by a registered Professional Engineer (with demonstrated structural experience) for all new structures requiring construction certification |
| - evidence of Public Liability Insurance. |

**Timing:** Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL)

#### 351(d) Maintenance Period

Provide 12 months' maintenance to the works from the time the works are accepted On-Maintenance by Council. Maintain the landscape in accordance with an approved maintenance program and rectify all defects identified at the On-Maintenance inspection and those arising during the maintenance period. Lodge a bond for the maintenance period. The bond is to be calculated in accordance with the relevant Brisbane Planning Scheme Codes/Policies. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

**Timing:** From acceptance of On Maintenance period

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<table>
<thead>
<tr>
<th>351(e) Off Maintenance Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>On completion of the maintenance period contact Development Assessment, to arrange an Off Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.</td>
</tr>
</tbody>
</table>

**Timing:** On completion of the maintenance period
Engineering

<table>
<thead>
<tr>
<th>352</th>
<th>Filling and Excavation</th>
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</thead>
</table>
| All proposed earthworks are to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the following requirements. For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

352(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ-Civil). The Earthworks Plan should include the following:

- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Preservation of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary; Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, *Guidelines on Earthworks for Commercial and Residential Developments*.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

352(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

352(c) Implement Endorsed Plan
Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

Comment
We seek the following amendments to the wording of this condition to reflect the performance based design solutions proposed in the engineering services report submitted as part of the development application. During assessment of the application Council confirmed their support for performance based design solutions for construction, where the standard Council codes and design standards could not be achieved. It is considered that the amended wording reflects this position and appropriately references the performance based outcomes that have been discussed and resolved with Council.

Proposed Condition
Filling and Excavation
All proposed earthworks are to be carried out generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies where possible and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

352(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, 'Civil Engineering Services Report B14159.CER01.CUN.jm (Revisions D)' by Brown Consulting QLD dated 9th August 2014 checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ- Civil).

The Earthworks Plan should include the following:

- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, *Guidelines on Earthworks for Commercial and Residential Developments*.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation...
has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

352(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

352(c) Implement Endorsed Plan
Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

353 Construction Management Plan
Prepare a Construction Management Plan for the subject site in accordance with the following requirements.

Note. This condition is imposed when construction activities need to be limited to manage the impact on the surrounding area. This condition is intended to apply throughout the period of site preparation to the completion of the development.

353(a) Construction Management Plan - For Endorsement
Submit to Development Assessment for endorsement, a Construction Management Plan for the demolition, excavation and construction phases of the approved development. Separate Construction Management Plans may be appropriate for the individual components. The Construction Management Plan is to be in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Workplace Health and Safety Legislation requirements, Environmental Protection Act, the requirements of any Concurrence Agency and any other relevant legislative requirements. The Construction Management Plan is to provide the following details and address impacts, where applicable:

- Provision for pedestrian management including alternative pedestrian routes, past or around the site;
- Location of and impacts on any Council or other authority's assets on and external to the site. Council assets include water, sewer, stormwater, street trees and kerb side allocation signs and line marking such as bus stops, loading zones and parking meters and/or ticket dispensers. Details of street trees are to include location, species, trunk and canopy size;
- Temporary vehicular access points and frequency of use;
- Existing and proposed kerb-side allocation signs and line marking (such as bus stops, loading zones and parking meters and or ticket dispensers);
- Provision for loading and unloading materials including the location of any remote loading sites;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- How materials are to be loaded/unloaded and potential impacts on existing street trees;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- Location of proposed external hoardings and gantries;
- Employee and visitor parking areas;
- Anticipated staging, programming;
- Provision for fire exit routes for other uses on the subject or adjoining sites;
- Details that identify and define phases of construction considered necessary to be conducted out of normal business hours (where normal hours are defined as Monday to Saturday between 6:30am and 6:30pm excluding public holidays).

Notes.
- Approval for footpath closures and/or temporary vehicle access will only be considered where it can be demonstrated that no reasonable alternative can be provided due to site constraints and that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are not compromised.
- Proposed arrangements utilising any part of the road reserve for construction related activities, for example, on street work zones, overhead gantries, hoardings or pedestrian diversions, are subject to separate application fees and rental fees.
- The Construction Management Plan may require modification, at Council's discretion, to reflect changes in relevant legislation and industry best practice prevailing at the time of the permit application and throughout the construction program.
- Endorsement of the Construction Management Plan does not allow the carrying out of specific work activities for any phase of construction outside of normal hours.

353(b) Construction Management Plan - Pre-start Meeting
Arrange a pre-start meeting with the Development Assessment.

353(c) Construction Management Plan - Works in Road
Obtain relevant approvals to carry out any works within the road reserve required by the approved Construction Management Plan:
- Temporary lane closures;
- Restricted work zones (subject to relaxation of clearway hours and resolution of alternate kerb side allocation including bus zones); Overcoming clearway restrictions;
- Gantry erection.

Notes.
- Applications will be assessed on the basis of road and footpath network operating conditions prevailing at the time. Council will consider impacts of other construction works on events that occur during the life of the permit.
- All fees are to be paid in full prior to any permit being granted by Council. Council may revoke any permits at any time for non-compliance with requirements or if it considers that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are likely to be compromised during the construction project.

353(d) Construction Management Plan - Plans on Site
Legible copies of the Construction Management Plan and current permits are to be kept on site and be made available on request at all times during construction.

353(e) Construction Management Plan - Out of Hours Works to be Performed
Notify Development Assessment for any work activity identified broadly in the endorsed Construction Management Plan to be conducted out of normal business hours 6:30am and 6:30pm Monday to Saturday.
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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<tbody>
<tr>
<td>354(a)</td>
<td>Prepare ESC Plan and Program</td>
</tr>
<tr>
<td>354(b)</td>
<td>Implement Certified ESC Plan and Program</td>
</tr>
<tr>
<td>355(a)</td>
<td>As Constructed Drawings</td>
</tr>
</tbody>
</table>

### 354 On-site Erosion (high risk)

**Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times**

**Timing:** While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

#### 354(a) Prepare ESC Plan and Program

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC. Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

**Timing:** Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

#### 354(b) Implement Certified ESC Plan and Program

Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion. The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:** While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

#### Comment

It is considered unnecessary to require sediment and erosion control measures to certified by both RPEQ and CPESC, as such we have amended the condition to reflect the most appropriate certified engineer to sign off on these aspects of the development. By including a requirement for double certification only adds time delays and costs that are considered unreasonable.

Additionally, it is considered a further time delay to require material to be lodged at least 10 days prior to a pre-start meeting on site. All material is in accordance with the OPW approval and therefore has been cited by officers previously. Provided all material is provided prior to the pre-start meeting so all parties have correct versions is considered sufficient. The wording of the condition has been amended accordingly.

### Proposed Condition

#### On-site Erosion (high risk)

**Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times**

**Timing:** While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

#### 115(a) Prepare ESC Plan and Program

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.

Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

**Timing:** Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

#### 115(b) Implement Certified ESC Plan and Program

Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:** While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

### 355 Protect Existing Infrastructure

Where there is existing infrastructure in the vicinity of the proposed work, then the new work must not damage or compromise the working ability of the existing infrastructure. Should it be required to provide alterations to public utility mains, existing mains, services or installations, then the developer is required to meet the costs of the alteration/s, which is to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

#### 355(a) As Constructed Drawings

Submit to Development Assessment “As Constructed” drawings including an asset register, showing all new and/or rectification works required by this condition. These works must be certified by a Registered Professional Engineer of Queensland-Civil that they are in accordance with the relevant Brisbane Planning Scheme Codes/Policies and any other relevant infrastructure requirements.

### 356 Waterway Corridor

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Materials, equipment or structures (including but not limited to material stockpiles, sheds, concrete areas, landscaping materials, etc.) of any description must not be located within the waterway corridor unless specifically shown on the approved drawings.

357. **Dedicate As Road - Non Trunk**

Dedicate as road the following requirements:

- i. The areas shown as new roads on the approved drawings and documents;
- ii. Areas, where required, to provide for external works in association with shared pedestrian access;
- iii. All corner truncations as six (6) metre by six (6) metre by three (3) equal chord truncations; and
- iv. A 0.60 metres dedication to provide for fire management access as shown in the approved plans.

**Note:** This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

358. **Provide Certified Site Survey Levels**

Submit to Development Assessment, “As Constructed” plans approved by a Registered Surveyor (in accordance with the relevant Brisbane Planning Scheme Codes/Policies) showing finished surface level information over the completed development. The survey information is required to show surface levels and site contours at 1 metre intervals. All levels are to be shown as Reduced Levels to the "Australian Height Datum" (AHD).

359. **Remove Improvements & Obstructions From Truncation and Dedication**

Remove all improvements (fences, gates, letter boxes, garden beds and plots and other constructed items etc.) and obstructions (existing earth banks, vegetation etc.) from the area of the corner truncation(s) and/or area of dedicated road and reinstate the area as footway in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Note:** The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service, utility or asset owner will be required. Council permission is required if street trees, stormwater gullies/drains, water or sewer and swales are affected.

### 360 Retaining Walls

Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

- i. All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.
- ii. All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.
- iii. Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall.
- iv. Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.
- v. Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This set back may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.
- vi. Retaining walls that retain fill and are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall unless an alternative has been approved by Council.
- vii. Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.
- viii. Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.
- ix Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

**360(a) Certification of Retaining Walls**

For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

**Comment**

The proposal plans that have been approved by Council do not nominate the location of anticipated guard rails on the top of retaining walls. In some areas having a minimum 500mm setback for a guard rail may negatively impact on the design outcome. As such we have sought changes to the wording of this condition to provide sufficient flexibility for alternative design solutions to be considered in order to appropriately respond to the uniqueness of this site.

Additionally amendments to the wording of this condition area sought in relation to intra-block retaining walls. In order to limit the extent of dead-space between allotments it is sought to increase the maximum height of a retaining wall to 3m (as has been discussed with Council) and limit the stepping requirements to one third of the height, rather than the conditioned half the height. It is considered that this will be a better design outcome and solution in the instances where retaining walls greater than 1.5m are required. The amendments to the condition are provided below.

**Proposed Condition**

**Retaining Walls**

Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

1. (i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.
2. (ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.
3. (iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall **unless otherwise approved by Council**.
4. (iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of **half one third** of the height of the retaining wall, **in accordance with the Subdivision and Development Guidelines** to minimise visual impact between the blocks, or otherwise as approved by Council.
5. (v) Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.
6. (vi) Retaining walls that retain fill and are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of **half one third** of the height of the retaining wall **unless an alternative has been approved by Council**.
364 Flooding & Stormwater Detention

Construct the Stage 1 South stormwater detention area in accordance with the approved Flood Investigation report (Issue B) prepared by Brown Consulting QLD and dated 14th October 2014, ensuring:

i) culvert crossings of waterways utilise reinforced concrete box culverts, arch culverts or bridges in accordance with Council’s Natural Channel Design Guidelines,

ii) culverts incorporate debris deflector headwalls to minimise blockages and incorporate scour control at inlets and outlets,

iii) roads on embankments of stormwater detention areas are designed to be safe for a minimum 500 year ARI flow,

iv) stormwater detention areas are designed to reduce access to the public by these areas and incorporate (where required) appropriate fencing, batter grades, depth markers and flood warning signs to ensure safety of the public.

Note: this condition is imposed under Section 665 of the Sustainable Planning Act 2009.

364(a) Submit Flood Study

Submit and obtain endorsement from Development Assessment for an updated Flood Study prepared and certified by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies, QUDM and Australian Rainfall and Runoff.

Timing: prior to site/operational/building work commencing.

364(b) Submit Drawings for Endorsement

Submit and obtain endorsement from Development Assessment, engineering drawings for the Stage 1 North detention area and Stage 1 South waterway crossing (as nominated in the approved Flood Investigation report (Issue B) by Brown Consulting QLD and dated 14th October 2014) prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing.

364(c) Implement Approved Drawings

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted “on maintenance” and “off maintenance” as a Council asset, by Development Assessment.

Timing: Prior to On-Maintenance Inspection.

364(d) Submit “As Constructed” Plans

Submit “As Constructed” plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing: Prior to On Maintenance Inspection.

364(e) On Maintenance Acceptance

Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the relevant Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies

Codes/Policies

360(a) Certification of Retaining Walls

For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

361 Granting Easements

Grant the following easements:

i. Easements for underground drainage, overland flow and access purposes as may be required, in favour of Brisbane City Council.

ii. Easements over that part of land within the proposed Waterway Corridors affected by the 100 year Average Recurrence Interval (ARI) flooding, in favour of Brisbane City Council.

iii. Reciprocal access easement as may be required, where applicable, over the access strips for the rear lots.

Note: This condition is imposed to provide access, maintenance of services and to protect drainage paths if required. Easements in favour of the Brisbane City Council are required to have the necessary easement documentation prepared (free of costs and compensation to Council) by the Brisbane City Council. Easements not in favour of the Brisbane City Council are required to have the necessary documentation prepared by the applicant’s private solicitors. Easements are to be shown on a Survey Plan and lodged with the Plan Sealing Unit. Enquiries regarding any legal documentation can be directed to the Plan Sealing Unit, Development Assessment (ph: 3403 8888).

362 Service Crossings of Waterways

All service crossings of creek/waterways are to be located below ground level or attached to an approved crossing structure (eg road crossing) where located within the 100 year ARI flooding extent. This is to ensure these crossings do not impose floodwaters or create scour of the creek/waterway and to protect the service against damage by flood debris.

363 Minimum Floor or Pad Levels

Design and construct all proposed pad levels and roads to have the appropriate freeboard in accordance with Brisbane Planning Scheme Codes/Policies to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI Creek/waterway flood event, whichever is the higher flood level. Flood immunity requirements for other development (including relevant infrastructure, floor levels, parks, substations and ancillary structures) is to meet the requirements of Brisbane Planning Scheme Codes/Policies. (Note: flooding within all Category 1, 2 and 3 waterways and Cedar Creek is defined as Creek/waterway flooding for the purpose of this condition).

363(a) Certification

Provide certification and/or As-Constructed plans from a Registered Surveyor that confirm the development complies with the requirements of this condition.

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Construct the Stage 1 North Detention area and Stage 1 South waterway crossing in accordance with the approved Flood Investigation report (Issue B) prepared by Brown Consulting QLD and dated 14th October 2014, ensuring:

1. Culvert crossings of waterways utilise reinforced concrete box culverts, arch culverts or bridges in accordance with Council's Natural Channel Design Guidelines,
2. Culverts incorporate debris deflector headwalls to minimise blockages and incorporate scour control at inlets and outlets,
3. Roads on embankments of stormwater detention areas are designed to be safe for a minimum 500 year ARI flow,
4. Stormwater detention areas are designed to reduce access by the public to these areas and incorporate (where required) appropriate fencing, barrier grades, depth markers and flood warning signs to ensure safety of the public.

**Timing:**
- For construction of the Stage 1 North Stormwater Detention Area prior to Council's notation of the plan of subdivision (ROL) for Stage 1A, 1B or 1C whichever is the earliest; and
- For construction of the Stage 1 South waterway crossing prior to Council's notation of the plan of subdivision (ROL) Stage 1A.

**Note:**
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

### 364(a) Submit Flood Study

Submit and obtain endorsement from Development Assessment for an updated Flood Study prepared and certified by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies, QUDM and Australian Rainfall and Runoff. The flood study is to be specific to Stage 1 and Stage 2 local flooding within the waterways and the Stage 1 North and Stage 1 South stormwater detention areas (as noted within the approved Flood Investigation by Brown Consulting QLD) and incorporate design earthworks, details for all detention basin outlets and provide a severe storm analysis as per QUDM requirements.

**Timing:**
- Prior to site/operational/building work commencing.

### 364(b) Submit Drawings for Endorsement

Submit and obtain endorsement from Development Assessment, engineering drawings for the Stage 1 North detention area and Stage 1 South waterway crossing (as nominated in the approved Flood Investigation report (Issue B) by Brown Consulting QLD and dated 14th October 2014) prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
- Prior to site/operational/building work commencing.

### 364(c) Implement Approved Drawings

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

**Timing:**
- Prior to On-Maintenance Inspection.

### 364(d) Submit As Constructed Plans

Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**
- Prior to On Maintenance Inspection.

### 364(e) On Maintenance Acceptance

Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works at the time of Operational Works assessment.
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies.

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- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

**Timing:**
- Prior to On-Maintenance Acceptance.
364(g) Geotechnical Certification
Submit to Development Assessment a geotechnical report with testing, recommendations and certification by a Registered Professional Engineer of Queensland (Geotechnical) that supports the design and construction of the Stage 1 North and South stormwater detention area embankments and road crossings. The geotechnical report is to certify that the detention basin embankments have been suitably designed to safely manage expected hydrostatic and hydrodynamic loads associated with ponding of stormwater behind the embankments to prevent failure (including piping failures). Timing:
Prior to site/operational/building work commencing.

365 Stormwater Outlets in Waterways
Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline "Stormwater Outlets in Parks and Waterways 2003". Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings. No stormwater is to be discharged into Category 2 waterways with the exception of low flow outlets from stormwater quality improvement devices or otherwise approved by Council.

Comment
We seek to amend this condition to remove the restrictions relating to discharging stormwater into the Category 2 areas. The major event will discharge into this area, which is unavoidable, and has been discussed throughout the assessment process. The amended condition wording is provided below.

Proposed Condition
Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline "Stormwater Outlets in Parks and Waterways 2003". Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings. No stormwater is to be discharged into Category 2 waterways with the exception of low flow outlets from stormwater quality improvement devices or otherwise approved by Council.

366 Stormwater - Hydraulic Report
Construct the development in accordance with the approved concept Site Based Stormwater Management Plan prepared by Brown Consulting dated 14th October 2014.
366(a) Certification
Provide certification from a Registered Professional Engineer Queensland that the development has been constructed in accordance with the approved hydraulic report.

367 Upslope Catchment Diversions
All retaining structures near or at the boundary with Lot 904 (SP230311) are to provide upslope catchment diversions designed to capture a minimum 10 year ARI flow off the external upslope catchment. This runoff is to be conveyed to a lawful point of discharge, being drainage within the new road or drainage reserve. All diversion drains are to be secured by an easement and located behind the top of wall where retaining cut, and in front of bottom of wall where retaining fill and located entirely within the development.

368 Construct Footpath Non-Trunk
Construct a 1.2 metre wide footpath along one side of the 16 metres wide neighbourhood access road, and the connecting footpath along Road 11 to the adjacent development, in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Notes,
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.
368(a) Submit As Constructed Plans
Submit to Development Assessment "As Constructed" plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with relevant Brisbane Planning Scheme Codes/Policies.

Timing:
Upon completion of the work.

369 Refuse Collection - Kerb Side (external road or internal private road)
Refuse and recycling bins for the proposed development are to be collected from the kerb side unless alternative refuse collection arrangements are made with Brisbane City Council\Waste Services. Bin collection pads are to be constructed, for purposes of storing the bins on collection days, as may be required for the rear lots. The pads are to be located behind the kerbs, alongside the rear access pavement, measuring 2.0m x 0.8m (catering for 1 general and 1 recycling bin) for each dwelling.

370 Repair Damage To Kerb, Footpath Or Road
Repair any damage to existing kerb and channel, footpath or roadway (including removal of concrete slurry from footways, roads, kerb and channel and stormwater gullies and drainlines) and re-instatement existing traffic signs and pavement markings that have been removed or damaged during any works carried out in association with the approved development.

371 Works for Transport Infrastructure - Non-Trunk Internal Roadworks
Provide the following Roadworks, Stormwater Drainage and any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, and the following requirements.
(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 50 km/hr maximum);
(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 50 km/hr maximum);

*Note: The 16 metres wide Neighbourhood Access Road is to be extended to Stage 2C up to Lot 255.*

(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area. A 6.0 metres wide pavement of minimum Type A standard for the provision of a fire management access and maintenance as shown in the approved plans.

Notes:
Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series).

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

### 371(a) Submit Functional Layout Drawings
Submit functional layout plans showing the extent of all proposed Roadworks.

**Timing:**
Prior to site/operational/building work commencing

**Note:**
Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

### 371(b) Submit Roads and Drainage Plans
Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
Prior to site/operational/building work commencing

### 371(c) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the *Queensland Manual of Uniform Traffic Control Devices*, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
Prior to site/operational/building work commencing

### 371(d) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.

**Timing:**
Prior to On-Maintenance Inspection

### 371(e) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On-Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**
Prior to On-Maintenance Inspection

### 371(f) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.

**Timing:**
Prior to On-Maintenance Acceptance

### 371(g) Off-Maintenance Acceptance
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.

**Timing:**
On completion of the maintenance period
Follows in point g).

Condition 371(f) has also been amended to remove the last bullet point as it is considered that this is covered by the off-maintenance condition that follows in point g).

Proposed Condition

Provide the following Roadworks, Stormwater Drainage, and any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, and the following requirements:

(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum);

(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 450 km/hr maximum with provision as an interim bus route, as may be required, for bus access);

Notes:

Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series) or as otherwise approved by Council.

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

371(a) Submit Functional Layout Drawings

Submit functional layout plans showing the extent of all proposed Roadworks as part of the Operational Works application.

Timing:

Prior to site/operational/building work commencing

Note:

Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

371(b) Submit Roads and Drainage Plans

Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings or as otherwise approved by Council, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:

Prior to site/operational/building work commencing

371(c) Submit Signs and Pavement Plans

Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:

Prior to site/operational/building work commencing

371(d) Implement Endorsed Drawings

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off- maintenance" as a Council asset, by Development Assessment.

Timing:

Prior to On-Maintenance Inspection

371(e) Submit "As Constructed" Plans

Submit "As Constructed" plans including an asset register and a pre-On- Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing:

Prior to On-Maintenance Inspection

371(f) On Maintenance Acceptance

Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
All Bioretention basins are to:
- provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level,
- design all outlet pits for a minimum 2 year ARI flow without overtopping spillways, and the spillway designed to safely convey the 50 year ARI peak flow,
- ensure the basin (including embankments and retaining walls) is located outside of the 10 year ARI flood extent within any waterway,
- provide scour control and tail-out channels in accordance with Councils Natural Channel Design Guidelines.

Proposed Condition
Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrently with the engineering drawings.

Timing: Prior to site/operational/building work commencing

Comment
The condition seeks the provision of gross pollutant traps (GPTs) at all stormwater inlets from roads. It is considered unreasonable to require this, and it does not accord with the proposed stormwater management strategy. There are substantial construction and maintenance cost implications with an increased number of GPTs. The bullet point requiring the inclusion of GPTs has been deleted as per below.

Proposing an alternative wording to the above, for the condition to read:

Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design). The design must provide for safe egress into and out of the treatment facility. All Bioretention basins are to:
- provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level,
- design all outlet pits for a minimum 2 year ARI flow without overtopping spillways, and the spillway designed to safely convey the 50 year ARI peak flow,
- ensure the basin (including embankments and retaining walls) is located outside of the 10 year ARI flood extent within any waterway,
- provide scour control and tail-out channels in accordance with Councils Natural Channel Design Guidelines.

372(a) Bioretention Basin Landscaping
Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrently with the engineering drawings.

Timing: Prior to site/operational/building work commencing
### 372(b) Implement Approved Drawings
Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.

**Timing:**
Prior to On-Maintenance Inspection

### 372(c) On-Maintenance Inspection
Contact Development Assessment to arrange an On-Maintenance inspection.

**Timing:**
Prior to On-Maintenance Inspection

### 372(d) Maintenance Period
Provide the following in relation to the maintenance period:

- The maintenance period will be **24 months**, followed by a **12 month establishment period** for planting upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment. The maintenance period ends when the works are accepted Off-Maintenance by Development Assessment.

- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.

- Submit “As Constructed” plans including an asset register, certified by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the approved plans.

**Timing:**
From acceptance of On-Maintenance period

### 372(e) Off-Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:**
On completion of the maintenance period.

### 373 Works for Stormwater Infrastructure - Non-Trunk
Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

- Runoff from the site and external catchments is to be managed in accordance with approved engineering plans to ensure there will be no adverse impacts on neighbouring properties.
- All allotments and roads are to be designed and constructed to have the appropriate freeboard to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek/waterway flood event, whichever is the higher flood level.
- A satisfactory lawful point of discharge has been provided via discharge to Council owned land (drainage reserve, road reserve) or stormwater easement designed to accommodate developed flows.

Notes:
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

### 373(a) Submit Drawings for Endorsement
Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:**
Prior to site/operational/building work commencing

### 373(b) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted “on maintenance” and “off maintenance” as a Council asset, by Development Assessment.

**Timing:**
Prior to On-Maintenance Inspection

### 373(c) Submit As Constructed Plans
Submit “As Constructed” plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:**
Prior to On Maintenance Inspection

### 373(d) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

**Timing:**
Prior to On-Maintenance Acceptance

### 373(e) Off Maintenance Inspection
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

**Timing:**
On completion of the maintenance period
374  **Ponding of stormwater**

Adjoining properties and roads are to be protected from ponding or nuisance from stormwater as a result of the works. Ensure the stormwater runoff from the site does not adversely impact on flooding or drainage (peak discharge and duration up to the 100 year Average Recurrence Interval) of properties that are upstream, downstream or adjacent to the site.

**Notes**
- If remedial works are required that involve drainage, drawings are to be submitted and approval obtained from Development Assessment, to provide a means to rectify the site drainage.
- This condition is imposed to ensure that the developer is aware that they are responsible for all remedial works required as a result of any site works and, that they must protect neighbouring properties and roads from ponding and nuisance water from the proposed development.

375  **Public Lighting**

Lodge street lighting design drawings showing the proposed public lighting system in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and obtain approval from the City Lighting, Asset Services.

**375(a) Agreement with Supplier**

Enter into an agreement with an electricity supplier and provide a public lighting system in accordance with the above approved lighting design plans.

376  **Service Conduits and Mains**

Supply and install all service conduits and meet the cost of any alterations to public utility mains, existing mains, services or installations required in connection with the approved development in accordance with the relevant Brisbane Planning Scheme Codes/Policies. This includes:

- the provision of all services and/or conduits along the full length of any rear allotment access or access easement.
- the relocation of any fire hydrant and/or valves from the development’s vehicular footway crossings if applicable.
- the retention and/or relocation of any existing foul water lines that currently exist within the site.

**Note.** Applicants should liaise with the appropriate service authorities. Typical underground services and/or conduits to be constructed include power, water, telecommunications, sewer, stormwater and gas if applicable.

**376(a) As Constructed Drawings**

Submit to Development Assessment “As Constructed” drawings including an asset register, approved by a Registered Professional Engineer Queensland that are in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and any other relevant infrastructure requirements, showing the works required by this condition.

377  **Conduit for Brisbane City Council**

Provide a single underground conduit (100mm diameter UPVC class PN9) in favour of Brisbane City Council on at least one side of all Neighbourhood Access Roads (Bus Route only), Industrial Access Roads and Major Roads in the Council Road Hierarchy, in accordance with the following:

- The conduit must be laid in the telecommunication alignment of the footpath, on the kerb side of the Telecommunication Carrier conduit or in an agreed shared trench arrangement with the Telecommunication Carrier and other Utilities as may be relevant, subject to the approval of Development Assessment.
- The conduit must bypass the Telecommunication Carrier pits.
- Pits (minimum size, Type 4 as per BCC Drawing UMS 600/031) with lids (as per Drawing UMS 600/030 - but Class B instead of Class C) must be installed at the head ends of the conduit, both sides of road crossings, at intersections and at other locations that may be specified by Council.
- The conduit must be plugged at each pit.
- The conduit must be located and installed in such a way that facilitates the installation of cable and additional pits in the future.

**377(a) Submit “As Constructed” Drawings**

Submit to Development Assessment, “As Constructed” drawings, including an asset register, approved by a Registered Professional Engineer Queensland, and in accordance with the requirements of this condition and the relevant Brisbane Planning Scheme Codes/Policies.

378  **Telecommunications**

Submit to Development Assessment, documentary evidence issued by a relevant telecommunication carrier to verify that the necessary underground telecommunication services have been supplied within and adjacent to the development.

379  **Provide Rear Lot Access**

Provide access to the rear lot in accordance with the following:

- Construct a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
- The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover.

**Comment**

It is considered more relevant and reasonable to require access to rear lots to be constructed in accordance with the Brisbane City Council standard drawings rather than specifying a construction standard in the condition. This allows for amendments to design standards over the life of the project.

**Proposed Condition**

Provide access to the rear lots in accordance with the following by constructing a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies. The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover. BCC Standard Drawing BSD-2021.

**Standard Advice**

380  **Concurrence Agency Conditions**

The Department of State Development Infrastructure and Planning as concurrence agency has imposed the conditions contained in the letter dated 2 December 2014.

