

1 July 2022

2210737

Keiran Thomas Director, Regional Assessments Department of Planning and Environment 4 Parramatta Square, 12 Darcy Street, Parramatta NSW 2150

Attention: Christopher Eldred, Senior Planning Officer

Dear Chris,

#### Huntlee - Stage 1 MP10\_0137 Modification 20 - Response to Submissions

Ethos Urban acts on behalf of Huntlee Pty Ltd regarding the section 4.55(2) Modification Application (MOD 20) to Project Approval MP10\_0137, relating to the Huntlee New Town, Branxton. The purpose of this letter is to provide a Response to Submission (RTS) addressing the issues raised by the Department of Planning and Environment (DPE), other government agencies and public submissions received during the exhibition of the modification. The modification was publicly exhibited between 6 April 2022 and 19 April 2022. The submissions received are outlined below:

- · Department of Planning and Environment;
- Department of Planning and Environment Biodiversity and Conservation Division;
- Department of Planning and Environment Crown Lands;
- Department of Planning and Environment Water;
- NSW Environmental Protection Authority (EPA);
- Hunter Water Corporation;
- Transport for NSW;
- Cessnock City Council; and
- Singleton Council.

It is noted the Rural Fire Service have not yet commented, and these are to be responded to separately, when received.

In addition to the above agencies, six (6) public submissions were also received.

In response to the submissions made, the following attachments are appended to this RTS:

- Figure 14A prepared by Northrop (Attachment A);
- Response to Transport for NSW comments prepared by SECA Solution (Attachment B);
- Ausgrid Correspondence relating to a zone substation (Attachment C); and
- Engineering Plans prepared by Northrop (Attachment D).

Responses to each submission are provided in the following sections.



# 1.0 Response to Department of Planning and Environment Submission

The following comments were provided by DPE at Attachment A of the Response to Submissions Report on 4 May 2022. The responses addressing each are outlined below.

#### 1.1 Response to Submissions

The Department requests that you provide a Response to Submissions report in accordance with clause 59 of Environmental Planning and Assessment Regulation 2021

#### **Applicant Response**

Noted. This package forms a RTS report.

#### 1.2 Servicing

The Department requests the additional information to quantify the availability of servicing (being water, sewer and electricity) for the proposed lots. An overall capacity for the services should be provided as well as an outline on what capacity has been utilised through the various modifications (and other developments) that access the networks.

Details are to be provided demonstrating essential services and infrastructure capacity for Huntlee Stage 1 project more broadly is not adversely impacted by the proposed development. Alternatively, if essential services and infrastructure modifications are required, relevant engineering details, plans and specifications will be required.

The Department requests that the capacity be quantified and consider other developments outside of the scope of MP10\_0137 that may rely on this infrastructure.

#### **Applicant Response:**

The Mod 20 application does not increase the demand on infrastructure and services from that which was identified in the original Stage 1 approval, Mod 20 includes the subdivision of super lots to create the individual residential allotments required to achieve the previously approved dwelling yield for Stage 1. To illustrate, Mod 20 only requests approval for a total of 2,042 residential lots, whilst the original Stage 1 approval was for up to 2,345 dwellings – no change to the Stage 1 dwelling cap is requested within Mod 20. Notwithstanding the above, additional details in relation to capacity of essential services is provided below.

Huntlee is serviced by Altogether Group (a Private Water utility under the *Water Industry Competition Act 2006* (WIC Act)) for sewer and water services. Huntlee has an agreement in place with Altogether Group to service the full development of Huntlee, being 7,500 residential dwellings plus commercial uses. Altogether Group currently has an onsite Local Water Centre which has been operational for several years which treats all wastewater from the Stage 1 Development, with a capacity identified as 2,750 ET. This first local water centre is sufficient to cater for the Stage 1 development dwelling yield plus commercial as per previously approved.

The need for the second local water centre will be triggered by a future proposed Mod 21, which will look to provide for approximately 400 additional residential lots. Mod 21 will include the site for the second local water centre - a rezoning process for this site is also underway separately through Cessnock Council, with a scoping report currently being prepared for submission. This second local water centre will also service the future Village 2 which will be subject to separate approvals.



In relation to external potable water infrastructure, upgrades were previously identified by Hunter Water Corporation (HWC) as part of the Utility Services Agreement between Altogether Group/Huntlee/HWC and also outlined in the original DA documentation. Three upgrades were identified as part of the 10 year agreement. The first has been completed, the second is about to be commissioned, and the third is planned to commence construction in 2023. The completion of these three upgrades achieves significant potable water capacity to the Huntlee Development, with the fourth external potable water infrastructure upgrade not required until at least 2035, at a residential yield well beyond 5000 lots, well outside the scope of the Stage 1 approval.

In regard to electricity supply, Huntlee maintains ongoing consultation with Ausgrid in regards to electricity supply planning, and the latest advice from Ausgrid is included in our response as **Attachment C**. In summary, through previous discussions and agreements with Ausgrid, Huntlee is constructing a new high voltage feeder this year which will secure electricity supply to the Huntlee development for approximately 5 years, until the next HV feeders are required from the Rothbury Zone substation. Huntlee has already started some planning for this work and expects to begin installing conduits in the next 12-18 months to ensure this infrastructure project is ready to commence as we continue to get updated advice from Ausgrid.

Ausgrid have also advised that a zone substation is no longer required within the Huntlee development, which relates to a current DA condition C5(h). It is requested that this condition is amended accordingly to avoid sterilising a large parcel of land for infrastructure not expected to be required.

C5: Utility Services

h) Prior to the subdivision certificate for 1201st dwelling, a 200 x 200m (4ha) parcel of land, or a size of land otherwise agreed with the relevant energy provider, shall be dedicated to the relevant electricity provider for the zone substation. Evidence of consultation with Hunter Water shall be submitted to the Certifying Authority.

In relation to communication services, NBN Co continues to supply this service to the Huntlee Development, due to the nature of this service, NBN Co works with Huntlee on a stage by stage basis to rollout the new infrastructure, any required backhaul works were agreed in the early stages of the project, new works are just extensions to the existing pit and pipe infrastructure, which NBN then supplies fibre through.

As outlined above, Huntlee continues to look beyond the current Stage 1 approval in regards to infrastructure supply in order to ensure future development areas still subject to DA's will have infrastructure capacity available when they are ready to commence, and as such the infrastructure capacity required in the short term for Stage 1 has been secured.

#### 1.3 Civil Plans

The application as submitted has not included the civil documentation for the proposed modification and the associated infrastructure that is required. The Department requires that concept civil documentation for all infrastructure associated with this modification be provided, including contours and any cut / fill required.

#### **Applicant Response:**

Civil Plans have been prepared that identify the current indicative levels of cut and fill required. It is noted, however, that Conditions C11 and C12 provide for detailed engineering plans to be submitted to and approved by the Certifying Authority, prior to the release of the relevant construction certificate:

C11. Engineering Plans

A detailed engineering design plan of the earthworks, roads and infrastructure must be submitted to and approved by the Certifying Authority prior to the release of the relevant Construction Certificate for each sub stage. Except where varied by the terms of this approval, the engineering design shall be generally in accordance with Cessnock City Council's Engineering Requirements for Development. The plan must include detailed design of all proposed infrastructure in accordance with the plans and documents subject of this approval.

C12. Earthworks



Detailed bulk earthworks