381  **Construction Noise and Dust Emissions**
Pursuant to the Environmental Protection Act 1994, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emission are accordance with the requirements of the Act. The Environmental Protection Act 1994 prescribes that:

1. A person must not carry out building work in a way that makes an audible noise:
   a. on a business day or Saturday, before 6.30a.m. or after 6.30p.m.; or
   b. on any other day, at any time.

2. The reference in subsection (1) to a person carrying out building work:
   a. includes a person carrying out building work under an owner-builder permit; and
   b. otherwise does not include a person carrying out building work at premises used by the person only for residential purposes.

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**Advice Agency Condition**

Powerlink acting as an advice agency for the development has imposed conditions contained in the letter dated 18 July 2014.

**Water & Wastewater Services ï Concurrence Agency Requirements**

| 383 | Grant Easements |
|-----|-----------------
| Grant the following easement(s) for water supply or sewerage purposes. |
| (a) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities. |
| (b) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities. |
| **Timing:** |
| Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first. |
| **GUIDELINE** |
| This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure. |
| **PROOF OF FULFILMENT** |
| Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources. |
| **Comment** |
| It is considered that the timing impacts referenced in this condition may delay plan sealing. Delays may be experienced where live works are still being undertaken after plan sealing but prior to on-maintenance (through the bonding process). As such we seek the reference toPrior to the relevant Council signing the plan of subdivision to be removed from the timing, as suggested below. |
| **Proposed Condition** |
| **Grant Easements** |
| Grant the following easement(s) for water supply or sewerage purposes. |
| m) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities. |
| n) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities. |
| **Timing:** |
| Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first. |
| **GUIDELINE** |
| This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure. |
| **PROOF OF FULFILMENT** |
| Registration of the easement on the of survey and on the property title with the Department of Natural Resources. |

<table>
<thead>
<tr>
<th>384</th>
<th>Construct Waste Water Non-Trunk Infrastructure System</th>
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<tbody>
<tr>
<td>Construct a Sewerage Non-Trunk infrastructure system necessary to provide a sewerage connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:</td>
<td></td>
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<tr>
<td><strong>GUIDELINE</strong></td>
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</tr>
<tr>
<td>This condition has been imposed to ensure that sewerage infrastructure is in place to serve the development and that each lot has a sewerage property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.</td>
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<tr>
<td><strong>PROOF OF FULFILMENT</strong></td>
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<tr>
<td>Connection Certification from QUU</td>
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<tr>
<th>384(a) Wastewater Network Infrastructure (Non-trunk Infrastructure)</th>
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<tbody>
<tr>
<td>(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.</td>
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</tbody>
</table>
(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*.

(c) Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities wastewater network infrastructures.

(d) Transfer ownership of the wastewater reticulation system (nontrunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network and/or property service infrastructure. This includes:
   (i) where not required for existing or future development, removing existing wastewater network and/or property service infrastructure and sealing any connection(s) to remaining reticulation infrastructure;
   (ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
   (iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

384(b) Wastewater Property Service Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*.

(c) Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland Urban Utilities wastewater reticulation system.

(d) Each lot must have a separate wastewater property service connection which commands the whole of each lot.

(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.

(f) If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

(g) Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

(h) Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

(i) Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words *B* forer Connection 2 M.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

384(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

384(d) Wastewater Network and Property Service Infrastructure- Sizing

The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

384(e) Wastewater Infrastructure- Design and Construction Standards

(a) The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

384(f) Wastewater Network Infrastructure- CCTV Inspection

(a) Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.

(b) CCTV survey must be carried out in accordance with the WSA 05-2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.
### Proposed Condition

#### Point 384(b)(h) Delete. Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to meet with the current standards.

#### Point 384(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

#### Point 384(c) Wastewater Infrastructure- Design and Construction Standards

The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 385 Live Works for Water Supply and Wastewater

Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

(a) All work on or near live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.

(b) A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.

(c) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.

(d) All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.

(e) Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.

(f) All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

**Timing:**
Prior to and at the time of Live Works.

#### Comment

We seek amendments to this condition to provide certainty on when QUU must be notified about works within the vicinity of their live QUU infrastructure. It is considered that the definition of therein is not clear enough to determine when QUU will need to be notified of works. AS such we seek amendments to the condition as follows.

Additionally we have added further clarity to the timing, to provide certainty and direction for the engineers, both designing and assessing compliance.

#### Proposed Condition

Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

(kk) All work on or within 1 metre of live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.
Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

### 386(a) Design Approval- Major Works

(a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities. (b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

**Timing:**
Prior to the construction of water or wastewater infrastructure.

### 386(b) Pre-Construction Review - Major Works

(a) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

(b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).

(c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.

(d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

**Timing:**
Prior to the construction of water or wastewater infrastructure.

### 386(c) Construction Certification- Major Works

(a) Submit complete design plans and associated supporting information (Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities. (b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Certificate of Completion).

**Timing:**
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 386(d) End of Maintenance- Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

### 386(e) Works Inspections - Major Works

(a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:

(i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);

(ii) Pouring of thrust blocks;

(iii) Pressure testing of pipelines;

(iv) Disinfection of water mains; and

(v) Construction completion inspection.

(b) Queensland Urban Utilities may identify, at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.

(c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

(d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.

(e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

**Timing:**
Prior to and during construction of water or wastewater infrastructure.

### Comment

The condition requires the works to be inspected by and certified by a suitably qualified RPEQ, as such including these hold points would only add unnecessary time delays to the delivery of the project. The amendments sought to this condition seek to remove any additional hold points by QUU.

It is additionally requested that the timing sections of this condition are modified (as provided below) so that the timing refers to the compliance of work in accordance with the SEQ water and sewerage design and construction codes at the time of approval. This will avoid any potential issues with rework, redesign, and reconstruction resulting from updated standards after the time of approval. This is effectively to avoid any chance of retrospective changes being sought to work already completed.

The condition has been amended accordingly below.

### Proposed Condition

---
Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

386(a) Design Approval- Major Works

a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

Timing: Prior to the construction of water or wastewater infrastructure.

386(b) Pre-Construction Review - Major Works

a) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).

c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.

d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

Timing: Prior to the construction of water or wastewater infrastructure.

386(c) Construction Certification- Major Works

a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).

b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

Timing: Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

386(d) End of Maintenance- Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

Timing: At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

386(e) Works Inspections - Major Works

a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:

   (vi) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);

   (vii) Pouring of thrust blocks;

   (i) Pressure testing of pipelines;

   (ii) Disinfection of water mains; and

   (iii) Construction completion inspection.

b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points on the construction schedule, at which Queensland Urban Utilities shall be given the opportunity to inspect the works and other (non-Hold Point) works inspections.

c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.

e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

Timing: Prior to and during construction of water or wastewater infrastructure.

387 Construct Water Supply Non-Trunk Infrastructure System

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

GUIDELINE

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

PROOF OF FULFILMENT

Connection Certification from QUU

387(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
(d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

(e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:

(i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;

(ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;

(iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and

(iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

387(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.

(d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.

(e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.

(f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.

(g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.

(h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.

(i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development’s proposed vehicular footway crossings.

(j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.

(k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

387(c) Drinking Water Network Infrastructure and Property Service Infrastructure Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

387(d) Drinking Water Network Infrastructure and Property Service Infrastructure - Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:

Prior to the construction of network or property service infrastructure.

387(e) Drinking Water Infrastructure - Design and Construction Standards

(a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

387(f) Drinking Water Network Infrastructure - Water Quality Testing

(a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:

Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

387(g) Drinking Water Network Infrastructure - Pressure Testing

(a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority. The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).
<table>
<thead>
<tr>
<th>Timing: Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comment</strong></td>
</tr>
<tr>
<td>The condition has been amended below to more appropriately manage the timing of compliance in accordance with the SEQ water and sewerage design and construction codes, being the time of approval. This is requested to avoid any potential issues with rework, redesign and reconstruction resulting from updated standards after the time of approval.</td>
</tr>
<tr>
<td><strong>Proposed Condition</strong></td>
</tr>
<tr>
<td><strong>Construct Water Supply Non-Trunk Infrastructure System</strong></td>
</tr>
<tr>
<td>Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions at the time of approval:</td>
</tr>
</tbody>
</table>

**GUIDELINE**

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**

Connection Certification from QUU

**387(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)**

- This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
- Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
  - (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure on or within the development site;
  - (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
  - (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
  - (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**Timing:**

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced. Where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**387(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)**

- This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- Provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
- Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.

**Timing:**

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced. Where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**387(c) Drinking Water Network Infrastructure and Property Service Infrastructure - Layout, Design and Sizing**

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>387(d)</td>
<td>Drinking Water Network Infrastructure and Property Service Infrastructure-Sizing</td>
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<tr>
<td>387(e)</td>
<td>Drinking Water Infrastructure - Design and Construction Standards</td>
</tr>
<tr>
<td>387(f)</td>
<td>Drinking Water Network Infrastructure- Water Quality Testing</td>
</tr>
<tr>
<td>387(g)</td>
<td>Drinking Water Network Infrastructure - Pressure Testing</td>
</tr>
<tr>
<td>388(a)</td>
<td>Land Owner's Consent</td>
</tr>
<tr>
<td>388(b)</td>
<td>External Agency Approvals and other Authorisations</td>
</tr>
</tbody>
</table>

**Consent and Permits prior to Construction of Water and Wastewater Infrastructure**

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

- **388(a) Land Owner's Consent**
  - (a) Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
  - (b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

- **388(b) External Agency Approvals and other Authorisations**
  - The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

**Comment**

It is considered unreasonable to include references in conditions that relate to documents in Water Approvals that have not been issued to the applicant for consideration. As such we propose amendments to the condition as follows to provide greater certainty for the applicant on the implications of this condition on the delivery of the project.

**Proposed Condition**

**Consent and Permits prior to Construction of Water and Wastewater Infrastructure**

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

- **388(a) Land Owner's Consent**
  - (a) Owner's consent to undertake works on the private property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
  - (b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.
### Proposed Condition

#### Delete Land Dedication for Non-Trunk Water and Wastewater Infrastructure

**Purpose:** To dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

- **Land Dedication for Non-Trunk Infrastructure:**
  - This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
  - This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
  - Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.
  - The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**Comment:**
The applicant does not consider this condition to be relevant to this development. The condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and/or in accordance with the standards and guidelines prescribed.

It is on this basis that we seek the deletion of this condition in its entirety.

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### Temporary Works for Water and Wastewater Infrastructure

**Purpose:** To provide temporary water and wastewater infrastructure, if applicable, all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.

- Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.
- A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.
- Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

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### Terminating Infrastructure for Water and Wastewater

**Purpose:** To ensure water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner's consent.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**Comment:**
It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required. As such we seek deletion of this condition in its entirety.

**Proposed Condition**
### Delete Terminating Infrastructure for Water and Wastewater

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**Comment**

This condition is imposed to ensure compliance with the development conditions of approval. The copy of the conditions and drawings should be located in any site management office or with the site foreman. Any copies of conditions or drawings that are illegible shall be considered as non-compliant with this condition of approval.

### Maintenance Period for Water and Wastewater Infrastructure

(a) Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and maintenance schedule (lodged as part of the As Constructed Package), relevant engineering standards and sound engineering practice.

(b) The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.

(c) Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.

(d) Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.

(e) Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.

**Timing:**
Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

### Maintenance Bond

Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.

The Maintenance Bond must remain valid for the full term of the Maintenance Period.

The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

**Timing:**
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

### Payment of Fees and Charges

Pay fees and charges calculated in accordance with the Queensland Urban Utilities Water Netserv Plan.

**Timing:**
At the times specified in the Queensland Urban Utilities Water Netserv Plan.

### Permit to which these conditions apply

**DA SPA ROL Subdivision of land Stage 2B**

**General/Planning Requirements**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Requirement</th>
</tr>
</thead>
</table>
| 395   | Staging of Development  
Stage 2B cannot be plan sealed until all conditions relating to Stage 2A have been complied with.  
Timing: All conditions relating to the earlier stage have been complied with. |
| 396   | Approved Drawings & Documents  
A legible copy of the approved drawings and documents bearing “Council Approval” and the Development Approval Conditions package is to be available on site.  
Note. This condition is imposed to ensure compliance with the development conditions of approval. The copy of the conditions and drawings should be located in any site management office or with the site foreman. Any copies of conditions or drawings that are illegible shall be deemed to be non compliance with this condition of approval. |
| 397   | Carry Out The Approved Development  
Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s).  
Note. This development approval may include the location of fences, retaining walls and/or external walls of buildings on the boundary of a lot. This approval does not constitute permission to enter neighbouring properties to carry out the construction (including associated drainage and earthwork(s) or maintenance activities. Permission to enter neighbouring properties must be obtained from relevant property owners. |
| 398   | Complete All Operational Work  
Complete all operational work associated with this development approval, including work required by any of the conditions included in the Conditions Package. Such operational work is to be carried out generally in accordance with the approved drawing(s), and/or documents or, if requiring a further approval from the Council, in accordance with the relevant approval(s). |

NDN Application T A003905687 T 390 Levitt Road, Upper Kedron Qld 4055
Submit Vegetation Management Plan
Submit to Development Assessment and receive approval for a Vegetation Management Plan (VMP). The VMP is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation that includes at least the following information for the area identified on Concept Rehabilitation Plan amended in red 30/10/2014: This Rehabilitation Plan is to include all

- Description of proposed rehabilitation, including earthworks, restoration methods (revegetation and assisted regeneration where appropriate);
- Details of the proposed rehabilitation schedule, staging, including site preparation, planting and establishment; plant species names, stock size, quantities, locations; a maintenance program (5 years) for all rehabilitation works;
- Details of rehabilitation outcomes; performance monitoring and assessment (minimum 9 visits within the first 24 months every 4 T 6 weeks); survival thresholds (minimum 90% survival required); replacement planting triggers (minimum requirement to keep survival above 90% and replacement within 4 weeks of issue being identified); target minimum tree height and canopy cover to be achieved at the end of 5 year maintenance period;
- Stabilisation methods for all areas of exposed soil surface;
- Details of special habitat features to be provided for the enhancement/restoration of habitat values including: coarse woody debris (e.g. root balls; hollows; logs; branches) to be salvaged from clearing activities and reused; nest boxes (best industry practice). A minimum of 10 boxes per ha required to be installed in dedication corridors to achieve a hollow density of 32 hollows per ha. Additional nest boxes will be required in areas having a low natural hollow density. Consultation with an experienced fauna consultant is required to determine the location and type of next box required, and appropriate nest box density for each area of corridor to be dedicated; nest box installation and maintenance, monitoring and reporting will also be required over a 5 year maintenance period. Habitat features such as nest boxes are to be provided for each stage during preparation works for site rehabilitation.
- Specification notes on site preparation; plant quality assurance including local provenance; plant stock handling; planting methodology; mulching; threat management (including tree guarding) 600mm corflute with hardwood stake; watering as required to prevent plant stress);
- The location and extent of all site works including all proposed infrastructure and areas of earthworks;
- Details of all measures to protect and recover fauna during clearing operations, including: presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures.

Submit Rehabilitation Plan
Submit to Development Assessment and receive approval for a Rehabilitation Plan. The Rehabilitation Plan is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation that includes at least the following information for the area identified on Proposal Plan_Stage One Overall Canvey Road, Upper Kedron (Drawing No. CDW01_44C) as amended in red.

- The extent of the VMP is to include evaluation of all areas including, proposed road reserves, external works and development areas;
- The location and description of existing vegetation at the interface between the development footprint and the Category 1, 2, 3 and 4 Corridors required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, including species and botanical name plus the height and canopy spread;
- The location and extent of all site works including all proposed infrastructure and areas of earthworks;
- Detail design of civil works is to be cognisant of environmental values. Alternative solutions may be required in some instances, to protect significant vegetation (e.g. alternative service alignments, variations to batter slopes and tunnel boring);
- The location and description of all vegetation to be retained and that to be removed;
- Methods of physical identification of trees/vegetation to be retained;
- A description of all measures to be used to protect vegetation and habitat features to be retained during construction, including protective fencing;
- A description of all pruning and tree surgery (to AS 4373/96) to maintain health and stability of trees and reduce potential hazards for future residents;
- The location and extent of storage and stockpile areas for cleared vegetation and site mulch;
- A description of all methods to salvage and/or re-use cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works;
- Details of all measures to protect and recover fauna during clearing operations, including: presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures.

399(b) Implement Approved Plan
Implement and carry out the works in accordance with the approved VMP;
Timing: Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL), and then to be maintained

399(c) Certify Approved Works
Submit to Development Assessment certification that the approved VMP has been implemented;
Timing: Certification to be submitted upon completion of each phase of the approved VMP.
Establishment of as many flora species from all strata (tree, shrub, and ground layer) as commercially available; removal and management of all exotic flora species within the maintenance period; introduction of coarse woody debris and leaf litter from clearing site as appropriate. Alternative regional ecosystems may be appropriate for areas with landforms influenced by unnatural levels of soil moisture or altered landform.

Regional Ecosystems Technical Descriptions and Biocondition Benchmarks documentation will be used to guide planting density, flora species selection, flora species dominance and distribution. Planting densities higher than those recorded in Regional Ecosystem Technical Descriptions will be appropriate in more open areas to account for 10% mortality and to assist with the development of a robust canopy.

**400(c) Implement Approved Plan**
Carry out rehabilitation works in accordance with the approved Rehabilitation Plan.

**400(b) On Maintenance Inspection**
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.

**400(a) On Maintenance Period**
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period. Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

**401(a) Prior to Vegetation Clearing**
Clearing operations and other site works must not commence until the Fauna Spotter has certified that the site has been fully inspected and any necessary fauna protection measures or relocation procedures implemented. Submit to Development Assessment a Fauna Spotter Report to demonstrate compliance with this condition.

**401(b) Fauna Spotter on Site**
The fauna spotter is to be present on site during all clearing operations to monitor works and to respond to any situations that may arise as determined by Development Assessment, based on the findings of the fauna spotter’s pre-clearing certification report.

**401(c) Fauna in Work Area**
If any animals are identified in trees to be removed during clearing operations, work shall cease immediately on that tree. The Fauna Spotter must supervise the relocation of any identified animal prior to clearing operations recommencing.

**401(d) Certification**
Provide certification that works have been undertaken in accordance with this condition.

**401 Fauna Spotter**
A Fauna Spotter, qualified by the relevant Queensland State Government Authority, shall inspect the site to ensure identification of any wildlife (fauna) or habitat features (e.g. nests, tree hollows) prior to clearing.

**402 Natural Assets Local Law (NALL) - On Site**
Lodge and receive approval from Development Assessment, an application to Carry Out Works on Protected Vegetation on the site.

**403 Submit Wildlife Movement Solutions Plan**
Submit to Development Assessment and receive approval for a Wildlife Movement Solutions Plan (WMSP). The WMSP is to include an overall plan of all Wildlife Movement Solutions (WMS) planned for the development including the WMS identified on the Wildlife Movement Solutions Concept Plan amended in red on 31/10/2014. Detailed design drawings are required for each development stage with WMS infrastructure. Submit an overall WMSP and detailed WMSP and report for Stage 2B outlining wildlife movement solutions infrastructure in conjunction with operational work approvals. Obtain approval from the Delegate, Development Assessment for the approved report and plans. The detailed design for each structure is to be in the form of scaled plans and supporting documentation. Design options must be integrated with required exclusion fencing and include warning signage at crossing points. The detailed designs must also be generally in accordance with the Fauna Sensitive Road Design Manual - Volume 2: Preferred Practices developed by the Department of Mains Roads. The plans must include, but not be limited to, the following information:
- Description of the fauna exclusion/movement fences
- Location of warning signage at crossing points;
- Description hardwood ledges and other structures that must be installed inside the culverts.
- Description of location, dimensions and openness of the structure to enable wildlife to enter the structure;
- Description of the topography and vegetation type to be planted at entry points to the culverts. The vegetation must attract target species (wallabies, possums, koalas, echidnas, etc.) to the structure and provide food source and shelter. Clear and workable plans representing rehabilitation on the ground including details of the proposed rehabilitation schedule, staging, plant species, stock size, densities, quantities and locations;
- Description of proposed rehabilitation, including earthwork, methods and objectives;
- A detailed 5 year maintenance period and monitoring program is to be provided to maintain the vegetation at the entry points to the culvert.
403(a) Implement approved plan
Construction of the wildlife movement solutions and the road network is to occur in accordance with approved designs.
Timing: While site/operational/building work is occurring and then to be maintained

403(b) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.
Timing: Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL)

403(c) On Maintenance Period
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.
Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.
Timing: 5 years from acceptance of on maintenance period

403(d) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.
Timing: On completion of the maintenance period

404 Bushfire Protection Zone
Maintain the Bushfire Asset Protection Zones (APZ) indicated on Figure 3: Bushfire Risk Treatments, received 15/10/2014 and in accordance with an approved Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014; Exclusion of habitable buildings or any flammable structures from the area
- Maintenance of fuel load and vegetation structure; and
- Maintenance of access to APZ for fire fighting purposes
404(a) Survey and peg the BPZ
Survey and peg all boundaries of the Bushfire Asset Protection Zone (APZ)

405 Bushfire Management Covenant
Enter into a Covenant by Registration pursuant to Section 97A of the Land Title Act (1994) with Brisbane City Council as Covenantee. The Covenant is to be able to be immediately registered in the Department of Environment and Resource Management, and is to be in term satisfactory to the Manager, Brisbane City Legal Practice, to ensure management of bushfire risk within the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014.

Provide a survey plan immediately registrable with the Department of Natural Resources and Mines in accordance with the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014 at the same time as providing the covenant.

This Covenant must detail the responsibilities, liabilities, measures, remedies and intents as necessary to ensure the appropriate management of bushfire risk within the covenant area. The Covenant shall address the following issues:
- Appropriate management of bushfire risk in accordance with the approved Bushfire Management Plan in the Covenant area; including provision of building standards AS3959 Construction of buildings in bushfire-prone areas to specified Bushfire Attack Level (BAL) ratings.

Comment
Amendments to this condition are sought to clarify timing of covenants. The condition seeks covenants to be immediately registered in the Department of Environment and Resource Management. It is considered reasonable to require covenants to be placed on titles at time of registering titles with the relevant State Government body.
Additionally the first paragraph of the condition references the DERM when the relevant government department is Department of Natural Resources and Mines (DNRM).

Proposed Condition
Bushfire Management Covenant
Enter into a Covenant by Registration pursuant to Section 97A of the Land Title Act (1994) with Brisbane City Council as Covenantee. The Covenant is to be able to be immediately registered in the Department of Environment and Resource Management, Department of Natural Resources and Mines and is to be in term satisfactory to the Manager, Brisbane City Legal Practice, to ensure management of bushfire risk within the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014.

Provide a survey plan immediately registrable with the Department of Natural Resources and Mines in accordance with the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014 at the same time as providing the covenant.
This Covenant must detail the responsibilities, liabilities, measures, remedies and intents as necessary to ensure the appropriate management of bushfire risk within the covenant area. The Covenant shall address the following issues:

Appropriate management of bushfire risk in accordance with the approved Bushfire Management Plan in the Covenant area; including provision of building standards AS3959 Construction of buildings in bushfire-prone areas to specified Bushfire Attack Level (BAL) ratings.

406 Arboricultural Requirements
The following arboricultural requirements are to be performed to ensure the long-term health and safety of trees to be retained:

406(a) Site Works
In consultation with Development Assessment, the Arborist is to direct the civil works contractor in relation to any service installation activities utilising alternative technologies such as directional-boring or under-boring using vacuum excavation or air-spade. The Arborist must be a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture).

406(b) Certification
Submit to Development Assessment, certification from a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) that all necessary arboricultural works have been carried out in accordance with the requirements of all parts of this condition.

406(c) Vegetation Pruning
Any necessary pruning, tree surgery and other maintenance works to maintain health and stability of any trees to be retained, and to reduce potential hazards for future residents, is to be carried out in consultation with Development Assessment. All works must be performed by a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) in accordance with the Australian Standard 4373/96 for Pruning of Amenity Trees.

407 Land for Ecological and Waterway Corridors Infrastructure
Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27 February 2014, which forms the land depicted as Category 2 Corridor as shown on Approved Plan Proposal Plan_Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red).

With the exception of crossings approved by the Council the land is to be free of encumbrances. Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

Comment
We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced Infrastructure Agreement.

Proposed Condition
Land for Ecological and Waterway Corridors Infrastructure
Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan_Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red).

With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances. Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

408 Bushfire Management Plan
i) Implement and carry out the works in accordance with approved Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014;

ii) Submit certification to Development Assessment certifying that the approved Bushfire Management Plan has been implemented.

409 Stormwater Quality - Submit Management Plan
Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SB SMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010 and be generally in accordance with approved plan B14159.W-SK01 Concept Stormwater Quality Management Plan For Stage 1 & 2 by Brown Consulting QLD dated 14th October 2014. The SB SMP must be to include at source stormwater quality treatments (including WSUD treatments in street trees, buildouts or other speed control devices) in the streetscape of all areas within Stage 2A, 2B, and 2C consisting of street tree WSUD pits, and bioretention basins. WSUD devices in the road reserve are to be located to ensure no services are constructed through the device or filter material. Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap.

409(a) Implement Approved Plan
Implement and maintain the approved Site Based Stormwater Quality Management Plan.

409(b) Certification
Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.

Comment
The BCC has amended in red marksups on the concept stormwater management plan suggests that additional at source treatment devices, beyond those already incorporated into the stormwater strategy are necessary for the development. It is considered that this is unnecessary for Stage 1A, 1B and 1C, and therefore seek the removal of references relating to at source treatment for these stages.

The Stage 2 conditions seek to restrict constructing services through these devices, which is unnecessary as it forms part of the infrastructure of the development.

We additionally seek the removal of the references requiring Gross Pollutant Traps (GPTs) being required for all basins. The inclusion of these devices adds unnecessary expense and maintenance burden on Council stormwater infrastructure in locations that have been determined that GPTs are unnecessary.

This condition has been amended to reflect these points as provided below.

Proposed Condition
Stormwater Quality - Submit Management Plan
Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SBSMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010. The water quality treatment strategy is to be generally in accordance with recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.

Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap.

109(a) Implement Approved Plan
Implement and maintain the approved Site Based Stormwater Quality Management Plan.

109(b) Certification
Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.
| **410(b) Pre Start Meeting** | Arrange with Development Assessment for a Pre Start meeting.  
Timing: Prior to site/operational work commencing |
| **410(c) Construct Approved Works** | Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.  
Timing: Prior to acceptance of works on maintenance |
| **410(d) On Maintenance Inspection** | Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:  
- Ensure that the works are constructed to a standard acceptable to council;  
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and  
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.  
Timing: Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL) |
| **410(e) On Maintenance Period** | Provide 24 months' maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the time of inspection and those arising during the on maintenance period.  
Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.  
Timing: 24 months from acceptance of on maintenance period |
| **410(f) Off Maintenance Inspection** | On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.  
Timing: On completion of the maintenance period |

**Comment**
During the assessment of the application it was agreed with Council that the analysis of the 2 year, 5 year and 100 year floodlines was sufficient. As such, it is considered unnecessary to require further analysis against the 10, 20 year and 50 year floodlines, and have therefore deleted these from this condition. Furthermore, the agreement to undertake a 5 year maintenance period was understood to be in relation to the areas of the site being rehabilitated, to ensure the protection and longevity of these particular species. It is not considered appropriate for a 5 year maintenance period to be enforced on the balance open space and landscape works within the corridors. On this basis the condition has been amended below to reflect a 2 year maintenance period on landscaped areas and a 5 year period on rehabilitation areas only.

**Proposed Condition**
Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

**Submit Plan for Works in Corridor**
Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and generally in accordance with the approved drawings in Landscape Concept 1 Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK17 & The Landscape Management and Site Works Plan must document the following:

**EXISTING SITE CONDITIONS**
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

**SITE PREPARATION**
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

**NEW WORKS**
- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embellishments chosen from Council's standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

COSTING AND MAINTENANCE PROGRAM
The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

Timing:
Prior to site/operational work commencing

110(b) Pre Start Meeting
Arrange with Development Assessment for a Pre Start meeting.

Timing:
Prior to site/operational work commencing

110(c) Construct Approved Works
Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

Timing:
Prior to acceptance of works on maintenance

110(d) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

Timing:
Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL)

110(e) On Maintenance Period
Provide 2 year maintenance to the landscape works and 5 years' maintenance to the rehabilitation works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.
Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The maximum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing:
2 year maintenance to the landscape works and 5 years to the rehabilitation works from acceptance of on maintenance period

110(f) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing:
On completion of the maintenance period

411 Provide Street Tree(s)
Submit to Asset Services and receive approval for a Street Tree Plan that provides details of street tree planting. Provide trees to all street frontages at spacings complying with the relevant Brisbane Planning Scheme Codes/Policies, or a minimum of one (1) tree per additional allotment frontage, whichever is the greater.

411(a) Implement Approved Plan
Install new street tree(s) in accordance with the approved plan. Contact Asset Services to arrange an On Maintenance inspection and obtain written confirmation that the street tree(s) have been planted in accordance with the approved Street Tree Plan.

411(b) Maintain Tree(s)
Maintain street trees for a period of 12 months after planting. At the end of the 12 month maintenance period contact Asset Services to arrange an Off Maintenance inspection.

412 Landscape Works in Road Reserve
Provide Landscape Works to contribute to the amenity of the development.

412(a) Submit Detailed Plan
Submit to the Development Assessment and receive approval for a detailed Landscape Plan for works in the road reserve. The plan is to be prepared at a scale of 1:100 by a suitably qualified and experienced Landscape Architect, and must comply with the relevant Brisbane Planning Scheme Code/Policy. The plan must include the following:
- WORKS
- The extent of proposed soft and hard landscape within proposed Council land.
- Location and description of fencing, retaining walls, entry statements, bollards, etc.
- Existing and proposed finished levels to external works particularly in critical areas (eg. top and toe of retaining walls and steps).
- Description/descriptions of critical design elements where applicable (eg. Proposed surface treatments, stabilisation of butters, water features, etc).
- Landscapes to storm water devices, revegetated areas, buffers, roundabouts, swales etc.
- Basic specification notes on plan for all proposed landscape works.
- RPEQ certified drawings for structural work where required.

PLANTING
- A planting schedule listing proposed plants by botanical names, quantities, pot size, height, spread and calliper at time of planting.

COSTING AND MAINTENANCE PROGRAM
The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan; and
- Details of a 12 month Maintenance Plan for all proposed landscape works.

Note: This condition does not refer to Parks or Street Trees. A Street Tree Plan is to be sent to the Arboriculturist, Asset Services for approval.

Timing: Prior to building work above ground level commencing (MCU), or prior to operational work commencing (ROL)

412(d) Maintenance Period
Provide 12 months' maintenance to the works from the time the works are accepted On-Maintenance by Council. Maintain the landscape in accordance with an approved maintenance program and rectify all defects identified at the On-Maintenance inspection and those arising during the maintenance period. Lodge a bond for the maintenance period. The bond is to be calculated in accordance with the relevant Brisbane Planning Scheme Codes/Policies. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing: From acceptance of On Maintenance period

412(e) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing: On completion of the maintenance period.

413(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the following requirements. For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council's assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

413(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

413(c) Implement Endorsed Plan
Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

**Comment**
We seek the following amendments to the wording of this condition to reflect the performance based design solutions proposed in the engineering services report submitted as part of the development application. During assessment of the application Council confirmed their support for performance based design solutions for construction, where the standard Council codes and design standards could not be achieved. It is considered that the amended wording reflects this position and appropriately references the performance based outcomes that have been discussed and resolved with Council.

**Proposed Condition**

**Filling and Excavation**
All proposed earthworks are to be carried out generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies where possible and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council’s assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slippage failures.

**413(a) Submit Earthworks Plan**
Submit and obtain endorsement from Development Assessment an earthworks plan prepared generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, 'Civil Engineering Services Report B14159.CER01.AN.jrn (Revisions D)' by Brown Consulting QLD dated 9th August 2014 checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ- Civil).

The Earthworks Plan should include the following:

- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are clean as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Protection of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads;
- Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

**Note.** If the earthworks impact on the road reserve, the Developer must obtain applicable footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

**413(b) Suitable Fill Material**
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

**413(c) Implement Endorsed Plan**
Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

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<tr>
<th>414</th>
<th>Construction Management Plan</th>
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<tbody>
<tr>
<td>Prepare a Construction Management Plan for the subject site in accordance with the following requirements.</td>
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<tr>
<td>Note. This condition is imposed when construction activities need to be limited to manage the impact on the surrounding area. This condition is intended to apply throughout the period of site preparation to the completion of the development.</td>
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**414(a) Construction Management Plan - For Endorsement**
Submit to Development Assessment for endorsement, a Construction Management Plan for the demolition, excavation and construction phases of the approved development. Separate Construction Management Plans may be appropriate for the individual components. The Construction Management Plan is to be in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Workplace Health and Safety Legislation requirements, Environmental Protection Act, the requirements of any Concurrence Agency and any other relevant legislative requirements. The Construction Management Plan is to provide the following details and address impacts, where applicable:

- Provision for pedestrian management including alternative pedestrian routes, past or around the site;
- Location of and impacts on any Council or other authority’s assets on and external to the site. Council assets include water, sewer, stormwater, street trees and kerb side allocation signs and line marking such as bus stops, loading zones and parking meters and/or ticket dispensers. Details of street trees are to include location, species, trunk and canopy size;
- Temporary vehicular access points and frequency of use;
- Existing and proposed kerb-side allocation signs and line marking (such as bus stops, loading zones and parking meters and or ticket dispensers);
- Provision for loading and unloading materials including the location of any remote loading sites;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- How materials are to be loaded/unloaded and potential impacts on existing street trees;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- Location of proposed external hoardings and gantries;
- Employee and visitor parking areas;
- Anticipated staging, programming;
414(b) Construction Management Plan - Pre-start Meeting

Arrange a pre-start meeting with the Development Assessment.

414(c) Construction Management Plan - Works in Road

Obtain relevant approvals to carry out any works within the road reserve required by the approved Construction Management Plan:
- Temporary lane closures;
- Overcoming clearway restrictions;
- Gantry erection.

Notes:
- Applications will be assessed on the basis of road and footpath network operating conditions prevailing at the time. Council will consider impacts of other construction works or events that occur during the life of the permit.
- The Construction Management Plan may require modification, at Council’s discretion, to reflect changes in relevant legislation and industry best practice prevailing at the time of the permit application and throughout the construction program.
- Council may revoke any permits at any time for non-compliance with requirements or if it considers that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are likely to be compromised during the construction project.

414(d) Construction Management Plan - Plans on Site

Legible copies of the Construction Management Plan and current permits are to be kept on site and be made available on request at all times during construction.

414(e) Construction Management Plan - Out of Hours Works to be Performed

Notify Development Assessment for any work activity identified broadly in the endorsed Construction Management Plan to be conducted out of normal business hours 6:30am and 6:30pm Monday to Saturday.

414(f) Construction Management Plan - Implement the Plan

Subject to the provisions of this condition, implement and maintain the approved Construction Management Plan.

415 On-site Erosion (high risk)

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

415(a) Prepare ESC Plan and Program

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC. Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request. At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

Timing: Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

415(b) Implement Certified ESC Plan and Program

Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion. The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

Comment

It is considered unnecessary to require sediment and erosion control measures to certified by both RPEQ and CPESC, as such we have amended the condition to reflect the most appropriate certified engineer to sign off on these aspects of the development. By including a requirement for double certification only adds time delays and costs that are considered unreasonable. Additionally, it is considered a further time delay to require material to be lodged at least 10 days prior to a pre-start meeting on site. All material is in accordance with the OPW approval and therefore has been cited by officers previously. Provided all material is provided prior to the pre-start meeting so all parties have correct versions is considered sufficient. The wording of the condition has been amended accordingly.

Proposed Condition

On-site Erosion (high risk)

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

NDN Application I A003905687 I 390 Levitt Road, Upper Kedron Qld 4055
115(a) Prepare ESC Plan and Program

Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC.

Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council’s Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

Timing:
Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

115(b) Implement Certified ESC Plan and Program

Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

Timing:
While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

416 Protect Existing Infrastructure

Where there is existing infrastructure in the vicinity of the proposed work, then the new work must not damage or compromise the working ability of the existing infrastructure. Should it be required to provide alterations to public utility mains, existing mains, services or installations, then the developer is required to meet the costs of the alteration(s), which is to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

416(a) As Constructed Drawings

Submit to Development Assessment "As Constructed" drawings including an asset register, showing all new and/or rectification works required by this condition. These works must be certified by a Registered Professional Engineer of Queensland-Civil that they are in accordance with the relevant Brisbane Planning Scheme Codes/Policies and any other relevant infrastructure requirements.

417 Waterway Corridor

Materials, equipment or structures (including but not limited to material stockpiles, sheds, concrete areas, landscaping materials, etc.) of any description must not be located within the waterway corridor unless specifically shown on the approved drawings.

418 Dedicate As Road - Non Trunk

Dedicate as road the following requirements:
1. The areas shown as new roads on the approved drawings and documents;
2. Areas, where required, to provide for external works in association with shared pedestrian access;
3. All corner truncations as six (6) metre by six (6) metre by three (3) equal chord truncations.
4. A 6.0 metres dedication to provide for fire management access as shown in the approved plans.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

419 Provide Certified Site Survey Levels

Submit to Development Assessment, “As Constructed” plans approved by a Registered Surveyor (in accordance with the relevant Brisbane Planning Scheme Codes/Policies) showing finished surface level information over the completed development. The survey information is required to show surface levels and site contours at 1 metre intervals. All levels are to be shown as Reduced Levels to the “Australian Height Datum” (AHD).

420 Remove Improvements & Obstructions From Truncation and Dedication

Remove all improvements (fences, gates, letter boxes, garden beds and plots and other constructed items etc.) and obstructions (existing earth banks, vegetation etc.) from the area of the corner truncation(s) and/or area of dedicated road and reinstate the area as footway in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Note: The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service, utility or asset owner will be required. Council permission is required if street trees, stormwater gullies/drainage pipes, water or sewer and sewers are affected.

421 Retaining Walls

Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:
1. All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.
2. All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.
3. Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall.
4. Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.
5. Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This set back may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.
6. Retaining walls that retain fill and are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall unless an alternative has been approved by Council.

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vii. Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.

viii. Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

ix. Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

421(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

Comment
The proposal plans that have been approved by Council do not nominate the location of anticipated guard rails on the top of retaining walls. In some areas having a minimum 500mm setback for a guard rail may negatively impact on the design outcome. As such we have sought changes to the wording of this condition to provide sufficient flexibility for alternative design solutions to be considered in order to appropriately respond to the uniqueness of this site.

Additionally amendments to the wording of this condition area sought in relation to intra-block retaining walls. In order to limit the extent of dead-space between allotments it is sought to increase the maximum height of a retaining wall to 3m (as has been discussed with Council) and limit the stepping requirements to one third of the height, rather than the conditioned half the height. It is considered that this will be a better design outcome and solution in the instances where retaining walls greater than 1.5m are required.

The amendments to the condition are provided below.

Proposed Condition
Retaining Walls
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

(i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.

(ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.

(iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall unless otherwise approved by Council.

(iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 3m in height are to be vertically and horizontally tiered by a dimension of one third of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.

(v) Retaining walls to stabilise excavation are to be set back off property boundary to accommodate subsoil drainage without encroachment into the neighbouring property. This setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.

(vi) Retaining walls that retain fill and are greater than 3m in height are to be vertically and horizontally tiered by a dimension of one third of the height of the retaining wall unless an alternative has been approved by Council.

(vii) Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.

(viii) Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

(ix) Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

421(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

422 Granting Easements
Grant the following easements:

i. Easements for underground drainage, overland flow and access purposes as may be required, in favour of Brisbane City Council.

ii. Easement over that part of land within the proposed Waterway Corridors affected by the 100 year Average Recurrence Interval (ARI) flooding, in favour of Brisbane City Council.

Note: This condition is imposed to provide access, maintenance of services and to protect drainage paths if required. Easements in favour of the Brisbane City Council are required to have the necessary easement documentation prepared (free of costs and compensation to Council) by the Brisbane City Council. Easements not in favour of the Brisbane City Council are required to have the necessary documentation prepared by the applicant’s private solicitors. Easements are to be shown on a Survey Plan and lodged with the Plan Sealing Unit. Enquiries regarding any legal documentation can be directed to the Plan Sealing Unit, Development Assessment (ph: 3403 8888).

423 Service Crossings of Waterways
All service crossings of creek/waterways are to be located below ground level or attached to an approved crossing structure (eg road crossing) where located within the 100 year ARI flood extent. This is to ensure these crossings do not to impede floodwaters or create scour of the creek/waterway and to protect the service against damage by flood debris.

424 Minimum Floor or Pad Levels
Design and construct all proposed pad levels and roads to have the appropriate freeboard in accordance with Brisbane Planning Scheme Codes/Policies to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI Creek/waterway flood event, whichever is the higher flood level. Flood immunity requirements for other development (including relevant infrastructure, floor levels, parks, substations and ancillary structures) is to meet the requirements of Brisbane Planning Scheme Codes/Policies. (Note: flooding within all Category 1, 2 and 3 waterways and Cedar Creek is defined as Creek/waterway flooding for the purpose of this condition).

424(a) Certification
Provide certification and/or As-Constructed plans from a Registered Surveyor that confirm the development complies with the requirements of this condition.

425 Stormwater Outlets in Waterways
Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline 8Stormwater Outlets in Parks and Waterways 2003.Q Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings. No stormwater is to be discharged into Category 2 waterways with the exception of low flow outlets from stormwater quality improvement devices or otherwise approved by Council.
## Comment

We seek to amend this condition to remove the restrictions relating to discharging stormwater into the Category 2 areas. The major event will discharge into this area, which is unavoidable, and has been discussed throughout the assessment process. The amended condition wording is provided below.

## Proposed Condition

Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline *Stormwater Outlets in Parks and Waterways 2003* 

Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings. No stormwater is to be discharged into Category 2 waterways with the exception of low flow outlets from stormwater quality improvement devices or otherwise approved by Council.

### 426

**Stormwater - Hydraulic Report**  
Construct the development in accordance with the approved concept Site Based Stormwater Management Plan prepared by Brown Consulting dated 14th October 2014.  
426(a) Certification  
Provide certification from a Registered Professional Engineer Queensland that the development has been constructed in accordance with the approved hydraulic report.

### 427

**Construct Footpath Non-Trunk**  
Construct a 1.2 metre wide footpath along one side of all 16 metres wide neighbourhood access roads in accordance with the relevant Brisbane Planning Scheme Codes/Policies.  
**Notes:**  
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.  
427(a) Submit As Constructed Plans  
Submit to Development Assessment "As Constructed" plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with relevant Brisbane Planning Scheme Codes/Policies.  
Timing: Upon completion of the work

### 428

**Refuse Collection - Kerb Side (external road or internal private road)**  
Refuse and recycling bins for the proposed development are to be collected from the kerb side unless alternative refuse collection arrangements are made with Brisbane City Council's Waste Services.

### 429

**Repair Damage To Kerb, Footpath Or Road**  
Repair any damage to existing kerb and channel, footpath or roadway (including removal of concrete slurry from footways, roads, kerb and channel and stormwater gullies and drainlines) and re-instatement existing traffic signs and pavement markings that have been removed or damaged during any works carried out in association with the approved development.

### 430

**Works for Transport Infrastructure - Non-Trunk Internal Roadworks**  
Provide the following Roadworks, Stormwater Drainage, Footpaths and Pathways with any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, and the following requirements:  
(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 50 km/hr maximum);  
(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 50 km/hr maximum);  
**Note:** The 16 metres wide Neighbourhood Access Road is to be extended to Stage 2C up to Lot 255.  
(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area.  
(iv) A 6.0 metres wide pavement of minimum Type A standard for the provision of a fire management access and maintenance as shown in the approved plans.  
**Notes:**  
Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series).

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

430(a) Submit Functional Layout Drawings  
Submit functional layout plans showing the extent of all proposed Roadworks.  
**Timing:**  
Prior to site/operational/building work commencing Note. Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

430(b) Submit Roads and Drainage Plans  
Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.  
**Timing:**  
Prior to site/operational/building work commencing

430(c) Submit Signs and Pavement Plans  
Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the *Queensland Manual of Uniform Traffic Control Devices*, checked and certified by a Registered Professional Engineer of Queensland-Civil.
430(d) Implement Endorsed Drawings

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.

Timing:
Prior to On-Maintenance Inspection

430(e) Submit As Constructed Plans

Submit "As Constructed" plans including an asset register and a pre-On-Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing:
Prior to On-Maintenance Inspection

430(f) On Maintenance Acceptance

Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.

Timing:
Prior to On-Maintenance Inspection

430(g) Off-Maintenance Acceptance

On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.

Timing:
On completion of the maintenance period

Comment

The design speed for 14m wide local roads and 16m neighbourhood roads should be 40km/hr as per the Traffic and Transport PSP (and also the new BCC City Plan Infrastructure Design PSP). As such item (i) and (ii) has been amended to reflect the appropriate speed limit.

As the emergency service track will only be available for emergency vehicles only and not as an alternate emergency access for private vehicles, it is considered that a sealed track is more appropriate than a Type A standard pavement. This will ensure that the track is not used for anything other than the stipulated purpose.

For clarity we have amended condition 430(a) to ensure that the functional layout drawings are included as part of the operational works package, and not a separate package prior to this time.

As Council are aware in some instances the design outcomes achieved for the site are performance outcomes that are not specifically on accordance with standard Council specifications and standards. As such the condition has been amended throughout to reflect outcomes agreed with Council through the inclusion of the following words: for as otherwise approved by Council.

Condition 430(f) has also been amended to remove the last bullet point as it is considered that this is covered by the off-maintenance condition that follows in point g).

Proposed Condition

Provide the following Roadworks, Stormwater Drainage, and any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, and the following requirements:

(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum);

(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 450 km/hr maximum with provision as an interim bus route, as may be required, for bus access);

Note: The 16 metres wide Neighbourhood Access Road is to be extended to Stage 2C up to Lot 255.

(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area;

(iv) A 6.0 metres wide pavement of minimum Type A standard sealed track for the provision of a fire management access and maintenance as shown in the approved plans.

Notes:

Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series) or as otherwise approved by Council.

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

430(a) Submit Functional Layout Drawings

Submit functional layout plans showing the extent of all proposed Roadworks as part of the Operational Works application.
### 430(b) Submit Roads and Drainage Plans
Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings **or as otherwise approved by Council**, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:** Prior to site/operational/building work commencing

### 430(c) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the **Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council**, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:** Prior to site/operational/building work commencing

### 430(d) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.

**Timing:** Prior to On-Maintenance Inspection

### 430(e) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On-Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:** Prior to On-Maintenance Inspection

### 430(f) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies

**Timing:** Prior to On-Maintenance Acceptance

### 430(g) Off-Maintenance Acceptance
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.

**Timing:** On completion of the maintenance period

### 431 Water Quality Treatments in Public Open Space
Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design). The design must provide for safe egress into and out of the treatment facility. All Bioretention basins are to:
- provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level,
- provide gross pollutant traps at all stormwater inlets from roads,
- design all outlet pits for a minimum 2 year ARI flow without overtopping spillways, and the spillway designed to safely convey the 50 year ARI peak flow,
- ensure the basin (including embankments and retaining walls) is located outside of the 10 year ARI flood extent within any waterway,
- provide scour control and tail out channels in accordance with Councils Natural Channel Design Guidelines.

### 431(a) Bioretention Basin Landscaping
Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrently with the engineering drawings.

**Timing:** Prior to site/operational/building work commencing

### 431(b) Implement Approved Drawings
Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.

**Timing:** Prior to On-Maintenance Inspection

### 431(c) On-Maintenance Inspection
Contact Development Assessment to arrange an On-Maintenance inspection.

**Timing:** Prior to On-Maintenance Inspection

### 431(d) Maintenance Period
Provide the following in relation to the maintenance period:
- The maintenance period will be 24 months upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment. The maintenance period ends when the works are accepted Off-Maintenance by Development Assessment.

On completion of the maintenance period, it is considered that the standard maintenance periods can be applied to this aspect of the development.
- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.
- Submit “As Constructed” plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Code/Policies and the approved plans.

**Timing:** From acceptance of On-Maintenance period

**431(c) Off-Maintenance Inspection**

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:** On completion of the maintenance period.

### Comment
The condition seeks the provision of gross pollutant traps (GPTs) at all stormwater inlets from roads. It is considered unreasonable to require all Bioretention basins are to:
- Provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level, provide scour control and tail-out channels in accordance with Councils Natural Channel Design Guidelines.

Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.

### Proposed Condition

Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design).

The design must provide for safe egress into and out of the treatment facility. The design must provide for safe egress into and out of the treatment facility.

**431(a) Bioretention Basin Landscaping**

Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrently with following lodgement of the engineering drawings. The design must provide for safe egress into and out of the treatment facility.

**Timing:** Prior to site/operational/building work commencing

**431(b) Implement Approved Drawings**

Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.

**Timing:** Prior to On-Maintenance Inspection

**431(c) On-Maintenance Inspection**

Contact Development Assessment to arrange an On-Maintenance inspection.

**Timing:** Prior to On-Maintenance Inspection

**431(d) Maintenance Period**

Provide the following in relation to the maintenance period:
- The maintenance period will be **24 months** 12 months, followed by a **12 month establishment period** for planting upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment. The maintenance period ends when the works are accepted Off-Maintenance by Development Assessment.
- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.
- Submit “As Constructed” plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the approved plans.

**Timing:** From acceptance of On-Maintenance period

**431(e) Off-Maintenance Inspection**

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:** On completion of the maintenance period.
Timing: On completion of the maintenance period, maintenance security will be released.

Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful, the

Timing: Prior to site/operational/building work commencing

Endorsement
Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing

Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.

Timing: Prior to On-Maintenance Inspection

Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing: Prior to On-Maintenance Inspection

On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period, maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

Timing: Prior to On-Maintenance Acceptance

Off Maintenance Inspection
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful, the maintenance security will be released.

Timing: On completion of the maintenance period

433 Ponding of stormwater
Adjoining properties and roads are to be protected from ponding or nuisance from stormwater as a result of the works. Ensure the stormwater runoff from the site does not adversely impact on flooding or drainage (peak discharge and duration up to the 100 year Average Recurrence Interval) of properties that are upstream, downstream or adjacent to the site.

Notes.
- If remedial works are required that involve drainage, drawings are to be submitted and approval obtained from Development Assessment, to provide a means to rectify the site drainage.
- This condition is imposed to ensure that the developer is aware that they are responsible for all remedial works required as a result of any site works and, that they must protect neighbouring properties and roads from ponding and nuisance water from the proposed development.

434 Public Lighting
Lodge street lighting design drawings showing the proposed public lighting system in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and obtain approval from the City Lighting, Asset Services.

Timing: Prior to On Maintenance Acceptance

Agreement with Supplier
Enter into an agreement with an electricity supplier and provide a public lighting system in accordance with the above approved lighting design plans.

435 Service Conduits and Mains
Supply and install all service conduits and meet the cost of any alterations to public utility mains, existing mains, services or installations required in connection with the approved development in accordance with the relevant Brisbane Planning Scheme Codes/Policies. This includes:

- the provision of all services and/or conduits along the full length of any rear allotment access or access easement.
- the relocation of any fire hydrant and/or valves from the development's vehicular footway crossings if applicable.
- the retention and/or relocation of any existing foul water lines that currently exist within the site.

Note. Applicants should liaise with the appropriate service authorities. Typical underground services and/or conduits to be constructed include power, phone, telecommunications, sewer, stormwater and gas if applicable.

Timing: Prior to On Maintenance Acceptance

As Constructed Drawings
Submit to Development Assessment "As Constructed" drawings including an asset register, approved by a Registered Professional Engineer Queensland that are in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and any other relevant infrastructure requirements, showing the works required by this condition.

436 Conduit for Brisbane City Council
Provide a single underground conduit (100mm diameter UPVC class PN9) in favour of Brisbane City Council on at least one side of all Neighbourhood Access Roads (Bus Route only), Industrial Access Roads and Major Roads in the Council Road Hierarchy, in accordance with the following:

- The conduit must be laid in the telecommunication alignment of the footpath, on the kerb side of the Telecommunication Carrier conduit or in an agreed shared trench arrangement with the Telecommunication Carrier and other Utilities as may be relevant, subject to the approval of Development Assessment.
- The conduit must bypass the Telecommunication Carrier pits.
- Pits (minimum size, Type 4 as per BCC Drawing UMS 600/031) with lids (as per Drawing UMS 600/030 - but Class B instead of Class C) must be installed at the dead ends of the conduit, both sides of road crossings, at intersections and at other locations that may be specified by Council.
- The conduit must be plugged at each pit.
- The conduit must be located and installed in such a way that facilitates the installation of cable and additional pits in the future.

436(a) Submit "As Constructed" Drawings
Submit to Development Assessment, As Constructed drawings, including an asset register, approved by a Registered Professional Engineer Queensland, and in accordance with the requirements of this condition and the relevant Brisbane Planning Scheme Codes/Policies.

437 Telecommunications
Submit to Development Assessment, documentary evidence issued by a relevant telecommunication carrier to verify that the necessary underground telecommunication services have been supplied within and adjacent to the development.

Standard Advice

438 Concurrence Agency Conditions
The Department of State Development Infrastructure and Planning as concurrence agency has imposed the conditions contained in the letter dated 2 December 2014.

439 Construction Noise and Dust Emissions
Pursuant to the Environmental Protection Act 1994, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emission are accordance with the requirements of the Act. The Environmental Protection Act 1994 prescribes that:
(1) A person must not carry out building work in a way that makes an audible noise
   (a) on a business day or Saturday, before 6.30a.m. or after 6.30p.m or
   (b) on any other day, at any time.
(2) The reference in subsection (1) to a person carrying out building work
   (a) includes a person carrying out building work under an owner-builder permit; and
   (b) otherwise does not include a person carrying out building work at premises used by the person only for residential purposes.

440 Advice Agency Condition
Powerlink acting as an advice agency for the development has imposed conditions contained in the letter dated 18 July 2014.

Water & Wastewater Services Ù Concurrence Agency Requirements

441 Grant Easements
Grant the following easement(s) for water supply or sewerage purposes.
(a) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
(b) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

GUIDELINE
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

PROOF OF FULFILMENT
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

Comment
It is considered that the timing impacts referenced in this condition may delay plan sealing. Delays may be experienced where live works are still being undertaken after plan sealing but prior to on-maintenance (through the bonding process). As such we seek the reference to Prior to the relevant Council signing the plan of subdivision to be removed from the timing, as suggested below.

Proposed Condition
Grant Easements
Grant the following easement(s) for water supply or sewerage purposes.
o) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
p) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
### GUIDELINE

This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

### PROOF OF FULFILMENT

Registration of the easement on the survey plans and on the property title with the Department of Natural Resources.

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#### 442

**Construct Waste Water Non-Trunk Infrastructure System**

Construct a Sewerage Non-Trunk infrastructure system necessary to provide a sewerage connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**

This condition has been imposed to ensure that sewerage infrastructure is in place to serve the development and that each lot has a sewerage property connection. This condition has been imposed on behalf of South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 and Retail Restructuring) Act 2009.

**PROOF OF FULFILMENT**

Connection Certification from QUU

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#### 442(a) Wastewater Network Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities wastewater network infrastructures.

(d) Transfer ownership of the wastewater reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network and/or property service infrastructure. This includes:

(i) where not required for existing or future development, removing existing wastewater network and/or property service infrastructure and sealing any connection(s) to remaining reticulation infrastructure;

(ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and

(iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as specified in current standards.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

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#### 442(b) Wastewater Property Service Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland Urban Utilities wastewater reticulation system.

(d) Each lot must have a separate wastewater property service connection which commands the whole of each lot.

(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.

(f) If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

(g) Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

(h) Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

(i) Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words ‘Sewer Connection 2 M’.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

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#### 442(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
442(d) Wastewater Network and Property Service Infrastructure - Sizing
The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

442(e) Wastewater Infrastructure - Design and Construction Standards
(a) The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant or prior to the commencement of the use, whichever comes first.

442(f) Wastewater Network Infrastructure - CCTV Inspection
(a) Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.
(b) CCTV survey must be carried out in accordance with the WSA 05-2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.
(c) The Applicant must repair all defects in accordance with the approved engineering restoration plan and schedule at no cost to Queensland Urban Utilities.

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

442(g) Wastewater Network Infrastructure - Pressure Testing
(a) Conduct pressure/vacuum testing of wastewater mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
(b) Pressure/vacuum testing of wastewater mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.
(c) The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming compliance.

Comment
Point 442(b)(h) It is considered that imposing the upgrades to existing services that are considered deficient by QUU and not located within the development is an unreasonable imposition on the development. As such we seek this aspect of the condition to be deleted.

Point 442(c) The impact and compliance with requirements prior to QUU issuing the Connection Certificate should be tied to demonstration of the relevant provisions of the SEQ water and sewerage design and construction codes. Amended wording is provided below to reflect this.

Proposed Condition
Point 442(b)(h) Delete. Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

442(c) Wastewater Network and Property Service Infrastructure - Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant or prior to the commencement of the use, whichever comes first.

442(e) Wastewater Infrastructure - Design and Construction Standards
The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant or prior to the commencement of the use, whichever comes first.

Live Works for Water Supply and Wastewater
Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

(a) All work on or near live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.
(b) A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.
(c) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.
**Proposed Condition**

Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

- **qq)** All work on or **within 1 metre of** live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.
- **rr)** A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.
- **ss)** Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.
- **tt)** All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.
- **uu)** Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.
- **vv)** All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

**Timing:**
Prior to and at the time of Live Works.

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**445 Construct Water Supply Non-Trunk Infrastructure System**

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**

Connection Certification from QUU

**445(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)**

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

(d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

(e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
   - (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
   - (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
   - (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
   - (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certification, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**445(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)**

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.

(d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
(e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.

(f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.

(g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.

(h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal tanks, fire hose reels and sprinkler systems.

(i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development’s proposed vehicular footway crossings.

(j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.

(k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

445(c) Drinking Water Network Infrastructure and Property Service Infrastructure Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

445(d) Drinking Water Network Infrastructure and Property Service Infrastructure Sizing
The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

445(e) Drinking Water Infrastructure - Design and Construction Standards
(a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

445(f) Drinking Water Network Infrastructure - Water Quality Testing
(a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

445(g) Drinking Water Network Infrastructure - Pressure Testing
(a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority. The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment
The condition has been amended below to more appropriately manage the timing of compliance in accordance with the SEQ water and sewerage design and construction codes, being the time of approval. This is requested to avoid any potential issues with rework, redesign and reconstruction resulting from updated standards after the time of approval.

Proposed Condition
Construct Water Supply Non-Trunk Infrastructure System
Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions at the time of approval:

GUIDELINE
This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

PROOF OF FULFILMENT
Connection Certification from QUU

445(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRTC of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
   (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure on or within the development site;
   (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
   (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
   (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

445(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.

d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.

e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.

f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.

g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.

h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.

i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.

j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.

k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

445(c) Drinking Water Network Infrastructure and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

445(d) Drinking Water Network Infrastructure and Property Service Infrastructure-Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

445(e) Drinking Water Infrastructure - Design and Construction Standards

a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

445(f) Drinking Water Network Infrastructure- Water Quality Testing

a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.
Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

(d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Comment
The applicant does not consider this condition to be relevant to this development. The condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and / or in accordance with the standards and guidelines prescribed.

Consent and Permits prior to Construction of Water and Wastewater Infrastructure

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

446(a) Land Owner's Consent

(a) Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.

(b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Timing:
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

446(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Timing:
Prior to construction of relevant water or wastewater infrastructure.

Comment
It is considered unreasonable to include references in conditions that relate to documents in Water Approvals that have not been issued to the applicant for consideration. As such we propose amendments to the condition as follows to provide greater certainty for the applicant on the implications of this condition on the delivery of the project.

Proposed Condition

Consent and Permits prior to Construction of Water and Wastewater Infrastructure

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

466(a) Land Owner's Consent

(a) Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.

(b) Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Timing:
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

466(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Timing:
Prior to construction of relevant water or wastewater infrastructure.
It is on this basis that we seek the deletion of this conditions in its entirety.

**Proposed Condition**

**Delete Land Dedication for Non-Trunk Water and Wastewater Infrastructure**

Delete land for purposes of water and wastewater infrastructure construction and the following requirements:

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in fee simple, and at no cost to Queensland Urban Utilities.

(d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

**Timing:**
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

**Comment**

It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required. As such we seek deletion of this conditions in its entirety.

**Proposed Condition**

**Delete Temporary Works for Water and Wastewater Infrastructure**

(a) Provide temporary water and wastewater infrastructure, if applicable, and all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.

(b) Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.

(c) A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.

(d) Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**Terminate Infrastructure for Water and Wastewater**

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**Comment**

It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required. As such we seek deletion of this conditions in its entirety.

**Proposed Condition**

**Delete Terminating Infrastructure for Water and Wastewater**

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**Proposed Condition**

**Delete Maintenance Period for Water and Wastewater Infrastructure**

(a) Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and maintenance schedule (lodged as part of the As- Constructed Package), relevant engineering standards and sound engineering practice.

(b) The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.

(c) Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.

(d) Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.

(e) Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.

**Timing:**
Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

**Proposed Condition**

**Delete Maintenance Bond**

(a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.

(b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.

(c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

**Timing:**
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.
Permit to which these conditions relate 

**DA SPA ROL Subdivision of Land Stage 2C**

**General/Planning Requirements**

- **Staging of Development**
  - Stage 2C cannot be qanl scaledbuart until all conditions relating to Stage 2B have been complied with.
  - Timing: All conditions relating to the earlier stage have been complied with.

- **Approved Drawings & Documents**
  - A legible copy of the approved drawings and documents bearing “Council Approval” and the Development Approval Conditions package is to be available on site.
  - Note. This condition is imposed to ensure compliance with the development conditions of approval. The copy of the conditions and drawings should be located in any site management office or with the site foreman. Any copies of conditions or drawings that are illegible shall be deemed to be non compliance with this condition of approval.

- **Carry Out The Approved Development**
  - Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s).
  - Note. This development approval may include the location of fences, retaining walls and/or external walls of buildings on the boundary of a lot. This approval does not constitute permission to enter neighbouring properties to carry out the construction (including associated drainage and earthworks) or maintenance activities. Permission to enter neighbouring properties must be obtained from relevant property owners.

- **Complete All Operational Work**
  - Complete all operational work associated with this development approval, including work required by any of the conditions included in the Conditions Package. Such operational work is to be carried out generally in accordance with the approved drawing(s), and/or documents or, if requiring a further approval from the Council, in accordance with the relevant approval(s).

**Ecology**

- **Submit Vegetation Management Plan**
  - Submit to Development Assessment and receive approval for a Vegetation Management Plan (VMP). The VMP is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation as per the Ecological Assessment Guidelines (referenced on Council’s website) for the protection, retention and/or management of vegetation on the site and in accordance with the approved Vegetation Retention Plan amended in red on 30 October 2014 and include the following information:
    - The extent of the VMP is to include evaluation of all areas including, proposed road reserves, external works and development areas
    - The location and description of existing vegetation at the interface between the development footprint and the Category 1, 2, 3 and 4 Corridors required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, including species and botanical name plus the height and canopy spread
    - The location and extent of all site works including all proposed infrastructure and areas of earthworks
    - Detail design of all civil works is to be cognisant of environmental values. Alternative solutions may be required in some instances, to protect significant vegetation (e.g. alternative service alignments, variations to batter slopes and tunnel boring)
    - The location and description of all vegetation to be retained and that to be removed
    - Methods of physical identification of trees/vegetation to be retained
    - A description of all measures to be used to protect vegetation and habitat features to be retained during construction, including protective fencing
    - A description of all pruning and tree surgery works (to AS 4373/96) to maintain health and stability of trees and reduce potential hazards for future residents
    - The location and extent of storage and stockpile areas for cleared vegetation and site mulch
    - A description of all methods to salvage and/or re-use cleared vegetation. Generally cleared vegetation is to be mulched for reuse in landscape/rehabilitation works
    - Details of all measures to protect and recover fauna during clearing operations, including: presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures.

- **Arrange Pre-start Meeting**
Submit Rehabilitation Plan
Submit to Development Assessment and receive approval for a Rehabilitation Plan. The Rehabilitation Plan is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation that includes at least the following information for the area identified on Concept Rehabilitation Plan amended in red 30/10/2014: This Rehabilitation Plan is to include all rehabilitation works for stages 1A, 1B, and 1C as identified on Proposal Plan_Stage One Overall Canvey Road, Upper Kedron (Drawing No. CDW01_44C) as amended in red.

- Description of proposed rehabilitation, including earthworks, restoration methods (revegetation and assisted regeneration where appropriate);
- Details of the proposed rehabilitation schedule, staging, including site preparation, planting and establishment; plant species names, stock size, quantities, locations; a maintenance program (5 years) for all rehabilitation works;
- Details of rehabilitation outcomes; performance monitoring and assessment (minimum 9 visits within the first 24 months every 4 to 6 weeks); survival thresholds (minimum 90% survival required); replacement planting triggers (minimum requirement to keep survival above 90% and replacement within 4 weeks of issue being identified); target minimum tree height and canopy cover to be achieved at the end of 5 year maintenance period;
- Stabilisation methods for all areas of exposed soil surface;
- Details of special habitat features to be provided for the enhancement/restoration of habitat values including: coarse woody debris (e.g. root balls; hollows; logs; branches) to be salvaged from clearing activities and reused; nest boxes (best industry practice). A minimum of 10 boxes per ha required to be installed in dedication corridors to achieve a hollow density of 32 hollows per ha. Additional nest boxes will be required in areas having a low natural hollow density. Consultation with an experienced fauna consultant is required to determine the location and type of next box required, and appropriate nest box density for each area of corridor to be dedicated; nest box installation and maintenance, monitoring and reporting will also be required over a 5 year maintenance period. Habitat features such as nest boxes are to be provided for each stage during preparation works for site rehabilitation;
- Specification notes on site preparation; plant quality assurance including local provenance; plant stock handling; planting methodology; mulching; threat management (including tree guarding 1 600mm corflute with hardwood stake; watering as required to prevent plant stress); weed management; tree guard removal and maintenance; establishment and maintenance. All restoration works are to be in accordance with the SEQ Ecological Restoration Framework and industry best practice.
- Evidence that the rehabilitation plan has been prepared by a bushland restoration specialist/ecologist with a minimum of 5 years experience in ecological restoration.
- Evidence that the delivery of rehabilitation works will be undertaken by a bushland restoration specialist with a minimum of 5 years experience in ecological restoration.
Bushland restoration works to target areas that are currently deficient of an existing vegetation structure and floristic composition that is commensurate with the Regional Ecosystem identified on the site or an alternative Regional Ecosystem as determined by a suitably qualified and experienced bushland restoration practitioner or Ecologist with a minimum of 5 years experience in ecological restoration. Rehabilitation methods must use a bushland restoration approach that will ultimately aim to achieve a vegetation structure and floristic composition commensurate with the Regional Ecosystem identified on the site. This will be achieved by including the establishment of as many flora species from all strataums (tree, shrub, and ground layer) as commercially available; removal and management of all exotic flora species within the maintenance period; introduction of coarse woody debris and leaf litter from clearing site as appropriate. Alternative regional ecosystems may be appropriate for areas with landforms influenced by unnatural levels of soil moisture or altered landform. Regional Ecosystems Technical Descriptions and Biocondition Benchmarks documentation will be used to guide planting density, flora species selection, flora species dominance and distribution. Planting densities higher than those recorded in Regional Ecosystem Technical Descriptions will be appropriate in more open areas to account for 10% mortality and to assist with the development of a robust canopy.

Implement Approved Plan
Carry out rehabilitation works in accordance with the approved Rehabilitation Plan.
Timing: While site/operational/building work is occurring and then to be maintained

On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.
Timing: Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period. Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.
Timing: 5 years from acceptance of on maintenance period

Off Maintenance Inspection
Timing: 5 years from acceptance of on maintenance period payment lodged with Council.

Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary
Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance
461(c) On Maintenance Period.

Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing: On completion of the maintenance period

459 Fauna Spotter
A Fauna Spotter, qualified by the relevant Queensland State Government Authority, shall inspect the site to ensure identification of any wildlife: (fauna) or habitat features (e.g. nests, tree hollows) prior to clearing.

459(a) Prior to Vegetation Clearing
Clearing operations and other site works must not commence until the Fauna Spotter has certified that the site has been fully inspected and any necessary fauna protection measures or relocation procedures implemented. Submit to Development Assessment a Fauna Spotter Report to demonstrate compliance with this condition.

459(b) Fauna Spotter on Site
The fauna spotter is to be present on site during all clearing operations to monitor works and to respond to any situations that may arise as determined by Development Assessment, based on the findings of the fauna spotter’s pre-clearing certification report.

459(c) Fauna in Work Area
If any animals are identified in trees to be removed during clearing operations, work shall cease immediately on that tree. The Fauna Spotter must supervise the relocation of any identified animal prior to clearing operations recommencing.

459(d) Certification
Provide certification that works have been undertaken in accordance with this condition.

460 Natural Assets Local Law (NALL) - On Site
Lodge and receive approval from Development Assessment, an application to Carry Out Works on Protected Vegetation on the site.

Submit Wildlife Movement Solutions Plan
Submit to Development Assessment and receive approval for a Wildlife Movement Solutions Plan (WMP). The WMSP is to include an overall plan of all Wildlife Movement Solutions (WMS) planned for the development including the WMS identified on the Wildlife Movement Solutions Concept Plan amended in red on 31/10/2014. Detailed design drawings are required for each development stage with WMS infrastructure. Submit an overall WMSP and detailed WMSP and report for Stage 2C outlining wildlife movement solutions infrastructure in conjunction with operational work approvals. Obtain approval from the Delegate, Development Assessment for the detailed report and plans. The detailed design for each structure is to be in the form of scaled plans and supporting documentation. Design options must be integrated with required exclusion fencing and include warning signage at crossing points. The detailed designs must also be generally in accordance with the Fauna Sensitive Road Design Manual - Volume 2: Preferred Practices developed by the Department of Main Roads. The plans must include, but not be limited to, the following information:

- Description of the fauna exclusion/movement fences
- Location of warning signage at crossing points;
- Description hardwood ledges and other structures that must be installed inside the culverts;
- Description of location, dimensions and openness of the structure to enable wildlife to enter the structure;
- Description of the topography and vegetation type to be planted at entry points to the culverts. The vegetation must attract target species (wallabies, possums, koalas, echidnas, etc.) to the structure and provide food source and shelter. Clear and workable plans representing rehabilitation on the ground including details of the proposed rehabilitation schedule, staging, plant species, stock size, densities, quantities and locations;
- Description of proposed rehabilitation, including earthwork, methods and objectives:
- A detailed 5 year maintenance period and monitoring program is to be provided to maintain the vegetation at the entry points to the culvert;
- Include details of special habitat features to be provided for the enhancement/restoration of habitat values;
- Description of the weel management program; and
- Details of associated fauna furniture must be included to provide opportunities for a broad range of species to roads.

461(a) Implement approved plan
Construction of the wildlife movement solutions and the road network is to occur in accordance with approved designs.

Timing: While site/operational/building work is occurring and then to be maintained

461(b) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:

- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Fauna Specialist/Ecologist with a minimum of 5 years experience that works have been undertaken in accordance with the approved plans.

Timing: Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

461(c) On Maintenance Period
Provide 5 years maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the works in accordance with the approved plans and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Maintenance Bond shall be calculated at 5% of the constructed works. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing: 5 years from acceptance of on maintenance period
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<th>461(d) Off Maintenance Inspection</th>
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| On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection. 

| Timing: On completion of the maintenance period |

462 **Bushfire Protection Zone**

- Maintain the Bushfire Asset Protection Zones (APZ) indicated on Figure 3: Bushfire Risk Treatments, received 15/10/2014 and in accordance with an approved Bushfire Management Plan. Stages 1 and 2 prepared by Place Design received 15/10/2014; [Box] Exclusion of habitable buildings or any flammable structures from the area; [Box] Maintenance of fuel load and vegetation structure; and [Box] Maintenance of access to APZ for fire fighting purposes

462(a) Survey and peg the BPZ

Survey and peg all boundaries of the Bushfire Asset Protection Zone (APZ).

463 **Bushfire Management Covenant**

Enter into a Covenant by Registration pursuant to Section 97A of the Land Title Act (1994) with Brisbane City Council as Covenantee. The Covenant is to be able to be immediately registered in the Department of Environment and Resource Management, and is to be in term satisfactory to the Manager, Brisbane City Legal Practice, to ensure management of bushfire risk within the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan. Stages 1 and 2 prepared by Place Design received 15/10/2014.

Provide a survey plan immediately registrable with the Department of Natural Resources and Mines in accordance with the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan. Stages 1 and 2 prepared by Place Design received 15/10/2014 at the same time as providing the covenant.

This Covenant must detail the responsibilities, liabilities, measures, remedies and intents as necessary to ensure the appropriate management of bushfire risk within the covenant area. The Covenant shall address the following issues: Appropriate management of bushfire risk in accordance with the approved Bushfire Management Plan in the Covenant area; including provision of building standards AS3959 Construction of buildings in bushfire-prone areas to specified Bushfire Attack Level (BAL) ratings.

**Comment**

Amendments to this condition are sought to clarify timing of covenants. The condition seeks covenants to be immediately registered in the Department of Environment and Resource Management. It is considered reasonable to require covenants to be placed on titles at time of registering titles with the relevant State Government body.

Additionally the first paragraph of the condition references the DERM when the relevant government department is Department of Natural Resources and Mines (DNR).  

**Proposed Condition**

**Bushfire Management Covenant**

Enter into a Covenant by Registration pursuant to Section 97A of the Land Title Act (1994) with Brisbane City Council as Covenantee. The Covenant is to be able to be immediately registered in the Department of Environment and Resource Management, Department of Natural Resources and Mines and is to be in term satisfactory to the Manager, Brisbane City Legal Practice, to ensure management of bushfire risk within the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan. Stages 1 and 2 prepared by Place Design received 15/10/2014.

Provide a survey plan immediately registrable with the Department of Natural Resources and Mines in accordance with the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan. Stages 1 and 2 prepared by Place Design received 15/10/2014 at the same time as providing the covenant.

This Covenant must detail the responsibilities, liabilities, measures, remedies and intents as necessary to ensure the appropriate management of bushfire risk within the covenant area. The Covenant shall address the following issues: Appropriate management of bushfire risk in accordance with the approved Bushfire Management Plan in the Covenant area; including provision of building standards AS3959 Construction of buildings in bushfire-prone areas to specified Bushfire Attack Level (BAL) ratings.

464 **Arboricultural Requirements**

The following arboricultural requirements are to be performed to ensure the long-term health and safety of trees to be retained:

464(a) Site Works

In consultation with Development Assessment, the Arborist is to direct the civil works contractor in relation to any service installation activities utilising alternative technologies such as directional-boring or under-boring using vacuum excavation or air-spade. The Arborist must be a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture).

464(b) Certification

Submit to Development Assessment, certification from a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) that all necessary arboricultural works have been carried out in accordance with the requirements of all parts of this condition.

464(c) Vegetation Pruning

Any necessary pruning, tree surgery and other maintenance works to maintain health and stability of any trees to be retained, and to reduce potential hazards for future residents, is to be carried out in consultation with Development Assessment. All works must be performed by a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) in accordance with the Australian Standard AS3939:1996 for Pruning of Amenity Trees.

465 **Land for Ecological and Waterway Corridors Infrastructure**

Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27 February 2014, which forms the land depicted as Category 2 Corridor as shown on Approved Plan Proposal Plan, Stage One Overall Canvey Road Upper Kedron, drawing number CD001_UD44C, dated 14 October 2014 (as amended in red). With the exception of crossings approved by the Council the land is to be free of encumbrances. Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.
| **Comment** |
| We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced Infrastructure Agreement. |

**Proposed Condition**

**Land for Ecological and Waterway Corridors Infrastructure**

Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision from being development approval of subdivision of land, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan, Stage One Overall Carwey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red).

With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances.

Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

| **466 Bushfire Management Plan** |
| i) Implement and carry out the works in accordance with approved Bushfire Management Plan – Stages 1 and 2 prepared by Place Design received 15/10/2014; |
| ii) Submit certification to Development Assessment certifying that the approved Bushfire Management Plan has been implemented. |

| **467 Stormwater Quality - Submit Management Plan** |
| Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SBSMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010 and be generally in accordance with approved plan B14159.W-SK01 Concept Stormwater Quality Management Plan For Stage 1 & 2 by Brown Consulting QLD dated 14th October 2014. The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, buildouts or other speed control devices) in the streetscape of all areas within Stage 2A, 2B, and 2C consisting of street tree WSUD pits, and bioretention basins. WSUD devices in the road reserve are to be located to ensure no services are constructed through the device or filter material. Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap. |

| **467(a) Implement Approved Plan** |
| Implement and maintain the approved Site Based Stormwater Quality Management Plan. |

| **467(b) Certification** |
| Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development. |

| **Comment** |
| The BCC has amended in red markups on the concept stormwater management plan suggests that additional at source treatment devices, beyond those already incorporated into the stormwater strategy are necessary for the development. It is considered that this is unnecessary for Stage 1A, 1B and 1C, and therefore seek the removal of references relating to at source treatment for these stages. |

The Stage 2 conditions seek to restrict constructing services through these devices, which is unnecessary as it forms part of the infrastructure of the development. We additionally seek the removal of the references requiring Gross Pollutant Traps (GPTs) being required for all basins. The inclusion of these devices adds unnecessary expense and maintenance burden on Council stormwater infrastructure in locations that have been determined that GPTs are unnecessary. This condition has been amended to reflect these points as provided below. |

**Proposed Condition**

**Stormwater Quality - Submit Management Plan**

Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SBSMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010. The water quality treatment strategy is to be generally in accordance with approved plan B14159.W-SK01 Concept Stormwater Quality Management Plan For Stage 1 & 2 by Brown Consulting QLD dated 14th October 2014. The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, buildouts or other speed control devices) in the streetscape of all areas within Stage 2A, 2B, and 2C consisting of street tree WSUD pits, and bioretention basins. Bioretention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap. |

| **109(a) Implement Approved Plan** |
| Implement and maintain the approved Site Based Stormwater Quality Management Plan. |

| **109(b) Certification** |
| Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development. |

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**Landscape Architecture & Open Space Planning**

| **468 Landscape Works in Corridor** |
| Undertake works in the Category 2 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below: |
| As indicated |
### 468(a) Submit Plan for Works in Corridor

Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the Corridor in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and the approved drawings. The Landscape Management and Site Works Plan must document the following:

**EXISTING SITE CONDITIONS**
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

**SITE PREPARATION**
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

**NEW WORKS**
- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embellishments chosen from Council's standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

**COSTING AND MAINTENANCE PROGRAM**

The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

**Timing:** Prior to site/operational work commencing

### 468(b) Pre Start Meeting

Arrange with Development Assessment for a Pre Start meeting.

**Timing:** Prior to site/operational work commencing

### 468(c) Construct Approved Works

Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

**Timing:** Prior to acceptance of works on maintenance

### 468(d) On Maintenance Inspection

Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

**Timing:** Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL)

### 468(e) On Maintenance Period

Provide 5 years' maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

**Timing:** 5 years from acceptance of on maintenance period

### 468(f) Off Maintenance Inspection

NDN Application  A003905687  390 Levitt Road, Upper Kedron Qld 4055
EXISTING SITE CONDITIONS

Site Works Plan must document the following:

NEW WORKS

SITE PREPARATION

Proposed Condition

Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

Submit Plan for Works in Corridor

Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the, the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and generally in accordance with the approved drawings Landscape Concept 1 Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK17 @ The Landscape Management and Site Works Plan must document the following:

EXISTING SITE CONDITIONS

- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

SITE PREPARATION

- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

NEW WORKS

- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embellishments chosen from Council’s standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

COSTING AND MAINTENANCE PROGRAM

The plans are to provide details of a costing and maintenance program, including the following:

- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

Timing:

Prior to site/operational work commencing

110(b) Pre Start Meeting

Arrange with Development Assessment for a Pre Start meeting.

Timing:

Prior to site/operational work commencing

110(c) Construct Approved Works

Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

Timing:

Prior to acceptance of works on maintenance

110(d) On Maintenance Inspection

On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing: On completion of the maintenance period

Comment

During the assessment of the application it was agreed with Council that the analysis of the 2 year, 5 year and 100 year floodlines was sufficient. As such, it is considered unnecessary to require further analysis against the 10 year, 20 year and 50 year floodlines, and have therefore deleted these from this condition.

Furthermore, the agreement to undertake a 5 year maintenance period was understood to be in relation to the areas of the site being rehabilitated, to ensure the protection and longevity of these particular species. It is not considered appropriate for a 5 year maintenance period to be enforced on the balance open space and landscape works within the corridors. On this basis the condition has been amended below to reflect a 2 year maintenance period on landscaped areas and a 5 year period on rehabilitation areas only.

During the assessment of the application it was agreed with Council that the analysis of the 2 year, 5 year and 100 year floodlines was sufficient. As such, it is considered unnecessary to require further analysis against the 10 year, 20 year and 50 year floodlines, and have therefore deleted these from this condition.

Furthermore, the agreement to undertake a 5 year maintenance period was understood to be in relation to the areas of the site being rehabilitated, to ensure the protection and longevity of these particular species. It is not considered appropriate for a 5 year maintenance period to be enforced on the balance open space and landscape works within the corridors. On this basis the condition has been amended below to reflect a 2 year maintenance period on landscaped areas and a 5 year period on rehabilitation areas only.

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On this basis the condition has been amended below to reflect a 2 year maintenance period on landscaped areas and a 5 year period on rehabilitation areas only.
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:

- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

Timing:
Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

110(e) On Maintenance Period
Provide 2 year maintenance to the landscape works and 5 years maintenance to the rehabilitation works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period. Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing:
2 year maintenance to the landscape works and 5 years to the rehabilitation works from acceptance of on maintenance period

110(f) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing:
On completion of the maintenance period

469
Provide Street Tree(s)
Submit to Asset Services and receive approval for a Street Tree Plan that provides details of street tree planting. Provide trees to all street frontages at spacings complying with the relevant Brisbane Planning Scheme Codes/Policies, or a minimum of one (1) tree per additional allotment frontage, whichever is the greater.

469(a) Implement Approved Plan
Install new street tree(s) in accordance with the approved plan. Contact Asset Services to arrange an On Maintenance inspection and obtain written confirmation that the street tree(s) have been planted in accordance with the approved Street Tree Plan.

469(b) Maintain Tree(s)
Maintain street trees for a period of 12 months after planting. At the end of the 12 month maintenance period contact Asset Services to arrange an Off Maintenance inspection.

470
Landscape Works in Road Reserve
Provide Landscape Works to contribute to the amenity of the development.

470(a) Submit Detailed Plan
Submit to the Development Assessment and receive approval for a detailed Landscape Plan for works in the road reserve. The plan is to be prepared at a scale of 1:100 by a suitably qualified and experienced Landscape Architect, and must comply with the relevant Brisbane Planning Scheme Code/Policy. The plan must include the following:

WORKS
- The extent of proposed soft and hard landscape within proposed Council land
- Location and description of fencing, retaining walls, entry statements, bollards, etc.
- Existing and proposed finished levels to external works particularly in critical areas (eg. top and toe of retaining walls and steps)
- Description/details of critical design elements where applicable (eg. Proposed surface treatments, stabilisation of batters, water features, etc)
- Landscape treatments to storm water devices, revegetated areas, buffers, roundabouts, swales etc.
- Basic specification notes on plan for all proposed landscape works
- RPEQ certified drawings for structural work required

PLANTING
- A planting schedule listing proposed plants by botanical names, quantities, pot size, height, spread and caliper at time of planting

COSTING AND MAINTENANCE PROGRAM
The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan; and
- Details of a 12 month Maintenance Plan for all proposed landscape works.

Note: This condition does not refer to Parks or Street Trees. A Street Tree Plan is to be sent to the Arboriculturist, Asset Services for approval.

Timing:
Prior to building work above ground level commencing (MCU), or prior to operational work commencing (ROL)

470(b) Implement the Approved Plan
Carry out the works in the approved detailed Landscape Plan.

Timing:
Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council’s notation of the plan of subdivision (ROL)

470(c) On Maintenance Inspection
Contact Development Assessment to arrange an On Maintenance inspection. The following information is to be provided to Development Assessment prior to the on maintenance inspection:
- certification by a registered Professional Engineer (with demonstrated structural experience) for all new structures requiring construction certification
- evidence of Public Liability Insurance.
### Filling and Excavation

#### 471(a) Submit Earthworks Plan

Submit and obtain endorsement from Development Assessment an earthworks plan prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, checked and certified by a Registered Professional Engineer of Queensland - Civil (RPEQ-Civil).

The Earthworks Plan should include the following:
- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, *Guidelines on Earthworks for Commercial and Residential Developments*.

#### Note

If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

#### 471(b) Suitable Fill Material

All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the *Environmental Protection Act 1994*) and noxious, hazardous, deleterious and organic materials.

#### 471(c) Implement Endorsed Plan

Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

#### Comment

We seek the following amendments to the wording of this condition to reflect the performance based design solutions proposed in the engineering services report submitted as part of the development application. During assessment of the application Council confirmed their support for performance based design solutions for construction, where the standard Council codes and design standards could not be achieved. It is considered that the amended wording reflects this position and appropriately references the performance based outcomes that have been discussed and resolved with Council.

#### Proposed Condition

**Filling and Excavation**

All proposed earthworks are to be carried out generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies where possible and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan.

The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.
**472 Construction Management Plan**

Prepare a Construction Management Plan for the subject site in accordance with the following requirements.

- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads;
- Suitable fill material is that deemed to comply with the requirements of AS 3798, *Guidelines on Earthworks for Commercial and Residential Developments*.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

**471(a) Suitable Fill Material**

All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the *Environmental Protection Act 1994*) and noxious, hazardous, deleterious and organic materials.

**471(c) Implement Endorsed Plan**

Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.
<table>
<thead>
<tr>
<th><strong>On-site Erosion (high risk)</strong></th>
<th>Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times. Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>473(a) Prepare ESC Plan and Program</strong></td>
<td>Prepare Erosion and Sediment Control (ESC) Plan(s) &amp; Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC. Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>It is considered unnecessary to require sediment and erosion control measures to be certified by both RPEQ and CPESC, as such we have amended the condition to reflect the most appropriate certified engineer to sign off on these aspects of the development. By including a requirement for double certification only adds time delays and costs that are considered unreasonable. Additionally, it is considered a further time delay to require material to be lodged at least 10 days prior to a pre-start meeting on site. All material is in accordance with the OPW approval and therefore has been cited by officers previously. Provided all material is provided prior to the pre-start meeting so all parties have correct versions is considered sufficient. The wording of the condition has been amended accordingly.</td>
</tr>
<tr>
<td><strong>Proposed Condition</strong></td>
<td><strong>On-site Erosion (high risk)</strong> Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times. Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.</td>
</tr>
<tr>
<td><strong>115(a) Prepare ESC Plan and Program</strong></td>
<td>Prepare Erosion and Sediment Control (ESC) Plan(s) &amp; Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC. Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.</td>
</tr>
<tr>
<td></td>
<td>At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council’s Compliance and Regulatory Services at: <a href="mailto:CARS-ESC@brisbane.qld.gov.au">CARS-ESC@brisbane.qld.gov.au</a></td>
</tr>
<tr>
<td><strong>Timing:</strong></td>
<td>Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.</td>
</tr>
<tr>
<td><strong>Proposed Condition</strong></td>
<td><strong>On-site Erosion (high risk)</strong> Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times. Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.</td>
</tr>
<tr>
<td><strong>115(b) Implement Certified ESC Plan and Program</strong></td>
<td>Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion. The plan(s), program, design certifications &amp; inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.</td>
</tr>
<tr>
<td></td>
<td>At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council’s Compliance and Regulatory Services at: <a href="mailto:CARS-ESC@brisbane.qld.gov.au">CARS-ESC@brisbane.qld.gov.au</a></td>
</tr>
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<td><strong>Timing:</strong></td>
<td>Prior to pre-start meeting or commencement of any site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.</td>
</tr>
</tbody>
</table>

NDN Application | A003905687 | 390 Levitt Road, Upper Kedron Qld 4055
Timing:
While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

474 Protect Existing Infrastructure
Where there is existing infrastructure in the vicinity of the proposed work, then the new work must not damage or compromise the working ability of the existing infrastructure. Should it be required to provide alterations to public utility mains, existing mains, services or installations, then the developer is required to meet the costs of the alteration/s which is to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

474(a) As Constructed Drawings
Submit to Development Assessment “As Constructed” drawings including an asset register, showing all new and/or rectification works required by this condition. These works must be certified by a Registered Professional Engineer of Queensland-Civil that they are in accordance with the relevant Brisbane Planning Scheme Codes/Policies and any other relevant infrastructure requirements.

475 Waterway Corridor
Materials, equipment or structures (including but not limited to material stockpiles, sheds, concrete areas, landscaping materials, etc.) of any description must not be located within the waterway corridor unless specifically shown on the approved drawings.

476 Dedicated As Road - Non Trunk
Dedicated as road the following requirements:
i. The areas shown as new roads on the approved drawings and documents,
ii. Areas, where required, to provide for external works in association with shared pedestrian access,
iii. All corner truncations as six (6) metre by six (6) metre by three (3) equal chord truncations.
iv. A 6.0 metres dedication to provide for fire management access as shown in the approved plans.

Note: This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

477 Provide Certified Site Survey Levels
Submit to Development Assessment, “As Constructed” plans approved by a Registered Surveyor (in accordance with the relevant Brisbane Planning Scheme Codes/Policies) showing finished surface level information over the completed development. The survey information is required to show surface levels and site contours at 1 metre intervals. All levels are to be to shown as Reduced Levels to the “Australian Height Datum” (AHD).

478 Remove Improvements & Obstructions From Truncation and Dedication
Remove all improvements (fences, gates, letter boxes, garden beds and plots and other constructed items etc.) and obstructions (existing earth banks, vegetation etc.) from the area of the corner truncation(s) and/or area of dedicated road and reinstate the area as footway in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Note. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service, utility or asset owner will be required. Council permission is required if street trees, stormwater gullies/drains, water or sewer and swales are affected.

479 Retaining Walls
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:
i. Design and construct all retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.
ii. All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.
iii. Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall.
iv. Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.
v. Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This set back may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.
vii. Retaining walls that retain fill and are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall unless an alternative has been approved by Council.
vii. Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.
ix. Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.
ix. Retaining walls facing onto Council property

479(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

Comment
The proposal plans that have been approved by Council do not nominate the location of anticipated guard rails on the top of retaining walls. In some areas having a minimum 500mm setback for a guard rail may negatively impact on the design outcome. As such we have sought changes to the wording of this condition to provide sufficient flexibility for alternative design solutions to be considered in order to appropriately respond to the uniqueness of this site.

Additionally amendments to the wording of this condition area sought in relation to intra-block retaining walls. In order to limit the extent of dead-space between allotments it is sought to increase the maximum height of a retaining wall to 3m (as has been discussed with Council) and limit the stepping requirements to one third of the height, rather than the conditioned half the height. It is considered that this will be a better design outcome and solution in the instances where retaining walls greater than 1.5m are required.

The amendments to the condition are provided below.

Proposed Condition
Retaining Walls
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

(i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.
(ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.

(iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall unless otherwise approved by Council.

(iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m 3.0m in height are to be vertically and horizontally tiered by a dimension of half the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.

(v) Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsol drainage without encroachment into the neighbouring property. The setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.

(vi) Retaining walls that retain fill and are greater than 1.5m 3.0m in height are to be vertically and horizontally tiered by a dimension of half the height of the retaining wall unless an alternative has been approved by Council.

(vii) Runoff from surface drains and subsol drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.

(viii) Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

(ix) Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

479(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

480 Granting Easements
Grant the following easements:

- Easements for underground drainage, overland flow and access purposes as may be required, in favour of Brisbane City Council.
- Easements over that part of land within the proposed Waterway Corridors affected by the 100 year Average Recurrence Interval (ARI) flooding, in favour of Brisbane City Council.

Note: This condition is imposed to provide access, maintenance of services and to protect drainage paths if required. Easements in favour of the Brisbane City Council are required to have the necessary easement documentation prepared (free of costs and compensation to Council) by the applicant’s private solicitors. Easements are to be shown on a Survey Plan and lodged with the Plan Sealing Unit. Enquiries regarding any legal documentation can be directed to the Plan Sealing Unit, Development Assessment (ph: 3403 8888).

481 Stormwater Infrastructure Staging
Development is to construct stormwater infrastructure in an orderly manner that minimises impacts to waterways during construction and manages flooding:

- Construct the Stage 1 North stormwater detention area within Stage 1C, prior to plan sealing of Stage 2A, 2B, 2C or 2D.
- Construct the Stage 1 South stormwater detention area prior to plan sealing of Stage 2A, 2B, 2C or 2D.

Comment
It is considered that this condition is unnecessary. Aspects of other conditions within the approvals package will ensure that the staging of infrastructure as specified by this condition is undertaken. As such we seek this conditions to be deleted.

Proposed Condition
Delete

- Construct the Stage 1 North stormwater detention area within Stage 1C, prior to plan sealing of Stage 2A, 2B, 2C or 2D.
- Construct the Stage 1 South stormwater detention area prior to plan sealing of Stage 2A, 2B, 2C or 2D

482 Service Crossings of Waterways
All service crossings of creek/waterways are to be located below ground level or attached to an approved crossing structure (eg road crossing) where located within the 100 year ARI flood extent. This is to ensure these crossings do not to impede floodwaters or create scour of the creek/waterway and to protect the service against damage by flood debris.

483 Minimum Floor or Pad Levels
Design and construct all proposed pad levels and roads to have the appropriate freeboard in accordance with Brisbane Planning Scheme Codes/Policies to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI Creek/waterway flood event, whichever is the higher flood level. Flood immunity requirements for other development (including relevant infrastructure, floor levels, parks, substations and ancillary structures) is to meet the requirements of Brisbane Planning Scheme Codes/Policies. (Note: flooding within all Category 1, 2 and 3 waterways and Cedar Creek is defined as Creek/waterway flooding for the purpose of this condition).

483(a) Certification
Provide certification and/or As-Constructed plans from a Registered Surveyor that confirm the development complies with the requirements of this condition.

484 Stormwater Outlets in Waterways
Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline Stormwater Outlets in Parks and Waterways 2003.Q Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings. No stormwater is to be discharged into Category 2 waterways with the exception of low flow outlets from stormwater quality improvement devices or otherwise approved by Council.

Comment
We seek to amend this condition to remove the restrictions relating to discharging stormwater into the Category 2 areas. The major event will discharge into this area, which is unavoidable, and has been discussed throughout the assessment process. The amended condition wording is provided below.

Proposed Condition
Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline Stormwater Outlets in Parks and Waterways 2003.Q Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings. No stormwater is to be discharged into Category 2 waterways with the exception of low flow outlets from stormwater quality improvement devices or otherwise approved by Council.
**Stormwater - Hydraulic Report**
Construct the development in accordance with the approved concept Site Based Stormwater Management Plan prepared by Brown Consulting dated 14th October 2014.

485(a) Certification
Provide certification from a Registered Professional Engineer Queensland that the development has been constructed in accordance with the approved hydraulic report.

**Construct Footpath Non-Trunk**
Construct a 1.2 metre wide footpath along one side of all 16 metres wide neighbourhood access roads.

Notes:
- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

486(a) Submit As Constructed Plans
Submit to Development Assessment "As Constructed" plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with relevant Brisbane Planning Scheme Codes/Policies.

Timing: Upon completion of the work

**Refuse Collection - Kerb Side (external road or internal private road)**
Refuse and recycling bins for the proposed development are to be collected from the kerb side unless alternative refuse collection arrangements are made with Brisbane City Council’s Waste Services. Bin collection pads are to be constructed, for purposes of storing the bins on collection days, as may be required for the rear lots. The pads are to be located behind the kerbs, alongside the rear access pavement, measuring 2.0m x 0.8m (catering for 1 general and 1 recycling bin) for each dwelling.

**Repair Damage To Kerb, Footpath Or Road**
Repair any damage to existing kerb and channel, footpath or roadway (including removal of concrete slurry from footways, roads, kerb and channel and stormwater gullies and drainlines) and re-instatement existing traffic signs and pavement markings that have been removed or damaged during any works carried out in association with the approved development.

**Works for Transport Infrastructure - Non-Trunk Internal Roadworks**
Provide the following Roadworks, Stormwater Drainage, Footpaths and Pathways with any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, and the following requirements:

(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 50 km/hr maximum);

(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 50 km/hr maximum);

Note: The 16 metres wide Neighbourhood Access Road is to be extended to Stage 2C up to Lot 255.

(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area.

(iv) A 6.0 metres wide pavement of minimum Type A standard for the provision of a fire management access and maintenance as shown in the approved plans.

Notes:
- Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series)

- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

489(a) Submit Functional Layout Drawings
Submit functional layout plans showing the extent of all proposed Roadworks.

Timing:
Prior to site/operational/building work commencing

Note:
Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

489(b) Submit Roads and Drainage Plans
Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:
Prior to site/operational/building work commencing

489(c) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing:
Prior to site/operational/building work commencing

489(d) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off-maintenance" as a Council asset, by Development Assessment.

Timing:
Prior to On-Maintenance Inspection

489(e) Submit As Constructed Plans
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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</table>
| **489(f) On Maintenance Acceptance** | Provide the following in relation to the on maintenance acceptance of the asset:  
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment.  
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the work.  
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies.  
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.  
Timing: Prior to On-Maintenance Inspection. |
| **489(g) Off-Maintenance Acceptance** | On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.  
Timing: On completion of the maintenance period. |
| **Comment** | The design speed for 14m wide local roads and 16m neighbourhood roads should be 40km/hr as per the Traffic and Transport PSP (and also the new BCC City Plan Infrastructure Design PSP). As such item (i) and (ii) has been amended to reflect the appropriate speed limit. As the emergency service track will only be available for emergency vehicles only and not as an alternate emergency access for private vehicles, it is considered that a sealed track is more appropriate than a Type A standard pavement. This will ensure that the track is not used for anything other than the stipulated purpose. For clarity we have amended condition 489(a) to ensure that the functional layout drawings are included as part of the operational works package, and not a separate package required prior to this time. As Council are aware in some instances the design outcomes achieved for the site are performance outcomes that are not specifically in accordance with standard Council specifications and standards. As such the condition has been amended throughout to reflect outcomes agreed with Council through the inclusion of the following words: *for as otherwise approved by Council*.  
Condition 489(f) has also been amended to remove the last bullet point as it is considered that this is covered by the off-maintenance condition that follows in point g). |
| **Proposed Condition** | Provide the following Roadworks, Stormwater Drainage, and any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, and the following requirements:  
(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum);  
(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 450 km/hr maximum with provision as an interim bus route, as may be required, for bus access);  
Note: The 16 metres wide Neighbourhood Access Road is to be extended to Stage 2C up to Lot 255.  
(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area;  
(iv) A 6.0 metres wide pavement of minimum Type A standard sealed track for the provision of a fire management access and maintenance as shown in the approved plans.  
Notes: Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series) or as otherwise approved by Council.  
This condition is imposed under Section 665 of the Sustainable Planning Act 2009. |
| **489(a) Submit Functional Layout Drawings** | Submit functional layout plans showing the extent of all proposed Roadworks as part of the Operational Works application.  
Timing: Prior to site/operational/building work commencing.  
Note. Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking. |
| **489(b) Submit Roads and Drainage Plans** | Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings or as otherwise approved by Council, checked and certified by a Registered Professional Engineer of Queensland-Civil.  
Timing: Prior to site/operational/building work commencing. |
| **489(c) Submit Signs and Pavement Plans** | |
Submit and obtain endorsement from Development Assessment for engineering drawings prepared and checked by a Registered Professional Engineer of Queensland in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the Bioretention Technical Design Guidelines (Water by Design). The design must provide for safe egress into and out of the treatment facility. All Bioretention basins are to:
- provide concrete driveways for safe and efficient maintenance including vehicle access from the nearest road reserve to filter level,
- provide gross pollutant traps at all stormwater inlets from roads,
- design all outlet pits for a minimum 2 year ARI flow without overtopping spillways, and the spillway designed to safely convey the 50 year ARI peak flow,
- ensure the basin (including embankments and retaining walls) is located outside of the 10 year ARI flood extent within any waterway,
- provide scour control and tail-out channels in accordance with Councils Natural Channel Design Guidelines.

### 490(a) Bioretention Basin Landscaping
Submit and obtain endorsement from Development Assessment, landscape plans for the bioretention basins concurrently with the engineering drawings.
Timing: Prior to site/operational/building work commencing

### 490(b) Implement Approved Drawings
Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.
Timing: Prior to On-Maintenance Inspection

### 490(c) On-Maintenance Inspection
Contact Development Assessment to arrange an On-Maintenance inspection.
Timing: Prior to On-Maintenance Inspection

### 490(d) Maintenance Period
Provide the following in relation to the maintenance period:
- The maintenance period will be 24 months upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment. The maintenance period ends when the works are accepted Off-Maintenance by Development Assessment.
- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin.
- The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.
- Submit “As Constructed” plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the approved plans.
Timing: From acceptance of On-Maintenance period

### 490(e) Off-Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing: On completion of the maintenance period.

<table>
<thead>
<tr>
<th>Comment</th>
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<tbody>
<tr>
<td>The condition seeks the provision of gross pollutant traps (GPTs) at all stormwater inlets from roads. It is considered unreasonable to require this, and it does not accord with the proposed stormwater management strategy. There are substantial construction and maintenance cost implications with an increased number of GPTs. The bullet point requiring the inclusion of GPTs has been deleted as per below.</td>
</tr>
<tr>
<td>Requiring the concurrent lodgement of engineering and landscaping plans will create delays for the development. General practice is that the landscape operational works applications are lodged with Council following the lodgement of the engineering drawings. Approval of the engineering drawings does not occur until landscape OPW is lodged. As such the wording has been amended below to allow for the delay in finalising landscape detailed design following completion of the engineering drawings.</td>
</tr>
<tr>
<td>The maintenance period for the water quality treatments has been amended to reflect standard practice of 12 months, followed by a 12 month period for planting establishment. It is considered that the standard maintenance periods can be applied to this aspect of the development.</td>
</tr>
<tr>
<td>Proposed Condition</td>
</tr>
<tr>
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<td>490(b) Implement Approved Drawings</td>
</tr>
<tr>
<td>Construct and maintain the works in accordance with the endorsed engineering plans and the relevant Brisbane Planning Scheme Codes/Policies and Councils Water Quality Objectives to be accepted On-Maintenance and Off-Maintenance as a Council asset by Development Assessment.</td>
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<td>Timing: Prior to On-Maintenance Inspection</td>
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<tr>
<td>490(c) On-Maintenance Inspection</td>
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<tr>
<td>Timing: Prior to On-Maintenance Inspection</td>
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<tr>
<td>490(d) Maintenance Period</td>
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<tr>
<td>Provide the following in relation to the maintenance period:</td>
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<tr>
<td>- The maintenance period will be 24 months 12 months, followed by a 12 month establishment period for planting upon completion of the landscaping/planting works at which time the works are accepted On-Maintenance by Development Assessment. The maintenance period ends when the works are accepted Off-Maintenance by Development Assessment.</td>
</tr>
<tr>
<td>- Where a bioretention basin is proposed, the subsoil drains are to be flushed and an infiltration test must be conducted in at least three (3) locations in the basin. The average hydraulic conductivity of such tests must be in accordance with the modelling assumptions (e.g. generally in excess of 180 mm/h) before it will be accepted off maintenance.</td>
</tr>
<tr>
<td>- Submit “As Constructed” plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the approved plans.</td>
</tr>
<tr>
<td>Timing: From acceptance of On-Maintenance period</td>
</tr>
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</tr>
<tr>
<td>Timing: On completion of the maintenance period.</td>
</tr>
</tbody>
</table>

Works for Stormwater Infrastructure - Non-Trunk
Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:
- Runoff from the site and external catchments is to be managed in accordance with approved engineering plans to ensure there will be no adverse impacts on neighbouring properties.
- All allotments and roads are to be designed and constructed to have the appropriate freeboard to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek/waterway flood event, whichever is the higher flood level.
- A satisfactory lawful point of discharge has been provided via discharge to Council owned land (drainage reserve, road reserve) or stormwater easement designed to accommodate developed flows.

Notes:
This condition is imposed under Section 665 of the Sustainable Planning Act 2009.
491(a) Submit Drawings for Endorsement
Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil. 
Timing: Prior to site/operational/building work commencing

491(b) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on maintenance" and "off maintenance" as a Council asset, by Development Assessment.
Timing: Prior to On-Maintenance Inspection

491(c) Submit As Constructed Plans
Submit "As Constructed" drawings including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
Timing: Prior to On Maintenance Acceptance

491(d) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment.
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works.
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies.
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.
Timing: Prior to On-Maintenance Acceptance

491(e) Off Maintenance Inspection
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.
Timing: On completion of the maintenance period

492 Ponding of stormwater
Adjoining properties and roads are to be protected from ponding or nuisance from stormwater as a result of the works. Ensure the stormwater runoff from the site does not adversely impact on flooding or drainage (peak discharge and duration up to the 100 year Average Recurrence Interval) of properties that are upstream, downstream or adjacent to the site.
Notes:
- If remedial works are required that involve drainage, drawings are to be submitted and approval obtained from Development Assessment, to provide a means to rectify the site drainage.
- This condition is imposed to ensure that the developer is aware that they are responsible for all remedial works required as a result of any site works and, that they must protect neighbouring properties and roads from ponding and nuisance water from the proposed development.

493 Public Lighting
Lodge street lighting design drawings showing the proposed public lighting system in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and obtain approval from the City Lighting, Asset Services.

493(a) Agreement with Supplier
Enter into an agreement with an electricity supplier and provide a public lighting system in accordance with the approved lighting design plans.

494 Service Conduits and Mains
Supply and install all service conduits and meet the cost of any alterations to public utility mains, existing mains, services or installations required in connection with the approved development in accordance with the relevant Brisbane Planning Scheme Codes/Policies. This includes:
- the provision of all services and/or conduits along the full length of any rear allotment access or access easement.
- the relocation of any fire hydrant and/or valves from the development’s vehicular footway crossings if applicable.
- the retention and/or relocation of any existing foul water lines that currently exist within the site.
Note. Applicants should liaise with the appropriate service authorities. Typical underground services and/or conduits to be constructed include power, phone, telecommunications, sewer, stormwater and gas if applicable.

494(a) As Constructed Drawings
Submit to Development Assessment "As Constructed" drawings including an asset register, approved by a Registered Professional Engineer Queensland that are in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and any other relevant infrastructure requirements, showing the works required by this condition.

495 Conduit for Brisbane City Council
Provide a single underground conduit (100mm diameter UPVC class PN9) in favour of Brisbane City Council on at least one side of all Neighbourhood Access Roads (Bus Route only), Industrial Access Roads and Major Roads in the Council Road Hierarchy, in accordance with the following:
- The conduit must be laid in the telecommunication alignment of the footpath, on the kerb side of the Telecommunication Carrier conduit or in an agreed shared trench arrangement with the Telecommunication Carrier and other Utilities as may be relevant, subject to the approval of Development Assessment.
- The conduit must bypass the Telecommunication Carrier pits.
- Pits (minimum size, Type 4 as per BCC Drawing UMS 600/031) with lids (as per Drawing UMS 600/030 - but Class B instead of Class C) must be installed at the head ends of the conduit, both sides of road crossings, at intersections and at other locations that may be specified by Council.
- The conduit must be plugged at each pit.
- The conduit must be located and installed in such a way that facilitates the installation of cable and additional pits in the future.

495(a) Submit "As Constructed" Drawings
Submit to Development Assessment, "As Constructed" drawings, including an asset register, approved by a Registered Professional Engineer Queensland, and in accordance with the requirements of this condition and the relevant Brisbane Planning Scheme Codes/Policies.

496 Telecommunications
Submit to Development Assessment, documentary evidence issued by a relevant telecommunication carrier to verify that the necessary underground telecommunication services have been supplied within and adjacent to the development.

**Provide Rear Lot Access**

Provide access to the rear lot in accordance with the following:

- Construct a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
- The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover.

**Comment**

It is considered more relevant and reasonable to require access to rear lots to be constructed in accordance with the Brisbane City Council standard drawings rather than specifying a construction standard in the condition. This allows for amendments to design standards over the life of the project.

**Proposed Condition**

Provide access to the rear lots in accordance with the following by constructing a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover.


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**Standard Advice**

**Concurrence Agency Conditions**

The Department of State Development Infrastructure and Planning as concurrence agency has imposed the conditions contained in the letter dated 2 December 2014.

**Construction Noise and Dust Emissions**

Pursuant to the Environmental Protection Act 1994, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emission are accordance with the requirements of the Act. The Environmental Protection Act 1994 prescribes that:

1. A person must not carry out building work in a way that makes an audible noise:
   a) on a business day or Saturday, before 6.30a.m. or after 6.30p.m; or
   b) on any other day, at any time.
2. The reference in subsection (1) to a person carrying out building work:
   a) includes a person carrying out building work under an owner-builder permit; and
   b) otherwise does not include a person carrying out building work at premises used by the person only for residential purposes.

**Advice Agency Condition**

Powerlink acting as an advice agency for the development has imposed conditions contained in the letter dated 18 July 2014.

**Water & Wastewater Services Ĵ Concurrence Agency Requirements**

**Grant Easements**

Grant the following easement(s) for water supply or sewerage purposes.

- Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
- The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**GUIDELINE**

This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

**PROOF OF FULFILMENT**

Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

**Comment**

It is considered that the timing impacts referenced in this condition may delay plan sealing. Delays may be experienced where live works are still being undertaken after plan sealing but prior to on-maintenance (through the bonding process). As such we seek the reference to "Prior to the relevant Council signing the plan of subdivision" to be removed from the timing, as suggested below.

**Proposed Condition**

Grant Easements

Grant the following easement(s) for water supply or sewerage purposes.

- Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
502 Construct Waste Water Non-Trunk Infrastructure System

Construct a Sewerage Non-Trunk infrastructure system necessary to provide a sewerage connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

GUIDELINE
This condition has been imposed to ensure that sewerage infrastructure is in place to serve the development and that each lot has a sewerage property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

PROOF OF FULFILMENT
Connection Certification from QUU

502(a) Wastewater Network Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(c) Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities wastewater network infrastructures.
(d) Transfer ownership of the wastewater reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network and/or property service infrastructure. This includes:
   (i) where not required for existing or future development, removing existing wastewater network and/or property service infrastructure and sealing any connection(s) to remaining reticulation infrastructure;
   (ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
   (iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

502(b) Wastewater Property Service Infrastructure (Non-trunk Infrastructure)

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(c) Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland Urban Utilities wastewater reticulation system.
(d) Each lot must have a separate wastewater property service connection which commands the whole of each lot.
(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.
(f) If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.
(g) Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.
(h) Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.
(i) Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words "Pipe connection 2 M."

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

502(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 502(d) Wastewater Network and Property Service Infrastructure- Sizing
The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

**Timing:**
Prior to the construction of network or property service infrastructure.

### 502(e) Wastewater Infrastructure- Design and Construction Standards
(a) The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 502(f) Wastewater Network Infrastructure- CCTV Inspection
(a) Conduct pressure/vacuum testing of wastewater mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
(b) Pressure/vacuum testing of wastewater mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.
(c) The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

**Timing:**
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

### 502(g) Wastewater Network Infrastructure- Pressure Testing
(a) Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.
(b) CCTV survey must be carried out in accordance with the WSA 05:2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.
(c) The Applicant must repair all defects in accordance with the approved engineering restoration plan and schedule at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

### Comment

**Proposed Condition**

**Point 502(b)(h) Delete.** Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

### 502(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 36(e) Wastewater Infrastructure- Design and Construction Standards
The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.
Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

(a) All work on or near live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.

(b) A live infrastructure asset is an asset that carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.

(c) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.

(d) All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.

(e) Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.

(f) All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

Timing:
Prior to and at the time of Live Works.

Comment
We seek amendments to this condition to provide certainty on when QUU must be notified about works within the vicinity of their live QUU infrastructure. It is considered that the definition of ‘near’ is not clear enough to determine when QUU will need to be notified of works. As such we seek amendments to the condition as follows. Additionally we have added further clarity to the timing, to provided certainty and direction for the engineers, both designing and assessing compliance.

Proposed Condition
Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

a) All work on or near within 1 metre of live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.

b) A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.

c) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.

d) All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.

e) Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.

f) All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

Timing:
Prior to and at the time of Live Works in accordance with the SEQ Water Supply and Sewerage Design and Construction Codes at the time of approval.

504 Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

504(a) Design Approval- Major Works

(a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

(b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

Timing:
Prior to the construction of water or wastewater infrastructure.

504(b) Pre-Construction Review - Major Works

(a) Submit pre-construction plans and associated supporting information (Pre- Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

(b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).

(c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre- Construction Package if necessary.

(d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

Timing:
Prior to the construction of water or wastewater infrastructure.

504(c) Construction Certification- Major Works

(a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).

(b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

504(d) End of Maintenance- Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.
### 504(e) Works Inspections - Major Works

(a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:
   (i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);
   (ii) Pouring of thrust blocks;
   (iii) Pressure testing of pipelines;
   (iv) Disinfection of water mains; and
   (v) Construction completion inspection.

(b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities has inspected the works and other (non-Hold Point) works inspections.

(c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

(d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.

(e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

**Timing:**
Prior to and during construction of water or wastewater infrastructure.

### Comment

The condition requires the works to be inspected by and certified by a suitably qualified RPEQ, as such including these hold points would only add unnecessary time delays to the delivery of the project. The amendments sought to this condition seek to remove any additional hold points by QUU.

It is additionally requested that the timing sections of this condition are modified (as provided below) so that the timing refers to the compliance of work in accordance with the SEQ water and sewerage design and construction codes at the time of approval. This will avoid any potential issues with rework, redesign, and reconstruction resulting from updated standards after the time of approval. This is effectively to avoid any chance of retrospective changes being sought to work already completed.

The condition has been amended accordingly below.

### Proposed Condition

#### Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

### 504(a) Design Approval - Major Works

1. Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
2. Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

**Timing:**
Prior to the construction of water or wastewater infrastructure.

### 504(b) Pre-Construction Review - Major Works

1. Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.
2. Schedule a pre-start meeting with at least 3 business days' notice to enable Queensland Urban Utilities to attend (if required).
3. Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.
4. No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

**Timing:**
Prior to the construction of water or wastewater infrastructure.

### 38(c) Construction Certification - Major Works

504 Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).

1. The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 504(d) End of Maintenance - Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

### 504(e) Works Inspections - Major Works

1. Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:
   (iv) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);
   (v) Pouring of thrust blocks;
   (vi) Pressure testing of pipelines;
   (i) Disinfection of water mains; and
|GUIDELINE| This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrency agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**

**Connection Certification from QUU**

### 505(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

- **(a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDI of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **(b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **(c)** Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
- **(d)** Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- **(e)** If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
  - (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
  - (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
  - (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
  - (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriage way as specified in current standards.

**Timing:**

Prior to and during construction of water or wastewater infrastructure.

### 505(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

- **(a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRD(J) of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **(b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **(c)** Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.
- **(d)** Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.
- **(e)** Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.
- **(f)** Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.
- **(g)** Provide a separate master meter for each body corporate where there are multiple body corporates in each development.
- **(h)** Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.
- **(i)** If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.
- **(j)** Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.
- **(k)** Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

**Timing:**

Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 505(c) Drinking Water Network Infrastructure and Property Service Infrastructure Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

505(d) Drinking Water Network Infrastructure and Property Service Infrastructure Sizing
The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

505(e) Drinking Water Infrastructure - Design and Construction Standards
(a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

505(f) Drinking Water Network Infrastructure - Water Quality Testing
(a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
(b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

505(g) Drinking Water Network Infrastructure - Pressure Testing
(a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
(b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority. The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment
The condition has been amended below to more appropriately manage the timing of compliance in accordance with the SEQ water and sewerage design and construction codes, being the time of approval. This is requested to avoid any potential issues with rework, redesign and reconstruction resulting from updated standards after the time of approval.

**Proposed Condition**

**Construct Water Supply Non-Trunk Infrastructure System**

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions at the time of approval:

**GUIDELINE**

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**

Connection Certification from QUU

505(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:

   (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure on or within the development site;

   (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;

   (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
(iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

505 (b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

| a) | This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009. |
| b) | This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009. |
| c) | Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system. |
| d) | Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box. |
| e) | Provide a separate drinking water property service connection which commands the whole lot for each proposed lot. |
| f) | Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards. |
| g) | Provide a separate master meter for each body corporate where there are multiple body corporates in each development. |
| h) | Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems. |
| i) | If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings. |
| j) | Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities. |
| k) | Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities. |

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

505 (c) Drinking Water Network Infrastructure and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

505 (d) Drinking Water Network Infrastructure and Property Service Infrastructure-Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

505 (e) Drinking Water Infrastructure - Design and Construction Standards

| a) | The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code. |

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

505 (f) Drinking Water Network Infrastructure - Water Quality Testing

| a) | Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code. |
| b) | Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. |

Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

505 (g) Drinking Water Network Infrastructure - Pressure Testing

| a) | Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code. |
b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

### Consent and Permits prior to Construction of Water and Wastewater Infrastructure

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

#### 506(a) Land Owner’s Consent

- **(a)** Owner’s consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
  
- **(b)** Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Timing:
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

#### 506(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Timing:
Prior to construction of relevant water or wastewater infrastructure.

### Proposed Condition

#### Consent and Permits prior to Construction of Water and Wastewater Infrastructure

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

#### 506(a) Land Owner’s Consent

- **(a)** Owner’s consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
  
- **(b)** Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

Timing:
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

#### 506(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

Timing:
Prior to construction of relevant water or wastewater infrastructure.

### Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

- **(a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
  
- **(b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
  
- **(c)** Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.
  
- **(d)** The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### Proposed Condition

#### Land Dedication for Non-Trunk Water and Wastewater Infrastructure

The applicant does not consider this condition to be relevant to this development. The condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and / or in accordance with the standards and guidelines prescribed.

It is on this basis that we seek the deletion of this conditions in its entirety.
Delete Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCF of the South East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Land required for any water or wastewater non-trunk infrastructure to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

508 Temporary Works for Water and Wastewater Infrastructure

(a) Provide temporary water and wastewater infrastructure, if applicable, and all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.

(b) Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.

(c) A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.

(d) Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

509 Terminating Infrastructure for Water and Wastewater

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Comment
It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required. As such we seek deletion of this conditions in its entirety.

Proposed Condition

Delete Terminating Infrastructure for Water and Wastewater

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner’s consent.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

510 Maintenance Period for Water and Wastewater Infrastructure

(a) Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and maintenance schedule (lodged as part of the As-Constructed Package), relevant engineering standards and sound engineering practice.

(b) The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.

(c) Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.

(d) Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.

(e) Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.

Timing:
Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

511 Maintenance Bond

(a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated consequential loss) for at least the value specified in (c) below.

(b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.

(c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

Comment
It is considered that bank guarantees for maintenance periods are to protect against physical defects and faults. It is not considered reasonable to include defects and faults in the design, as QUU will have had the opportunity through the assessment of the DA (conceptual design) and then additionally through the OPW process to review and comment on the detailed design proposed. As such a bank guarantee associated with works should only cover defects and faults not associated with the approved detailed design. The amended wording to the condition is provided below.

Proposed Condition

| a) | Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials and workmanship and design (including any associated consequential loss) for at least the value specified in (c) below. |
| b) | The Maintenance Bond must remain valid for the full term of the Maintenance Period. |
| c) | The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost. |

Timing: Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

<table>
<thead>
<tr>
<th>512</th>
<th>Payment of Fees and Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay fees and charges calculated in accordance with the Queensland Urban Utilities Water Nertsv Plan.</td>
<td></td>
</tr>
<tr>
<td>Timing:</td>
<td>At the times specified in the Queensland Urban Utilities Water Nertsv Plan.</td>
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</tbody>
</table>

| 513 | Demolish or Relocate Buildings |
| Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings. |
| Timing: | Prior to any new building work occurring (MCU or BW) or prior to Council’s notation on the plan of subdivision (ROL) |

Comment
This is a standard condition and is tied to ensuring the sites are appropriately cleared of existing buildings prior to the creation of the approved development. Prior to any building work occurring is a sufficient time frame without the uncertainty added to timing. The condition has been amended to reflect this.

Proposed Condition
Demolish or relocate buildings/structures on the site in accordance with the approved drawing(s). The removal of buildings/structures includes the removal of all existing concrete slabs, foundations and footings.

Timing: Prior to any new building work occurring (MCU or BW) or prior to Council’s notation on the plan of subdivision (ROL).

| 514 | Staging of Development |
| Stage 2D cannot be plan sealed until all conditions relating to Stage 2C have been complied with. |
| Timing: | All conditions relating to the earlier stage have been complied with. |

| 515 | Approved Drawings & Documents |
| A legible copy of the approved drawings and documents bearing “Council Approval” and the Development Approval Conditions package is to be available on site. Note. This condition is imposed to ensure compliance with the development conditions of approval. The copy of the conditions and drawings should be located in any site management office or with the site foreman. Any copies of conditions or drawings that are illegible shall be deemed to be non compliance with this condition of approval. |

| 516 | Carry Out The Approved Development |
| Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s). Note. This development approval may include the location of fences, retaining walls and/or external walls of buildings on the boundary of a lot. This approval does not constitute permission to enter neighbouring properties to carry out the construction (including associated drainage and earthworks) or maintenance activities. Permission to enter neighbouring properties must be obtained from relevant property owners. |

| 517 | Complete All Operational Work |
| Complete all operational work associated with this development approval, including work required by any of the conditions included in the Conditions Package. Such operational work is to be carried out generally in accordance with the approved drawing(s), and/or documents or, if requiring a further approval from the Council, in accordance with the relevant approval(s). |

Ecology

| 518 | Submit Vegetation Management Plan |
| Submit to Development Assessment and receive approval for a Vegetation Management Plan (VMP). The VMP is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation as per the Ecological Assessment Guidelines (referenced on Council’s website) for the protection, retention and/or management of vegetation on the site and in accordance with the approved Vegetation Retention Plan amended in red on 30 October 2014 and include the following information: |

- The extent of the VMP is to include evaluation of all areas including proposed road reserves, external works and development areas. |
Submit to Development Assessment certification that the approved VMP has been implemented.

518(c) Certify Approved Works
Submit to Development Assessment certification that the approved VMP has been implemented.

519 Submit Rehabilitation Plan
Submit to Development Assessment and receive approval for a Rehabilitation Plan. The Rehabilitation Plan is to be in the form of scaled plans (one overall plan and detailed plans for each development stage is required) and supporting documentation that includes at least the following information for the area identified on Concept Rehabilitation Plan amended in red 30/10/2014: This Rehabilitation Plan is to include all rehabilitation works for stages 1A, 1B, and 1C as identified on Proposal Plan_Stage One Overall Canvey Road, Upper Kedron (Drawing No. CDW01_44C) as amended in red.

- Description of proposed rehabilitation, including earthworks, restoration methods (revegetation and assisted regeneration where appropriate);
- Details of the proposed rehabilitation schedule, staging, including site preparation, planting and establishment; plant species names, stock size, quantities, locations; a maintenance program (5 years) for all rehabilitation works;
- Details of rehabilitation outcomes, performance monitoring and assessment (minimum 9 visits within the first 24 months every 4 to 6 weeks); survival thresholds (minimum 90% survival required); replacement planting triggers (minimum requirement to keep survival above 90% and replacement within 4 weeks of issue being identified); target minimum tree height and canopy cover to be achieved at the end of 5 year maintenance period;
- Stabilisation methods for all areas of exposed soil surface;
- Details of special habitat features to be provided for the enhancement/restoration of habitat values including: coarse woody debris (e.g. root balls; hollows; logs; branches) to be salvaged from clearing activities and reused; nest boxes (best industry practice). A minimum of 10 boxes per ha required to be installed in dedication corridors to achieve a hollow density of 32 hollows per ha. Additional nest boxes will be required in areas having a low natural hollow density. Consultation with an experienced fauna consultant is required to determine the location and type of next box required, and appropriate nest box density for each area of corridor to be dedicated; nest box installation and maintenance, monitoring and reporting will also be required over a 5 year maintenance period. Habitat features such as nest boxes are to be provided for each stage during preparation works for site rehabilitation. 
- Specification notes on site preparation; plant quality assurance including local provenance; plant stock handling; planting methodology; mulching; threat management (including tree guarding 1 600mm corflute with hardwood stake; watering as required to prevent plant stress); weed management; tree guard removal and maintenance; establishment and maintenance. All restoration works are to be in accordance with the SEQ Ecological Restoration Framework and industry best practice.
- Evidence that the rehabilitation plan has been prepared by a bushland restoration specialist/ecologist with a minimum of 5 years experience in ecological restoration.
- Evidence that the delivery of rehabilitation works will be undertaken by a bushland restoration specialist with a minimum of 5 years experience in ecological restoration.

- Bushland restoration works to target areas that are currently deficient of an existing vegetation structure and floristic composition that is commensurate with the Regional Ecosystem identified on the site or an alternative Regional Ecosystem as determined by a suitably qualified and experienced bushland restoration practitioner or Ecologist with a minimum of 5 years experience in ecological restoration. Rehabilitation methods must use a bushland restoration approach that will ultimately aim to achieve a vegetation structure and floristic composition commensurate with the Regional Ecosystem identified on the site. This will be achieved by including the establishment of as many flora species from all strata/stratum (tree, shrub, and ground layer) as commercially available; removal and management of all exotic flora species within the maintenance period; introduction of coarse woody debris and leaf litter from clearing site as appropriate. Alternative regional ecosystems may be appropriate for areas with landforms influenced by unnatural levels of soil moisture or altered landform.

Regional Ecosystems Technical Descriptions and Biocondition Benchmarks documentation will be used to guide planting density, flora species selection, flora species dominance and distribution. Planting densities higher than those recorded in Regional Ecosystem Technical Descriptions will be appropriate in more open areas to account for 10% mortality and to assist with the development of a robust canopy.

519(a) Implement Approved Plan
520 Fauna Spotter
A Fauna Spotter, qualified by the relevant Queensland State Government Authority, shall inspect the site to ensure identification of any wildlife (fauna) or habitat features (e.g. nests, tree hollows) prior to clearing.

520(a) Prior to Vegetation Clearing
Clearing operations and other site works must not commence until the Fauna Spotter has certified that the site has been fully inspected and any necessary fauna protection measures or relocation procedures implemented. Submit to Development Assessment a Fauna Spotter Report to demonstrate compliance with this condition.

520(b) Fauna Spotter on Site
The fauna spotter is to be present on site during all clearing operations to monitor works and to respond to any situations that may arise as determined by Development Assessment, based on the findings of the fauna spotter's pre-clearing certification report.

520(c) Fauna in Work Area
If any animals are identified in trees to be removed during clearing operations, work shall cease immediately on that tree. The Fauna Spotter must supervise the relocation of any identified animal prior to clearing operations recommencing.

520(d) Certification
Provide certification that works have been undertaken in accordance with this condition.

521 Natural Assets Local Law (NALL) - On Site
Lodge and receive approval from Development Assessment, an application to Carry Out Works on Protected Vegetation on the site.

522 Submit Wildlife Movement Solutions Plan
Submit to Development Assessment and receive approval for a Wildlife Movement Solutions Plan (WMSP). The WMSP is to include an overall plan of all Wildlife Movement Solutions (WMS) planned for the development including the WMS identified on the Wildlife Movement Solutions Concept Plan amended in red on 31/10/2014. Detailed design drawings are required for each development stage with WMS infrastructure. Submit an overall WMSP and detailed WMSP and report for Stage 2D outlining wildlife movement solutions infrastructure in conjunction with operational work approvals. Obtain approval from the Delegate, Development Assessment for the detailed report and plans. The detailed design for each structure is to be in the form of scaled plans and supporting documentation. Design options must be integrated with required exclusion fencing and include warning signage at crossing points. The detailed designs must also be generally in accordance with the Fauna Sensitive Road Design Manual - Volume 2: Preferred Practices developed by the Department of Main Roads. The plans must include, but not be limited to, the following information:

- Description of the fauna exclusion/movement fences
- Location of warning signage at crossing points;
- Description hardwood ledges and other structures that must be installed inside the culverts.
- Description of location, dimensions and openness of the structure to enable wildlife to enter the structure;
- Description of the topography and vegetation type to be planted at entry points to the culverts. The vegetation must attract target species (wallabies, possums, koalas, echidnas, etc.) to the structure and provide food source and shelter. Clear and workable plans representing rehabilitation on the ground including details of the proposed rehabilitation schedule, staging, plant species, stock size, densities, quantities and locations;
- Description of proposed rehabilitation, including earthwork, methods and objectives;
- A detailed 5 year maintenance period and monitoring program is to be provided to maintain the vegetation at the entry points to the culvert;
- Include details of special habitat features to be provided for the enhancement/restoration of habitat values;
- Description of the weed management program, and
- Details of associated fauna furniture must be included to provide opportunities for a broad range of species to roads.
Proposed Condition

Bushfire Management Covenant
Enter into a Covenant by Registration pursuant to Section 97A of the Land Title Act (1994) with Brisbane City Council as Covenantee. The Covenant is to be able to be immediately registered in the Department of Environment and Resource Management, Department of Natural Resources and Mines and to be in term satisfactory to the Manager, Brisbane City Legal Practice, to ensure management of bushfire risk within the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan: Stages 1 and 2 prepared by Place Design received 15/10/2014 at the same time as providing the covenant.

This Covenant must detail the responsibilities, liabilities, measures, remedies and intents as necessary to ensure the appropriate management of bushfire risk within the covenant area. The Covenant shall address the following issues:
Appropriate management of bushfire risk in accordance with the approved Bushfire Management Plan in the Covenant area; including provision of building standards AS3959 Construction of buildings in bushfire-prone areas to specified Bushfire Attack Level (BAL) ratings.

Comment
Amendments to this condition are sought to clarify timing of covenants. The condition seeks covenants to be immediately registered in the Department of Environment and Resource Management. It is considered reasonable to require covenants to be placed on titles at time of registering titles with the relevant State Government body.
Additionally the first paragraph of the condition references the DERM when the relevant government department is Department of Natural Resources and Mines (DNRM).
Provide a survey plan immediately registrable with the Department of Natural Resources and Mines in accordance with the identified Bushfire Asset Protection Zone (APZ) on the site in accordance with the with the proposed lots identified on Figure 3: Bushfire Risk Treatments, from the Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014 at the same time as providing the covenant.

This Covenant must detail the responsibilities, liabilities, measures, remedies and intents as necessary to ensure the appropriate management of bushfire risk within the covenant area. The Covenant shall address the following issues:

Appropriate management of bushfire risk in accordance with the approved Bushfire Management Plan in the Covenant area; including provision of building standards AS3959 Construction of buildings in bushfire-prone areas to specified Bushfire Attack Level (BAL) ratings.

525 Arboricultural Requirements

The following arboricultural requirements are to be performed to ensure the long-term health and safety of trees to be retained:

525(a) Site Works

In consultation with Development Assessment, the Arborist is to direct the civil works contractor in relation to any service installation activities utilising alternative technologies such as directional-boring or under-boring using vacuum excavation or air-spade. The Arborist must be a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture)

525(b) Certification

Submit to Development Assessment, certification from a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture) that all necessary arboricultural works have been carried out in accordance with the requirements of all parts of this condition.

525(c) Vegetation Pruning

Any necessary pruning, tree surgery and other maintenance works to maintain health and stability of any trees to be retained, and to reduce potential hazards for future residents, is to be carried out in consultation with Development Assessment. All works must be performed by a suitably qualified arboricultural consultant (minimum AQF Level 5 Diploma in Arboriculture)

526 Land for Ecological and Waterway Corridors Infrastructure

Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron dated 27 February 2014, which forms the land depicted as Category 2 Corridor as shown on Approved Plan Proposal Plan_Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red). With the exception of crossings approved by the Council the land is to be free of encumbrances. Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

Comment

We seek administrative changes to the wording of this condition to avoid the need to seek amendments in the future in order to achieve compliance with the relevant and appropriately referenced Infrastructure Agreement.

Proposed Condition

Land for Ecological and Waterway Corridors Infrastructure

Transfer at no cost to the Council, in fee simple, land for ecological and waterway corridors as required by the Infrastructure Agreement for Institutional Investments for land at Upper Kedron, originally dated 27th February 2014, and subsequently superseded with each revision following development approval of subdivision of land, which forms the land depicted as Category 3 Corridor as shown on Approved Plan Proposal Plan_Stage One Overall Canvey Road Upper Kedron, drawing number CDW01_UD44C, dated 14 October 2014 (as amended in red). With the exception of drainage infrastructure and crossings approved by the Council the land is to be free of encumbrances. Note: This condition is imposed under Section 348 of the Sustainable Planning Act 2009 on the basis that it requires compliance with an infrastructure agreement relating to the land.

527 Bushfire Management Plan

i) Implement and carry out the works in accordance with approved Bushfire Management Plan 1 Stages 1 and 2 prepared by Place Design received 15/10/2014;

ii) Submit certification to Development Assessment certifying that the approved Bushfire Management Plan has been implemented.

528 Stormwater Quality - Submit Management Plan

Submit to Development Assessment and receive approval for an updated Site Based Stormwater Quality Management Plan (SB SMP). The plan must be prepared by a suitably qualified and experienced professional and be in accordance with the requirements of the State Planning Policy 4/10 Healthy Waters, the State Planning Policy 4/10 Guidelines for Healthy Waters and Urban Stormwater Quality Planning Guidelines 2010 and be generally in accordance with approved plan B14159_W-SK01 fConcept Stormwater Quality Management Plan For Stage 1 & 2 by Brown Consulting QLD dated 14th October 2014. The SB SMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, buildouts or other speed control devices) in the streetscape of all areas within Stage 2A, 2B, and 2C consisting of street tree WSUD pits, and bioRetention basins. WSUD devices in the road reserve are to be located to ensure no services are constructed through the device or filter material. BioRetention basins are to be designed in accordance with the Water By Design Bioretention Technical Guidelines and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioRetention basins are to receive pre-treatment via a gross pollutant trap.

528(a) Implement Approved Plan

Implement and maintain the approved Site Based Stormwater Quality Management Plan.

528(b) Certification

Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.

Comment

The BCC has amended in red markups on the concept stormwater management plan suggests that additional at source treatment devices, beyond those already incorporated into the stormwater strategy are necessary for the development. It is considered that this is unnecessary for Stage 1A, 1B and 1C, and therefore seek the removal of references relating to at source treatment for these stages.

The Stage 2 conditions seek to restrict constructing services through these devices, which is unnecessary as it forms part of the infrastructure of the development.
The SBSMP is to include at source stormwater quality treatments (including WSUD treatments in street trees, build-outs or other speed control devices) in the streetscape of all areas within Stage 1A, 1B, and 1C consisting of street tree pits, and bioretention basins.

Bioretention basins are to be designed in accordance with the Water By Design "Bioretention Technical Guidelines" and located outside of the developed 10 year ARI flood extent in waterways, and avoiding any vegetation nominated to be retained. All bioretention basins are to receive pre-treatment via a gross pollutant trap.

109(a) Implement Approved Plan
Implement and maintain the approved Site Based Stormwater Quality Management Plan.

109(b) Certification
Submit to Development Assessment certification from a suitably qualified and experienced professional that all the treatments and measures recommended in the approved Site Based Stormwater Quality Management Plan have been implemented and constructed into the development.

### Landscape Architecture & Open Space Planning

#### Landscape Works in Corridor

Undertake works in the Category 2 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

#### 529(a) Submit Plan for Works in Corridor

Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the Corridor in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and the approved drawings for landscape concept. The Landscape Management and Site Works Plan must document the following:

**EXISTING SITE CONDITIONS**
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above- ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

**SITE PREPARATION**
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on- site until the corridor is accepted on-maintenance.

**NEW WORKS**
- 2yr, 5yr, 10yr, 20yr, 50yr and 100yr flood lines;
- Corridor embellishments chosen from Council’s standard suite. Refer to the subdivision and development guidelines and Brisbane Standard Drawings (BSD);
- Construction of vehicle barriers/bollards along corridor frontages to prevent unauthorised vehicular access in accordance with BSD 7093 for an Angle Top Hardwood Bollard;
- Provision of a lock-rail and associated vehicular crossover to the road frontage/s to allow maintenance access to all corridor areas in accordance with BSD 7055;
- Graphically show delineation between planting designated for rehabilitation planting and general corridor landscaping;
- 3 tiered planting to base of retaining walls to visually screen retaining walls;
- Measures to protect any downstream areas of corridor already constructed;
- Bank stabilisation/mulching methods including construction details;
- Planting to bio-basins;
- Tree protection fencing;
- Spot levels and gradient lines in all Corridor areas;
- Longitudinal and horizontal cross-sections through the Corridor at regular intervals;
- Cross-sectional treatment of creek invert;
- Certification from a Registered Professional Engineer of Queensland for the design of all proposed structures in the Corridor;
- Provision of electricity and water connections to the corridor;
- Location of proposed drainage and stormwater works within the corridor, including cross-sections and descriptions;
- Surface treatments, including the preparation of all open ground within the proposed corridor to ensure that it is level, topsoiled, grassed and suitable for mowing. Grassing is to achieve 80% coverage at the time of the on-maintenance inspection;
- Details and locations of proposed embellishments;
- Provision of a plant schedule listing all proposed plants by botanical name, quantity and size at time of planting.

**COSTING AND MAINTENANCE PROGRAM**

The plans are to provide details of a costing and maintenance program, including the following:

NDN Application I A003905687 I 390 Levitt Road, Upper Kedron Qld 4055
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

Timing:
Prior to site/operational work commencing

529(b) Pre Start Meeting
Arrange with Development Assessment for a Pre Start meeting.
Timing:
Prior to site/operational work commencing

529(c) Construct Approved Works
Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.
Timing:
Prior to acceptance of works on maintenance

529(d) On Maintenance Inspection
Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:
- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

Timing:
Prior to commencement of use (MCU) or prior to Council’s notation on the plan of subdivision (ROL)

529(e) On Maintenance Period
Provide 5 years’ maintenance to the works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period. Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing:
5 years from acceptance of on maintenance period

529(f) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing:
On completion of the maintenance period

Comment
During the assessment of the application it was agreed with Council that the analysis of the 2 year, 5 year and 100 year floodlines was sufficient. As such, it is considered unnecessary to require further analysis against the 10 year, 20 year and 50 year floodlines, and have therefore deleted these from this condition. Furthermore, the agreement to undertake a 5 year maintenance period was understood to be in relation to the areas of the site being rehabilitated, to ensure the protection and longevity of these particular species. It is not considered appropriate for a 5 year maintenance period to be enforced on the balance open space and landscape works within the corridors. On this basis the condition has been amended below to reflect a 2 year maintenance period on landscaped areas and a 5 year period on rehabilitation areas only.

Proposed Condition
Undertake works in the Category 3 Corridor, as indicated on the approved drawings and documents, in accordance with the requirements detailed in this condition and follow the actions and timings outlined below:

Submit Plan for Works in Corridor
Submit for the approval of Development Assessment a detailed Landscape Management and Site Works Plan for works in the 1A, 1B and 1C Corridor in accordance with the, the relevant Brisbane Planning Scheme Codes/Policies, Australian Standards and generally in accordance with the approved drawings. The Landscape Concept – Stage 1 and 2 received 15.10.2014 dwgs SK08 to SK17. The Landscape Management and Site Works Plan must document the following:

EXISTING SITE CONDITIONS
- Existing topography and land cover (including water bodies);
- Existing vegetation including species, location, height, spread, diameter at breast height and health;
- Location of existing under-ground and above-ground services within the proposed corridor; and
- Location and description of existing fencing and retaining walls within and abutting the corridor.

SITE PREPARATION
- Removal of deleterious matter or redundant structures, including those which may present a public liability risk;
- Proposed finished levels, including sections across and through the corridor at critical points;
- Location and description of proposed fencing and retaining walls within and abutting the corridor; and
- Construction of a star picket fence around the proposed corridor. This fence is to remain on-site until the corridor is accepted on-maintenance.

NEW WORKS
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>530 Provide Street Tree(s)</td>
<td>Submit to Asset Services and receive approval for a Street Tree Plan that provides details of street tree planting. Provide trees to all street frontages at spacings complying with the relevant Brisbane Planning Scheme Codes/Policies, or a minimum of one (1) tree per additional allotment frontage, whichever is the greater.</td>
</tr>
</tbody>
</table>

**COSTING AND MAINTENANCE PROGRAM**

The plans are to provide details of a costing and maintenance program, including the following:

- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan;
- Details of a 12-month Maintenance Plan for all proposed landscape works; and
- Detailed drawings are certified by a Registered Professional Engineer of Queensland as appropriate.

**Timing:**

Prior to site/operational work commencing

529(b) Pre Start Meeting

 Arrange with Development Assessment for a Pre Start meeting.

**Timing:**

Prior to site/operational work commencing

529(c) Construct Approved Works

 Carry out the works documented in the approved detailed Landscape Management and Site Works Plan.

**Timing:**

Prior to acceptance of works on maintenance

529(d) On Maintenance Inspection

 Contact Development Assessment to arrange an on maintenance inspection and obtain written acceptance by Council that the works have been accepted on maintenance. The following information must be provided to Development Assessment prior to the works being accepted on maintenance:

- Ensure that the works are constructed to a standard acceptable to council;
- Provide proof of Public Liability Insurance ($20 million) for the on maintenance period; and
- Provide certification by a Registered Professional Engineer of Queensland that the structural works are in accordance with the approved drawings.

**Timing:**

Prior to commencement of use (MCU) or prior to Council's notation on the plan of subdivision (ROL)

529(e) On Maintenance Period

 Provide 2 year maintenance to the landscape works and 5 year maintenance to the rehabilitation works from the time the works are accepted on maintenance by Council. Maintain the corridor in accordance with an approved maintenance program and rectify all defects identified at the on maintenance inspection and those arising during the on maintenance period.

Lodge a bond for the on maintenance period in accordance with the amount detailed in the approved Costing and Maintenance Program. The Corridor Maintenance Bond shall be calculated at 5% of the constructed corridor works plus $1.00 per square metre of dedicated corridor area. The minimum Corridor Maintenance Bond is $10,000. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

**Timing:**

2 year maintenance to the landscape works and 5 years to the rehabilitation works from acceptance of on maintenance period

529(f) Off Maintenance Inspection

 On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

**Timing:**

On completion of the maintenance period
530(a) Implement Approved Plan
Install new street tree(s) in accordance with the approved plan. Contact Asset Services to arrange an On Maintenance inspection and obtain written confirmation that the street tree(s) have been planted in accordance with the approved Street Tree Plan.

530(b) Maintain Tree(s)
Maintain street trees for a period of 12 months after planting. At the end of the 12 month maintenance period contact Asset Services to arrange an Off Maintenance inspection.

531 Landscape Works in Road Reserve
Provide Landscape Works to contribute to the amenity of the development.

531(a) Submit Detailed Plan
Submit to the Development Assessment and receive approval for a detailed Landscape Plan for works in the road reserve. The plan is to be prepared at a scale of 1:100 by a suitably qualified and experienced Landscape Architect, and must comply with the relevant Brisbane Planning Scheme Code/Policy. The plan must include the following:

WORKS
- The extent of proposed soft and hard landscape within proposed Council land - Location and description of fencing, retaining walls, entry statements, bollards, etc.
- Existing and proposed finished levels to external works particularly in critical areas (eg. top and toe of retaining walls and steps)
- Description/details of critical design elements where applicable (eg. Proposed surface treatments, stabilisation of batters, water features, etc)
- Landscape treatments to storm water devices, revegetated areas, buffers, roundabouts, swales etc.
- Basic specification notes on plan for all proposed landscape works
- RPEQ certified drawings for structural work where required

PLANTING
- A planting schedule listing proposed plants by botanical names, quantities, pot size, height, spread and calliper at time of planting

COSTING AND MAINTENANCE PROGRAM
The plans are to provide details of a costing and maintenance program, including the following:
- An itemised Estimate of Probable Costs for all works indicated on the Landscape Plan; and
- Details of a 12 month Maintenance Plan for all proposed landscape works.

Note. This condition does not refer to Parks or Street Trees. A Street Tree Plan is to be sent to the Arboriculturist, Asset Services for approval.

Timing:
Prior to building work above ground level commencing (MCU), or prior to operational work commencing (ROL)

531(b) Implement the Approved Plan
Carry out the works in the approved detailed Landscape Plan.

Timing: Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL)

531(c) On Maintenance Inspection
Contact Development Assessment to arrange an On Maintenance inspection. The following information is to be provided to Development Assessment prior to the on maintenance inspection:
- certification by a registered Professional Engineer (with demonstrated structural experience) for all new structures requiring construction certification
- evidence of Public Liability Insurance.

Timing:
Prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first (MCU or BW), or prior to Council's notation of the plan of subdivision (ROL)

531(d) Maintenance Period
Provide 12 months' maintenance to the works from the time the works are accepted On-Maintenance by Council. Maintain the landscape in accordance with an approved maintenance program and rectify all defects identified at the On-Maintenance inspection and those arising during the maintenance period. Lodge a bond for the maintenance period. The bond is to be calculated in accordance with the relevant Brisbane Planning Scheme Codes/Policies. A maintenance bond can consist of either a bank guarantee or monetary payment lodged with Council.

Timing:
From acceptance of On Maintenance period

531(e) Off Maintenance Inspection
On completion of the maintenance period contact Development Assessment, to arrange an Off-Maintenance inspection and release of the Bond. Ensure all defects are rectified prior to making an appointment for Off-Maintenance Inspection.

Timing:
On completion of the maintenance period

Engineering

532 Filling and Excavation
All proposed earthworks are to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies and the following requirements.
For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan. The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

532(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, checked and certified by a Registered Professional Engineer of Queensland - Civil (RPEQ-Civil).

The Earthworks Plan should include the following:
- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

532(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.

532(c) Implement Endorsed Plan
Construct and maintain the earthworks works in accordance with the endorsed engineering plans and with the relevant Brisbane Planning Scheme Codes/Policies.

Comment
We seek the following amendments to the wording of this condition to reflect the performance based design solutions proposed in the engineering services report submitted as part of the development application. During assessment of the application Council confirmed their support for performance based design solutions for construction, where the standard Council codes and design standards could not be achieved. It is considered that the amended wording reflects this position and appropriately references the performance based outcomes that have been discussed and resolved with Council.

Proposed Condition
Filling and Excavation
All proposed earthworks are to be carried out generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies where possible and the following requirements.

For filling and excavation works that involves construction of road embankments and high retaining walls on sites in excess of 1:5 gradient, a detailed geotechnical assessment report is to be submitted as an integral part of the earthworks plan. The report is to include recommended designs and construction methods for earth filling and retaining walls to be constructed on the steep slopes of the existing soil formation. This is to ensure that the geotechnical stability of the site and Council assets, including road embankments, are safely designed and constructed to prevent any possible settlement and slip failures.

532(a) Submit Earthworks Plan
Submit and obtain endorsement from Development Assessment an earthworks plan prepared generally in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Reference Specifications, 'Civil Engineering Services Report B14159.CER01.AN.jm (Revisions D)' by Brown Consulting QLD dated 9th August 2014 checked and certified by a Registered Professional Engineer of Queensland- Civil (RPEQ-Civil).

The Earthworks Plan should include the following:
- The location of any cut and/or fill;
- The quantity of fill to be deposited and finished fill levels;
- Maintenance of access roads to and from the site such that they remain free of all fill material and are cleaned as necessary;
- The existing and proposed finished levels in reference to the Australian Height Datum (extending into the adjacent properties);
- Preservation of all drainage structures from the effects of structural loading generated by the earthworks;
- Protection of adjoining properties and roads from ponding or nuisance from stormwater;
- That all vehicles exiting from the site will be cleaned and treated so as to prevent material being tracked or deposited on public roads.
- Suitable fill material is that deemed to comply with the requirements of AS 3798, Guidelines on Earthworks for Commercial and Residential Developments.

Note. If the earthworks impact on the road reserve, the Developer must obtain applicable footpath and road permits prior to commencing any works. Such impacts may include footpath occupation, road closures, reprofiling, ground anchors and/or relocation of services. If the excavation has to be stabilised using ground anchors or similar then the submitted plans are to show the location of these in relation to all services. The cost of moving services, utilities and assets is the responsibility of the Developer. The permission of the service/utility/asset owner will be required.

532(b) Suitable Fill Material
All fill material placed on the site is to comprise only natural earth and rock and is to be free of contaminants (as defined by Section 11 of the Environmental Protection Act 1994) and noxious, hazardous, deleterious and organic materials.
### 533 Construction Management Plan

Prepare a Construction Management Plan for the subject site in accordance with the following requirements.

**Note.** This condition is imposed when construction activities need to be limited to manage the impact on the surrounding area. This condition is intended to apply throughout the period of site preparation to the completion of the development.

#### 533(a) Construction Management Plan - For Endorsement

Submit to Development Assessment for endorsement, a Construction Management Plan for the demolition, excavation and construction phases of the approved development. Separate Construction Management Plans may be appropriate for the individual components. The Construction Management Plan is to be in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Workplace Health and Safety Legislation requirements, Environmental Protection Act, the requirements of any Concurrence Agency and any other relevant legislative requirements. The Construction Management Plan is to provide the following details and address impacts, where applicable:

- Provision for pedestrian management including alternative pedestrian routes, past or around the site;
- Location of and impacts on any Council or other authority's assets on and external to the site. Council assets include water, sewer, stormwater, street trees and kerb side allocation signs and line marking such as bus stops, loading zones and parking meters and/or ticket dispensers. Details of street trees are to include location, species, trunk and canopy size;
- Temporary vehicular access points and frequency of use;
- Existing and proposed kerb-side allocation signs and line marking (such as bus stops, loading zones and parking meters and or ticket dispensers);
- Provision for loading and unloading materials including the location of any remote loading sites;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- How materials are to be loaded/unloaded and potential impacts on existing street trees;
- Location of materials, structures, plant and equipment to be stored or placed on the construction site;
- Location of proposed external hoardings and gantries;
- Employee and visitor parking areas;
- Anticipated staging, programming;
- Provision for fire exit routes for other uses on the subject or adjoining sites;
- Details that identify and define phases of construction considered necessary to be conducted out of normal business hours (where normal hours are defined as Monday to Saturday between 6:30am and 6:30pm excluding public holidays).

Notes:
- Approval for footpath closures and/or temporary vehicle access will only be considered where it can be demonstrated that no reasonable alternative can be provided due to site constraints and that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are not compromised.
- Proposed arrangements utilising any part of the road reserve for construction related activities, for example, on street work zones, overhead gantries, hoardings or pedestrian diversions, are subject to separate application fees and rental fees.
- The Construction Management Plan may require modification, at Council's discretion, to reflect changes in relevant legislation and industry best practice prevailing at the time of the permit application and throughout the construction program.
- Endorsement of the Construction Management Plan does not allow the carrying out of specific work activities for any phase of construction outside of normal hours.

#### 533(b) Construction Management Plan - Pre- start Meeting

Arrange a pre- start meeting with the Development Assessment.

#### 533(c) Construction Management Plan - Works in Road

Obtain relevant approvals to carry out any works within the road reserve required by the approved Construction Management Plan:

- Temporary lane closures;
- Restricted work zones (subject to clearance of clearway hours and resolution of alternate kerb side allocation including bus zones);
- Overcoming clearway restrictions;
- Gantry erection.

Notes:
- Applications will be assessed on the basis of road and footpath network operating conditions prevailing at the time. Council will consider impacts of other construction works or events that occur during the life of the permit.
- All fees are to be paid in full prior to any permit being granted by Council. Council may revoke any permits at any time for non-compliance with requirements or if it considers that safety, capacity and/or operation of public transport, vehicle and pedestrian traffic are likely to be compromised during the construction project.

#### 533(d) Construction Management Plan - Plans on Site

Legible copies of the Construction Management Plan and current permits are to be kept on site and be made available on request at all times during construction.

#### 533(e) Construction Management Plan - Out of Hours Works to be Performed

Notify Development Assessment for any work activity identified broadly in the endorsed Construction Management Plan to be conducted out of normal business hours 6:30am and 6:30pm Monday to Saturday.

#### 533(f) Construction Management Plan - Implement the Plan

Subject to the provisions of this condition, implement and maintain the approved Construction Management Plan.

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### On-site Erosion (high risk)

Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

**Timing:** While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.
534(a) Prepare ESC Plan and Program
Prepare Erosion and Sediment Control (ESC) Plan(s) & Program, and provide design certificates, inspection certificates and a schedule of registered business names for the site in accordance with the relevant Brisbane Planning Scheme Codes. The plan(s) and program must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer Qld (RPEQ) with suitable qualifications and experience in erosion and sediment control and must be certified by a CPESC. Documentary evidence demonstrating appropriate qualifications in erosion and sediment control must be provided to the Council upon request.

At least 10 days prior to either the pre-start meeting or commencement of site works, submit copies of all required documentation, including design certificates to Council Compliance and Regulatory Services at: CARS-ESC@brisbane.qld.gov.au

Timing: Prior to pre-start meeting or commencement of site works and to be maintained until all exposed soil areas are permanently stabilised against erosion.

534(b) Implement Certified ESC Plan and Program
Implement the certified ESC plan(s) and Program to maintain compliance with all parts of the relevant Brisbane Planning Scheme Codes, while site works are occurring and until all exposed soil areas are permanently stabilised against erosion. The plan(s), program, design certifications & inspection certifications must be available on site at all times for inspection by Council officers until all exposed soil areas are permanently stabilised against erosion. Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times.

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

Comment
It is considered unnecessary to require sediment and erosion control measures to be certified by both RPEQ and CPESC, as such we have amended the condition to reflect the most appropriate certified engineer to sign off on these aspects of the development. By including a requirement for double certification only adds time delays and costs that are considered unreasonable. Additionally, it is considered a further time delay to require material to be lodged at least 10 days prior to a pre-start meeting on site. All material is in accordance with the OPW approval and therefore has been cited by officers previously. Provided all material is provided prior to the pre-start meeting so all parties have correct versions is considered sufficient. The wording of the condition has been amended accordingly.

Proposed Condition
On-site Erosion (high risk)
Minimise on-site erosion and the release of sediment or sediment laden stormwater from the site at all times

Timing: While site works are occurring and until all exposed soil areas are permanently stabilised against erosion.

535 Protect Existing Infrastructure
Where there is existing infrastructure in the vicinity of the proposed work, then the new work must not damage or compromise the working ability of the existing infrastructure. Should it be required to provide alterations to public utility mains, existing mains, services or installations, then the developer is required to meet the costs of the alteration/s, which is to be carried out in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

535(a) As Constructed Drawings
Submit to Development Assessment "As Constructed" drawings including an asset register, showing all new and/or rectification works required by this condition. These works must be certified by a Registered Professional Engineer of Queensland-Civil that they are in accordance with the relevant Brisbane Planning Scheme Codes/Policies and any other relevant infrastructure requirements.

536 Waterway Corridor
Materials, equipment or structures (including but not limited to material stockpiles, sheds, concrete areas, landscaping materials, etc.) of any description must not be located within the waterway corridor unless specifically shown on the approved drawings.

537 Dedicate As Road - Non Trunk
Dedicate as road the following requirements:

i. The areas shown as new roads on the approved drawings and documents;

ii. Areas, where required, to provide for external works in association with shared pedestrian access;
Retaining Walls
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:

i. All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.

ii. All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.

iii. Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall.

iv. Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall, in accordance with the Subdivision and Development Guidelines, to minimise visual impact between the blocks, or otherwise as approved by Council.

v. Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.

vi. Retaining walls that retain fill and are greater than 1.5m in height are to be vertically and horizontally tiered by a dimension of half of the height of the retaining wall unless an alternative has been approved by Council.

vii. Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.

viii. Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

ix. Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

540(a) Certification of Retaining Walls
For retaining walls over 1.0 metre in height, provide certification from a Registered Professional Engineer Queensland that the design and construction of the retaining wall and ancillary drainage comply with this condition.

Comment
The proposed plans that have been approved by Council do not nominate the location of anticipated guard rails on the top of retaining walls. In some areas having a minimum 500mm setback, for a guard rail may negatively impact on the design outcome. As such we have sought changes to the wording of this condition to provide sufficient flexibility for alternative design solutions to be considered in order to appropriately respond to the uniqueness of this site.

Additionally amendments to the wording of this condition area sought in relation to intra-block retaining walls. In order to limit the extent of dead-space between allotments it is sought to increase the maximum height of a retaining wall to 3m (as has been discussed with Council) and limit the stepping requirements to one third of the height, rather than the conditioned half the height. It is considered that this will be a better design outcome and solution in the instances where retaining walls greater than 1.5m are required. The amendments to the condition are provided below.

Proposed Condition
Retaining Walls
Design and construct all retaining walls and associated fences, in accordance with the relevant Brisbane Planning Scheme Codes/Policies to ensure the following:

(i) All retaining walls including the footing structure, must be located wholly within the property boundary of the site where works are occurring.

(ii) All retaining walls for purposes of road embankment must be located wholly outside the road reserve alignment.

(iii) Where guard rail is required for safety purposes above a retaining wall, the clear width of the road reserve is to be measured from the face of the guard rail. This is to ensure that clear width for the road reserve is maintained. The guard rail is to be installed at minimum 500mm measured from the back of the retaining wall or the top layer of the boulder wall unless otherwise approved by Council.

(iv) Retaining walls that are to be constructed at the intra-block boundaries to retain fill or cut that are greater than one third of the height of the retaining wall are to be vertically and horizontally tiered by a dimension of 3.0m in height.

(v) Retaining walls to stabilise excavation are to be set back off property boundaries to accommodate subsoil drainage without encroachment into the neighbouring property. This setback may vary depending on the height, structure and design of the retaining wall, including loadings from neighbouring properties, and to provide a surface drain along the top of the retaining wall.

(vi) Retaining walls that retain fill and are greater than one third of the height of the retaining wall are to be vertically and horizontally tiered by a dimension of 3.0m in height.

(vii) Runoff from surface drains and subsoil drainage associated with the retaining wall is to be collected and conveyed to a lawful point of discharge and must not cause any ponding, nuisance or disturbance to adjacent property owners.

(viii) Retaining walls in excess of 1.0m in height are to be designed and certified by a Registered Professional Engineer of Queensland.

(ix) Retaining walls facing onto Council property (including the road reserve and parkland) must not be constructed from timber.

540(a) Certification of Retaining Walls
### Stormwater Infrastructure Staging

**Development is to construct stormwater infrastructure in an orderly manner that minimises impacts to waterways during construction and manages flooding:**
- Construct the Stage 1 North stormwater detention area within Stage 1C, prior to plan sealing of Stage 2A, 2B, 2C or 2D.
- Construct the Stage 1 South stormwater detention area prior to plan sealing of Stage 2A, 2B, 2C or 2D.

#### Comment

It is considered that this condition is unnecessary. Aspects of other conditions within the approvals package will ensure that the staging of infrastructure as specified by this condition is undertaken. As such we seek this condition to be deleted.

#### Proposed Condition

Delete Development is to construct stormwater infrastructure in an orderly manner that minimises impacts to waterways during construction and manages flooding.
- Construct the Stage 1 North stormwater detention area within Stage 1C, prior to plan sealing of Stage 2A, 2B, 2C or 2D.
- Construct the Stage 1 South stormwater detention area prior to plan sealing of Stage 2A, 2B, 2C or 2D

### Service Crossings of Waterways

All service crossings of creek/waterways are to be located below ground level or attached to an approved crossing structure (eg road crossing) where located within the 100 year ARI flood extent. This is to ensure these crossings do not to impede floodwaters or create scour of the creek/waterway and to protect the service against damage by flood debris.

### Minimum Floor or Pad Levels

Design and construct all proposed pad levels and roads to have the appropriate freeboard in accordance with Brisbane Planning Scheme Codes/Policies to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI Creek/waterway flood event, whichever is the higher flood level. Flood immunity requirements for other development (including relevant infrastructure, floor levels, parks, substations and ancillary structures) is to meet the requirements of Brisbane Planning Scheme Codes/Policies. (Note: flooding within all Category 1, 2 and 3 waterways and Cedar Creek is defined as Creek/waterway flooding for the purpose of this condition).

#### 544(a) Certification

Provide certification and/or As-Constructed plans from a Registered Surveyor that confirm the development complies with the requirements of this condition.

### Stormwater Outlets in Waterways

Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline *Stormwater Outlets in Parks and Waterways* 2003. Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings. No stormwater is to be discharged into Category 2 waterways with the exception of low flow outlets from stormwater quality improvement devices or otherwise approved by Council.

#### Comment

We seek to amend this condition to remove the restrictions relating to discharging stormwater into the Category 2 areas. The major event will discharge into this area, which is unavoidable, and has been discussed throughout the assessment process. The amended condition wording is provided below.

#### Proposed Condition

Ensure all stormwater outlets are suitably located and stabilised to protect the waterway in accordance with Councils guideline *Stormwater Outlets in Parks and Waterways* 2003. Stormwater outlets are to discharge into existing gullies within the waterway/creeks where practically possible, or at proposed waterway/creek crossings. No stormwater is to be discharged into Category 2 waterways with the exception of low flow outlets from stormwater quality improvement devices or otherwise approved by Council.

### Stormwater - Hydraulic Report

Construct the development in accordance with the approved concept Site Based Stormwater Management Plan prepared by Brown Consulting, document no. B14159-W-05A dated 14th October 2014.

#### 546(a) Certification

Provide certification from a Registered Professional Engineer Queensland that the development has been constructed in accordance with the approved hydraulic report.

### Construct Footpath Non-Trunk

Construct a 1.2 metre wide footpath along one side of all 16 metres wide neighbourhood access roads in accordance with the relevant Brisbane Planning Scheme Codes/Policies. Note:

- This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

#### 547(a) Submit As Constructed Plans

Submit to Development Assessment “As Constructed” plans including an asset register, checked by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with relevant Brisbane Planning Scheme Codes/Policies.

- Timing:
  - Upon completion of the work

### Refuse Collection - Kerb Side (external road or internal private road)
Refuse and recycling bins for the proposed development are to be collected from the kerb side unless alternative refuse collection arrangements are made with Brisbane City Council’s Waste Services. Bin collection pads are to be constructed, for purposes of storing the bins on collection days, as may be required for the rear lots. The pads are to be located behind the kerbs, alongside the rear access pavement, measuring 2.0m x 0.8m (catering for 1 general and 1 recycling bin) for each dwelling.

549 Repair Damage To Kerb, Footpath Or Road
Repair any damage to existing kerb and channel, footpath or roadway (including removal of concrete slurry from footways, roads, kerb and channel and stormwater gullies and drainlines) and re-instatement existing traffic signs and pavement markings that have been removed or damaged during any works carried out in association with the approved development.

550 Works for Transport Infrastructure - Non-Trunk Internal Roadworks
Provide the following Roadworks, Stormwater Drainage, Footpaths and Pathways with any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, and the following requirements:

(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 50 km/hr maximum);
(ii) A 6.0 metres wide pavement of minimum Type A standard for the provision of a fire management access and maintenance as shown in the approved plans.

Notes.
Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series).

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

550(a) Submit Functional Layout Drawings
Submit functional layout plans showing the extent of all proposed Roadworks.
Timing: Prior to site/operational/building work commencing
Note.
Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

550(b) Submit Roads and Drainage Plans
Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.
Timing: Prior to site/operational/building work commencing

550(c) Submit Signs and Pavement Plans
Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices, checked and certified by a Registered Professional Engineer of Queensland-Civil.
Timing: Prior to site/operational/building work commencing

550(d) Implement Endorsed Drawings
Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off- maintenance" as a Council asset, by Development Assessment
Timing: Prior to On-Maintenance Inspection

550(e) Submit As Constructed Plans
Submit "As Constructed" plans including an asset register and a pre-On-Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
Timing: Prior to On-Maintenance Inspection

550(f) On Maintenance Acceptance
Provide the following in relation to the on maintenance acceptance of the asset:
- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the work
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On-Maintenance by Council. During this period maintain the works and rectify any defects identified at the On-Maintenance inspection and those arising during the maintenance period.
Timing: Prior to On-Maintenance Acceptance

550(g) Off-Maintenance Acceptance
On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.
Timing: On completion of the maintenance period

Comment
The design speed for 14m wide local roads and 16m neighbourhood roads should be 40km/hr as per the Traffic and Transport PSP (and also the new BCC City Plan Infrastructure Design PSP). As such item (i) and (ii) has been amended to reflect the appropriate speed limit.

As the emergency service track will only be available for emergency vehicles only and not as an alternate emergency access for private vehicles, it is considered that a sealed track is more appropriate than a Type A standard pavement. This will ensure that the track is not used for anything other than the stipulated purpose.

For clarity we have amended condition 550(a) to ensure that the functional layout drawings are included as part of the operational works package, and not a separate package required prior to this time.

As Council are aware in some instances the design outcomes achieved for the site are performance outcomes that are not specifically in accordance with standard Council specifications and standards. As such the condition has been amended throughout to reflect outcomes agreed with Council through the inclusion of the following words: for as otherwise approved by Council.

Condition 550(f) has also been amended to remove the last bullet point as it is considered that this is covered by the off-maintenance condition that follows in point g).

**Proposed Condition**

Provide the following Roadworks, Stormwater Drainage, and any associated services in accordance with an endorsed detail design, the relevant Brisbane Planning Scheme Codes/Policies, Standard Drawings, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, and the following requirements:

(i) The roads 14 metres wide are to be designed and constructed as Local Access Roads (designed for 85 percentile 450 km/hr maximum);

(ii) The roads 16 metres wide are to be designed and constructed as Neighbourhood Access Roads (designed for 85 percentile 450 km/hr maximum with provision as an interim bus route, as may be required, for bus access);

Note: The 16 metres wide Neighbourhood Access Road is to be extended to Stage 2C up to Lot 255.

(iii) A suitably sealed area as may be required for the provision of a temporary refuse vehicle turning area;

(iv) A 6.0 metres wide pavement of minimum Type A standard sealed track for the provision of a fire management access and maintenance as shown in the approved plans.

Notes:

Any need for roadside barriers or pedestrian fencing should be determined from a design safety audit, e.g. w-beam guard fencing, to protect errant road users from roadside hazards such as steep embankments or retaining walls, where clear zones are specified in the relevant design guidelines. If warranted and appropriate, fencing and barriers are to be provided in accordance with TMR design guidelines and Brisbane Standard Drawings (7000 series) or as otherwise approved by Council.

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

**550(a) Submit Functional Layout Drawings**

Submit functional layout plans showing the extent of all proposed Roadworks as part of the Operational Works application.

Timing: Prior to site/operational/building work commencing

Note: Obtain preliminary approval from Development Assessment, prior to the submission of Roads & Drainage and Signs & Pavement Marking.

**550(b) Submit Roads and Drainage Plans**

Submit Roadworks and Stormwater Drainage Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings or as otherwise approved by Council, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing

**550(c) Submit Signs and Pavement Plans**

Submit and obtain endorsement from Development Assessment Signs & Pavement Marking Plans prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies, Reference Specifications and the Queensland Manual of Uniform Traffic Control Devices or as otherwise approved by Council, checked and certified by a Registered Professional Engineer of Queensland-Civil.

Timing: Prior to site/operational/building work commencing

**550(d) Implement Endorsed Drawings**

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted "on-maintenance" and "off- maintenance" as a Council asset, by Development Assessment.

Timing: Prior to On-Maintenance Inspection

**550(e) Submit As Constructed Plans**

Submit "As Constructed" plans including an asset register and a pre-On-Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

Timing: Prior to On-Maintenance Inspection

**550(f) On Maintenance Acceptance**

Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on-maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies

Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.
### Timing: Prior to On-Maintenance Acceptance

#### 550(g) Off-Maintenance Acceptance

On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for an Off-Maintenance Inspection. If the inspection is successful the maintenance security will be released.

**Timing:** On completion of the maintenance period

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<table>
<thead>
<tr>
<th>551</th>
<th>Works for Stormwater Infrastructure - Non-Trunk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide non-trunk stormwater works to service the development in accordance with the relevant Brisbane Planning Scheme Codes/Policies and to ensure the following:</td>
<td></td>
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<tr>
<td>- Runoff from the site and external catchments is to be managed in accordance with approved engineering plans to ensure there will be no adverse impacts on neighbouring properties.</td>
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</tr>
<tr>
<td>- All allotments and roads are to be designed and constructed to have the appropriate freeboard to ensure they will not be flooded during a 50 year ARI local flood event or a 100 year ARI creek/waterway flood event, whichever is the higher flood level.</td>
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</tr>
<tr>
<td>- A satisfactory lawful point of discharge has been provided via discharge to Council owned land (drainage reserve, road reserve) or stormwater easement designed to accommodate developed flows.</td>
<td></td>
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</tbody>
</table>

**Notes:**

This condition is imposed under Section 665 of the Sustainable Planning Act 2009.

#### 551(a) Submit Drawings for Endorsement

Submit and obtain endorsement from Development Assessment, engineering drawings prepared in accordance with the relevant Brisbane Planning Scheme Codes/Policies and Standard Drawings, checked and certified by a Registered Professional Engineer of Queensland-Civil.

**Timing:** Prior to site/operational/building work commencing

#### 551(b) Implement Endorsed Drawings

Construct the works in accordance with the endorsed engineering plans to a standard that will be satisfactory to be accepted “on maintenance” and “off maintenance” as a Council asset, by Development Assessment.

**Timing:** Prior to On-Maintenance Inspection

#### 551(c) Submit As Constructed Plans

Submit “As Constructed” plans including an asset register and a pre-On Maintenance Inspection Checklist, prepared by a Registered Professional Engineer Queensland, certifying that the works have been completed in accordance with the relevant Brisbane Planning Scheme Codes/Policies.

**Timing:** Prior to On Maintenance Inspection

#### 551(d) On Maintenance Acceptance

Provide the following in relation to the on maintenance acceptance of the asset:

- Undertake a successful on-maintenance inspection with an engineering officer from Development Assessment
- Submit all required on maintenance documentation in accordance with the Brisbane Planning Scheme Codes/Policies relating to the works
- Lodge to Council a maintenance security. The security is to be calculated in accordance with the relevant Brisbane Planning Scheme Council Codes/Policies
- Provide a minimum 12 months maintenance to the works from the time the works are accepted On Maintenance by Council. During this period maintain the works and rectify any defects identified at the On Maintenance inspection and those arising during the maintenance period.

**Timing:** Prior to On-Maintenance Acceptance

#### 551(e) Off Maintenance Inspection

On completion of the maintenance period undertake an Off-Maintenance inspection with an Engineering Officer from Development Assessment. Ensure all defects have been rectified prior to making an appointment for Off-Maintenance Inspection. If successful the maintenance security will be released.

**Timing:** On completion of the maintenance period

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<table>
<thead>
<tr>
<th>552</th>
<th>Ponding of Stormwater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjoining properties and roads are to be protected from ponding or nuisance from stormwater as a result of the works. Ensure the stormwater runoff from the site does not adversely impact on flooding or drainage (peak discharge and duration up to the 100 year Average Recurrence Interval) of properties that are upstream, downstream or adjacent to the site.</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

- If remedial works are required that involve drainage, drawings are to be submitted and approval obtained from Development Assessment, to provide a means to rectify the site drainage.
- This condition is imposed to ensure that the developer is aware that they are responsible for all remedial works required as a result of any site works and, that they must protect neighbouring properties and roads from ponding and nuisance water from the proposed development.

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<table>
<thead>
<tr>
<th>553</th>
<th>Public Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodge street lighting design drawings showing the proposed public lighting system in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and obtain approval from the City Lighting, Asset Services.</td>
<td></td>
</tr>
</tbody>
</table>

#### 553(a) Agreement with Supplier

Enter into an agreement with an electricity supplier and provide a public lighting system in accordance with the above approved lighting design plans.

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<table>
<thead>
<tr>
<th>554</th>
<th>Service Conduits and Mains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply and install all service conduits and meet the cost of any alterations to public utility mains, existing mains, services or installations required in connection with the approved development in accordance with the relevant Brisbane Planning Scheme Codes/Policies. This includes</td>
<td></td>
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</table>

NDN Application I A003905687 I 390 Levitt Road, Upper Kedron Qld 4055
- the provision of all services and/or conduits along the full length of any rear allotment access or access easement.
- the relocation of any fire hydrant and/or valves from the development’s vehicular footway crossings if applicable.
- the retention and/or relocation of any existing foul water lines that currently exist within the site.

Note. Applicants should liaise with the appropriate service authorities. Typical underground services and/or conduits to be constructed include power, phone, telecommunications, sewer, stormwater and gas if applicable.

554(a) As Constructed Drawings
Submit to Development Assessment “As Constructed” drawings including an asset register, approved by a Registered Professional Engineer Queensland that are in accordance with the relevant Brisbane Planning Scheme Codes/Policies, and any other relevant infrastructure requirements, showing the works required by this condition.

555 Conduit for Brisbane City Council
Provide a single underground conduit (100mm diameter UPVC class PN9) in favour of Brisbane City Council on at least one side of all Neighbourhood Access Roads (Bus Route only), Industrial Access Roads and Major Roads in the Council Road Hierarchy, in accordance with the following:
- The conduit must be laid in the telecommunication alignment of the footpath, on the kerb side of the Telecommunication Carrier conduit or in an agreed shared trench arrangement with the Telecommunication Carrier and other Utilities as may be relevant, subject to the approval of Development Assessment.
- The conduit must bypass the Telecommunication Carrier pits.
- Pits (minimum size, Type 4 as per BCC Drawing UMS 600/031) with lids (as per Drawing UMS 600/030 - but Class B instead of Class C) must be installed at the head ends of the conduit, both sides of road crossings, at intersections and at other locations that may be specified by Council.
- The conduit must be plugged at each pit.
- The conduit must be located and installed in such a way that facilitates the installation of cable and additional pits in the future.

555(a) Submit “As Constructed” Drawings
Submit to Development Assessment, drawings, including an asset register, approved by a Registered Professional Engineer Queensland, and in accordance with the requirements of this condition and the relevant Brisbane Planning Scheme Codes/Policies.

556 Telecommunications
Submit to Development Assessment, documentary evidence issued by a relevant telecommunication carrier to verify that the necessary underground telecommunication services have been supplied within and adjacent to the development.

557 Provide Rear Lot Access
Provide access to the rear lot in accordance with the following:
- Construct a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
- The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover.

Comment
It is considered more relevant and reasonable to require access to rear lots to be constructed in accordance with the Brisbane City Council standard drawings rather than specifying a construction standard in the condition. This allows for amendments to design standards over the life of the project.

Proposed Condition
Provide access to the rear lot in accordance with the following by Constructing a concrete slab access way or a minimum Type A standard road pavement, to provide the access for the rear allotments as shown in the approved plans in accordance with the relevant Brisbane Planning Scheme Codes/Policies.
The rear access is to be constructed a minimum width of 4.0 metres complete with a 5.0 metres wide Type A permanent vehicular crossover.


Standard Advice

558 Concurrence Agency Conditions
The Department of State Development Infrastructure and Planning as concurrence agency has imposed the conditions contained in the letter dated 2 December 2014.

559 Construction Noise and Dust Emissions
Pursuant to the Environmental Protection Act 1994, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emission are accordance with the requirements of the Act. The Environmental Protection Act 1994 prescribes that:

(1) A person must not carry out building work in a way that makes an audible noise
   (a) on a business day or Saturday, before 6.30a.m. or after 6.30p.m; or
   (b) on any other day, at any time.
(2) The reference in subsection (1) to a person carrying out building work
   (a) includes a person carrying out building work under an owner-builder permit; and
   (b) otherwise does not include a person carrying out building work at premises used by the person only for residential purposes.

560 Advice Agency Condition
Powerlink acting as an advice agency for the development has imposed conditions contained in the letter dated 18 July 2014.

Water & Wastewater Services Ì Concurrence Agency Requirements

561 Grant Easements
Grant the following easement(s) for water supply or sewerage purposes.
(a) Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.
(b) The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**GUIDELINE**
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

**PROOF OF FULFILMENT**
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

**Comment**
It is considered that the timing impacts referenced in this condition may delay plan sealing. Delays may be experienced where live works are still being undertaken after plan sealing but prior to on-maintenance (through the bonding process). As such we seek the reference to *Prior to the relevant Council signing the plan of subdivision* to be removed from the timing, as suggested below.

**Proposed Condition**
**Grant Easements**
Grant the following easement(s) for water supply or sewerage purposes.

- **s)** Buildings or structures must not encroach on any easement issued in favour of Queensland Urban Utilities, without the prior written consent of Queensland Urban Utilities.

- **t)** The Applicant must obtain the grant of easements in favour of Queensland Urban Utilities as required and in accordance with the SEQ Water Supply and Sewerage Design and Construction Code, including easement plans and associated documents, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

**GUIDELINE**
This condition is imposed to ensure that access is provided for the construction and maintenance of QUU infrastructure and services, or that access is provided to QUU infrastructure.

**PROOF OF FULFILMENT**
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

562

**Construct Waste Water Non-Trunk Infrastructure System**
Construct a Sewerage Non-Trunk infrastructure system necessary to provide a sewerage connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**
This condition has been imposed to ensure that sewerage infrastructure is in place to serve the development and that each lot has a sewerage property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**PROOF OF FULFILMENT**
Registration of the easement on the plan of survey and on the property title with the Department of Natural Resources.

562(a) **Wastewater Network Infrastructure (Non-trunk Infrastructure)**
(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(c) Provide a wastewater reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities wastewater network infrastructures.
(d) Transfer ownership of the wastewater reticulation system (nontrunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities wastewater network and/or property service infrastructure. This includes:
   (i) where not required for existing or future development, removing existing wastewater network and/or property service infrastructure and sealing any connection(s) to remaining reticulation infrastructure;
   (ii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
   (iii) where a new road opening or widening is required, relocating existing wastewater mains clear of the proposed carriageway as specified in current standards.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

562(b) **Wastewater Property Service Infrastructure (Non-trunk Infrastructure)**
(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Supply and install a wastewater property service connection to serve each proposed lot and which connects into the Queensland Urban Utilities wastewater reticulation system.

(d) Each lot must have a separate wastewater property service connection which commands the whole of each lot.

(e) If necessary and at no cost to Queensland Urban Utilities, modify the existing wastewater property service infrastructure and where it is not required for future development, remove and seal any connection to Queensland Urban Utilities reticulation infrastructure.

(f) If necessary and at no cost to Queensland Urban Utilities, relocate existing wastewater property service infrastructure from within the limits of proposed vehicular footway crossings, or with the written approval of Queensland Urban Utilities provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

(g) Where existing or new wastewater property service infrastructure on private property will be located under reinforced concrete slabs, provide a 1m x 1m removable slab with lifting arrangements centrally located over the connection.

(h) Where existing wastewater maintenance holes do not have the current standard top slab, cover and frame, or there are changes to the surface levels or there are changes to the loading conditions, the maintenance holes are to be modified, at no cost to Queensland Urban Utilities, to accord with the current standards.

(i) Property connection points at the ends of property connection sewers shall be marked with a single vertical orange PVC conduit 40mm in diameter and 2m long, placed at the invert of the property connection point, duct taped to a hardwood stake and brought to the surface, and marked with the words IPewer Connection 2 M.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

562(c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

562(d) Wastewater Network and Property Service Infrastructure- Sizing

The sizing of wastewater network infrastructure and property service infrastructure must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

562(e) Wastewater Infrastructure- Design and Construction Standards

(a) The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

562(f) Wastewater Network Infrastructure- CCTV Inspection

(a) Submit (as part of the As-Constructed Package) a closed circuit television (CCTV) survey of all new wastewater mains within the development site.

(b) CCTV survey must be carried out in accordance with the WSA 05-2008 Conduit Inspection Reporting Code of Australia and include a defect report of the survey and an engineering restoration plan and schedule for any defect found for review and approval by Queensland Urban Utilities.

(c) The Applicant must repair all defects in accordance with the approved engineering restoration plan and schedule at no cost to Queensland Urban Utilities.

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

562(g) Wastewater Network Infrastructure- Pressure Testing

(a) Conduct pressure/vacuum testing of wastewater mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Pressure/vacuum testing of wastewater mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

(c) The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new wastewater infrastructure to the Queensland Urban Utilities wastewater network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment

Point 562(b) It is considered that imposing the upgrades to existing services that are considered deficient by QUU and not located within the development is an unreasonable imposition on the development. As such we seek this aspect of the condition to be deleted.

Point 562(c) The impact and compliance with requirements prior to QUU issuing the Connection Certificate should be tied to demonstration of the relevant provisions of the SEQ water and sewerage design and construction codes. Amended wording is provided below to reflect this.
562c) Wastewater Network and Property Service Infrastructure- Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

562e) Wastewater Infrastructure- Design and Construction Standards

The design, construction and alteration of all wastewater property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate, demonstration of compliance in accordance with the SEQ water and sewerage design and construction codes relevant at the time of approval and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

563 Live Works for Water Supply and Wastewater

Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

(a) All work on or near live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.

(b) A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.

(c) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.

(d) All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.

(e) Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.

(f) All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

Timing:
Prior to and at the time of Live Works.

Comment

We seek amendments to this condition to provide certainty on when QUU must be notified about works within the vicinity of their live QUU infrastructure. It is considered that the definition of near is not clear enough to determine when QUU will need to be notified of works. AS such we seek amendments to the condition as follows.

Additionally we have added further clarity to the timing, to provided certainty and direction for the engineers, both designing and assessing compliance.

Proposed Condition

Construct live works for water supply and wastewater infrastructure to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

a) All work on or near within 1 metre of live Queensland Urban Utilities infrastructure must be authorised by Queensland Urban Utilities.

b) A live infrastructure asset is an asset that either carries water or sewage or is connected unplugged to an asset that carries water or sewage. An asset is unplugged when there is no plug, closed valve or other blocking device between the asset and a live asset.

c) Working on live assets (Live Works) includes making a hole in a pipe or maintenance structure carrying water or sewage, opening a maintenance hole cover, inserting tools into a maintenance hole or shaft, entering a maintenance hole and operating valves or other equipment.

d) All Live Works authorised by Queensland Urban Utilities is subject to the terms and conditions set out in the Queensland Urban Utilities Permit to Work.

e) Areas of the work site over or near live infrastructure must be securely fenced and construction work in these areas subject to the prior approval of Queensland Urban Utilities.

f) All Live Works authorised by Queensland Urban Utilities must be undertaken at no cost to Queensland Urban Utilities.

Timing:
Prior to and at the time of Live Works in accordance with the SEQ Water Supply and Sewerage Design and Construction Codes at the time of approval.

564 Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

564(a) Design Approval- Major Works

(a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

(b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

Timing:
Prior to the construction of water or wastewater infrastructure.
Prior to the construction of water or wastewater infrastructure.

Timing:

564(a) Design Approval - Major Works

(a) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

(b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).

(c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.

(d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

Timing:

Prior to the construction of water or wastewater infrastructure.

564(c) Construction Certification - Major Works

(a) Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).

(b) The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

Timing:

Prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced and prior to issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

564(d) End of Maintenance - Major Works

Submit the End of Maintenance Package in accordance with SEQ Water Supply and Sewerage Design and Construction Code.

Timing:

At the end of the Maintenance Period and prior to Queensland Urban Utilities issuing the End of Maintenance Notification.

564(e) Works Inspections - Major Works

(a) Notify Queensland Urban Utilities at least 3 business days in advance of each of the following activities occurring:

(i) Prior to backfilling of pipe trenches (after embedment has been placed around pipes);

(ii) Pouring of thrust blocks;

(iii) Pressure testing of pipelines;

(iv) Disinfection of water mains; and

(v) Construction completion inspection.

(b) Queensland Urban Utilities may identify, at the pre-start meeting or in writing at other times in the construction phase, Hold Points during the construction schedule, at which work is not to proceed until Queensland Urban Utilities has inspected the works and other (non-Hold Point) works inspections.

(c) The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

(d) Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.

(e) A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

Timing:

Prior to and during construction of water or wastewater infrastructure.

Comment

The condition requires the works to be inspected by and certified by a suitably qualified RPEQ, as such including these hold points would only add unnecessary time delays to the delivery of the project. The amendments sought to this condition seek to remove any additional hold points by QUU.

It is additionally requested that the timing sections of this condition are modified (as provided below) so that the timing refers to the compliance of work in accordance with the SEQ water and sewerage design and construction codes at the time of approval. This will avoid any potential issues with rework, redesign, and reconstruction resulting from updated standards after the time of approval. This is effectively to avoid any chance of retrospective changes being sought to work already completed.

The condition has been amended accordingly below.

Proposed Condition

Major Works for Water Supply and Wastewater Infrastructure

Construct major works for water supply and wastewater infrastructure system necessary to provide connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

564(a) Design Approval - Major Works

a) Submit complete design plans and associated supporting information (Design Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Obtain approval from Queensland Urban Utilities that the design referred to in (a) above complies with all relevant Water Approval Conditions, relevant engineering standards and sound engineering practice (Design Approval Notification).

Timing:

Prior to the construction of water or wastewater infrastructure.

564(b) Pre-Construction Review - Major Works

a) Submit pre-construction plans and associated supporting information (Pre-Construction Package) for all water and wastewater network and property service infrastructure required by the Water Approval to Queensland Urban Utilities.

b) Schedule a pre-start meeting with at least 3 business days notice to enable Queensland Urban Utilities to attend (if required).

c) Obtain review comments (if any) from Queensland Urban Utilities on the Pre-Construction Package in (a) above, which may be at the pre-start meeting or otherwise in writing, and ensure such comments are properly considered and addressed in the construction documentation, including submitting a detailed reconciliation closing out such comments and a revised Pre-Construction Package if necessary.

d) No construction works, including building activities, may commence on subject sites until appropriate sediment and erosion controls have been implemented.

Timing:
Prior to the construction of water or wastewater infrastructure.

### 564(c) Construction Certification - Major Works

- **a)** Submit the As-Constructed Package and provide certification from a RPEQ that the construction of all water and wastewater network and property service infrastructure required by the Water Approval complies with all relevant Water Approval Conditions, relevant engineering standards, sound engineering practice and the certified design (Certificate of Completion).
- **b)** The As-Constructed Package accompanying the Certificate of Completion must be submitted to Queensland Urban Utilities.

**Timing:**
- Prior to Queensland Urban Utilities issuing the Construction Completion Notification and before work is to proceed until Queensland Urban Utilities notifies that it requires its personnel to be present.
- Any person nominated to represent the RPEQ on site must have sufficient training, experience and knowledge of the works to be able to adequately liaise with Queensland Urban Utilities or its representative during works inspections.
- A legible copy of the approved design drawings and Water Approval Conditions must be available on site at all times during the construction phase.

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**PROOF OF FULFILMENT**

**Connection Certification from QUU**

### 565 Construct Water Supply Non-Trunk Infrastructure System

Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions:

**GUIDELINE**

This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

**565(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)**

- **(a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **(b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **(c)** Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.
- **(d)** Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.
- **(e)** If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:
  - (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure;
  - (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;
  - (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and
  - (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

**Timing:**
- Prior to Queensland Urban Utilities issuing the Connection Certificate and before work is to proceed until Queensland Urban Utilities has inspected the works and other (non-Hold Point) works inspections.
- The Applicant (through its construction contractor and/or RPEQ) must coordinate any inspections for which Queensland Urban Utilities has notified that it requires its personnel to be present.

### 565(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

- **(a)** This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
- **(b)** This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.
(c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.

(d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.

(e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.

(f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.

(g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.

(h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.

(i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing water meters or valves from within the limits of the development's proposed vehicular footway crossings.

(j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.

(k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

565(c) Drinking Water Network Infrastructure and Property Service Infrastructure Layout, Design and Sizing
The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

565(d) Drinking Water Network Infrastructure and Property Service Infrastructure Sizing
The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

565(e) Drinking Water Infrastructure - Design and Construction Standards
(a) The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

565(f) Drinking Water Network Infrastructure - Water Quality Testing
(a) Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

(b) Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration. Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

565(g) Drinking Water Network Infrastructure - Pressure Testing
(a) Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code. (b) Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority. The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

Timing:
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

Comment
The condition has been amended below to more appropriately manage the timing of compliance in accordance with the SEQ water and sewerage design and construction codes, being the time of approval. This is requested to avoid any potential issues with rework, redesign and reconstruction resulting from updated standards after the time of approval.

Proposed Condition
Construct Water Supply Non-Trunk Infrastructure System
Construct a water supply Non-Trunk infrastructure system necessary to provide a water connection to each allotment in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code and the following conditions at the time of approval:

GUIDELINE
This condition has been imposed to ensure that water supply infrastructure is in place to serve the development and that each lot has a water supply property connection. This condition has been imposed on behalf of Central SEQ Distribution - Retailer Authority, Queensland Urban Utilities, under the delegated concurrence agency agreement. For any enquiries about this condition, please contact QUU on 07 3432 2200.

PROOF OF FULFILMENT
Connection Certification from QUU

565(a) Drinking Water Network Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Provide a drinking water supply reticulation system (non-trunk infrastructure) that connects into the existing Queensland Urban Utilities drinking water network infrastructure, together with valves and fire hydrants.

d) Transfer ownership of the drinking water reticulation system (non-trunk infrastructure) to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

e) If necessary, at no cost to Queensland Urban Utilities, modify the existing Queensland Urban Utilities drinking water network and/or property service infrastructure. This includes:

   (i) where not required for existing or future development, removing any existing drinking water network and/or property service infrastructure and sealing any connection(s) to remaining network infrastructure on or within the development site;

   (ii) relocating any valves, fire hydrants and scours from within the limits of vehicular footway crossings;

   (iii) raising or lowering mains to current standards if development works change the depth of cover on these works; and

   (iv) where a road opening or widening is required, relocating existing drinking water mains clear of the proposed carriageway as specified in current standards.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

565(b) Drinking Water Property Service Infrastructure (Non-trunk Infrastructure)

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Supply and install a drinking water property service connection including an approved meter assembly and meter box, to the boundary of each proposed lot in the development which connects into the Queensland Urban Utilities drinking water reticulation system.

d) Water must not be drawn from Queensland Urban Utilities water supply network unless it is provided through an approved meter assembly located within a meter box.

e) Provide a separate drinking water property service connection which commands the whole lot for each proposed lot.

f) Provide a water meter (sub-meter) for each lot within a community title scheme, sole occupancy, or storey of a class 5 building in accordance with the Queensland Plumbing and Wastewater Code and Queensland Urban Utilities Sub-Metering Standards.

g) Provide a separate master meter for each body corporate where there are multiple body corporates in each development.

h) Where the proposed development comprises mixed classifications as defined by the Building Code of Australia containing any of Classes 5 to 9 and any of Classes 2 to 4, provide a separate metered water service for the Class 2 to 4 occupancy. This requirement is exclusive of any special fire service consideration i.e. internal hydrants, fire hose reels and sprinkler systems.

i) If necessary and at no cost to Queensland Urban Utilities, modify the existing drinking water property service infrastructure including relocating any existing drinking meters or valves from within the limits of the development's proposed vehicular footway crossings.

j) Where not required for future development, remove and seal any existing property service connections to Queensland Urban Utilities network infrastructure at no cost to Queensland Urban Utilities.

k) Transfer ownership of the drinking water property service infrastructure located outside the boundary of the lot or proposed lots, and water meters and submeters to Queensland Urban Utilities, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

565(c) Drinking Water Network Infrastructure and Property Service Infrastructure - Layout, Design and Sizing

The design, construction and alteration of all drinking water network infrastructure and property service infrastructure must be in accordance with the current version of SEQ Water Supply and Sewerage Design and Construction Code at the time of approval.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

565(d) Drinking Water Network Infrastructure and Property Service Infrastructure - Sizing

The sizing of drinking water network infrastructure and property service infrastructure (including meters) must be approved by Queensland Urban Utilities.

Timing:
Prior to the construction of network or property service infrastructure.

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### 565(e) Drinking Water Infrastructure - Design and Construction Standards

- **a)** The design, construction and alteration of all drinking water property service infrastructure and network infrastructure required by the Water Approval must be in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.

**Timing:**
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

### 565(f) Drinking Water Network Infrastructure - Water Quality Testing

- **a)** Conduct water quality testing in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
- **b)** Water quality testing (including the taking of samples) must be carried out by a laboratory with National Association of Testing Authorities Australia (NATA) registration.

Reports must include residual chlorine count, standard plate count, total coliform and E-coli and include a written recommendation as to the suitability of the newly constructed drinking water mains to be connected to the drinking water network.

**Timing:**
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

### 565(g) Drinking Water Network Infrastructure - Pressure Testing

- **a)** Conduct pressure testing of water mains in accordance with the SEQ Water Supply and Sewerage Design and Construction Code.
- **b)** Pressure testing of water mains must be carried out by a National Association of Testing Authorities Australia (NATA) registered testing authority.

The test report must be certified by the RPEQ supervising the works and submitted to Queensland Urban Utilities (as part of the As-Constructed Package).

**Timing:**
Prior to Live Works and connection of new drinking water infrastructure to the Queensland Urban Utilities drinking water network and prior to Queensland Urban Utilities issuing the Construction Completion Notification and confirming that the Maintenance Period has commenced.

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**Comment**
It is considered unreasonable to include references in conditions that relate to documents in Water Approvals that have not been issued to the applicant for consideration. As such we propose amendments to the condition as follows to provide greater certainty for the applicant on the implications of this condition on the delivery of the project.

### Proposed Condition

**Consent and Permits prior to Construction of Water and Wastewater Infrastructure**

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

#### 566(a) Land Owner's Consent

- **(a)** Owner's consent to undertake works on the property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
- **(b)** Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

**Timing:**
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

#### 566(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to construction of relevant water or wastewater infrastructure.

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**Proposed Condition**

**Consent and Permits prior to Construction of Water and Wastewater Infrastructure**

The Applicant is responsible for obtaining the following approvals, permits and consents prior to construction of the water or wastewater infrastructure:

#### 566(a) Land Owner’s Consent

- **(a)** Owner’s consent to undertake works on the private property identified by the Real Property Description on page 1 of the Water Approval must be obtained and submitted to Queensland Urban Utilities.
- **(b)** Should any works be proposed on any other land under private ownership, written permission for the works must be obtained from the relevant land owner and submitted to Queensland Urban Utilities.

**Timing:**
Prior to submitting the Pre-Construction Package and at the pre-start meeting.

#### 566(b) External Agency Approvals and other Authorisations

The Applicant is responsible for obtaining all necessary approvals, permits and authorisations (Authorisations) required from any external agencies in satisfying the Water Approval Conditions, at no cost to Queensland Urban Utilities.

**Timing:**
Prior to construction of relevant water or wastewater infrastructure.
Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

(a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

(c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

(d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Comment
The applicant does not consider this condition to be relevant to this development. The condition is referring to land dedication for non-trunk infrastructure for water and waste water. There is no requirement for land transfer for these assets as the assets will be wholly located within the designated corridors and/or in accordance with the standards and guidelines prescribed.

It is on this basis that we seek the deletion of this conditions in its entirety.

Proposed Condition
Delete Land Dedication for Non-Trunk Water and Wastewater Infrastructure

Dedicate land for purposes of water and wastewater infrastructure construction and the following requirements:

a) This condition for non-trunk infrastructure has been applied in accordance with s99BRDJ of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

b) This infrastructure is not eligible for an offset or refund in accordance with s99BRCT of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

c) Land required for any water or wastewater non-trunk infrastructure is to be on a separate lot which must be transferred, in freehold, and at no cost to Queensland Urban Utilities.

d) The land for the water or wastewater non-trunk infrastructure site shall be sufficient to accommodate any future augmentation of the infrastructure.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Temporary Works for Water and Wastewater Infrastructure

(a) Provide temporary water and wastewater infrastructure, if applicable, and all associated works, at no cost to Queensland Urban Utilities, to service the proposed development set out in the Water Approval.

(b) Water must not be drawn from Queensland Urban Utilities water supply network for construction purposes unless it is provided through an approved meter assembly located within a meter box.

(c) A construction water meter must be installed and a properly completed Meter Installation Form submitted to Queensland Urban Utilities prior to commencing use of this service and on decommissioning.

(d) Decommission and remove the temporary water and wastewater infrastructure referred to in (a) above and reinstate the site prior to completion of the works, at no cost to Queensland Urban Utilities.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Terminating Infrastructure for Water and Wastewater

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner's consent.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Comment
It is considered that this condition is unreasonable and not relevant to the proposed development. The development is the final developable area within Upper Kedron, therefore no provision for future development (other than that within future stages of this development) is required.

As such we seek deletion of this conditions in its entirety.

Proposed Condition
Delete Terminating Infrastructure for Water and Wastewater

Water and wastewater infrastructure shall terminate in a location and in an arrangement that allows future connection to the network to be made without disruption to the community, damage to infrastructure and/or the need to obtain private land owner's consent.

Timing:
Prior to Queensland Urban Utilities issuing the Connection Certificate and where there is a related Development Application, prior to the relevant Council signing the plan of subdivision, issuing the Certificate of Classification, the Final Inspection Certificate, the endorsement of a Community Management Statement, where relevant, or prior to the commencement of the use, whichever comes first.

Maintenance Period for Water and Wastewater Infrastructure
(a) Operate and maintain all water and wastewater network (non-trunk) and property service infrastructure provided in order to comply with the
Water Approval Conditions for the period stated in (b) below and in accordance with the approved operations and maintenance manuals and
maintenance schedule (lodged as part of the As- Constructed Package), relevant engineering standards and sound engineering practice.
(b) The Maintenance Period shall be a minimum of 12 months and extend until all defects have been rectified.
(c) Maintain comprehensive records of all operations and maintenance activities undertaken during the Maintenance Period.
(d) Rectify all defects identified during the Maintenance Period and maintain comprehensive records of all such defects and their rectification.
(e) Ensure comprehensive operations and maintenance manuals are available and up to date and provide training to all relevant personnel.
Timing:
Completion Notification and ends on the date that Queensland Urban Utilities specifies in the End of Maintenance Notification.

571 **Maintenance Bond**

(a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects Queensland
Urban Utilities for the time specified in (b) below against defects and faults in materials, workmanship and design (including any associated
consequential loss) for at least the value specified in (c) below.

(b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.

(c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

**Comment**

It is considered that bank guarantees for maintenance periods are to protect against physical defects and faults. It is not considered reasonable to
include defects and faults in the design, as QUU will have had the opportunity through the assessment of the DA (conceptual design) and then
additionally through the OPW process to review and comment on the detailed design proposed. As such a bank guarantee associated with works
should only cover defects and faults not associated with the approved detailed design. The amended wording to the condition is provided below.

**Proposed Condition**

a) Submit a security undertaking in the form of a bank guarantee on terms acceptable to Queensland Urban Utilities, that protects
Queensland Urban Utilities for the time specified in (b) below against defects and faults in materials and workmanship and design
(including any associated consequential loss) for at least the value specified in (c) below.

b) The Maintenance Bond must remain valid for the full term of the Maintenance Period.

c) The minimum value of the Maintenance Bond shall be not less than 5% of the total works design and construction cost.

Timing:
Prior to Queensland Urban Utilities issuing the Construction Completion Notification and commencement of the Maintenance Period.

572 **Payment of Fees and Charges**

Pay fees and charges calculated in accordance with the Queensland Urban Utilities Water Netserv Plan.

Timing:
At the times specified in the Queensland Urban Utilities Water Netserv Plan.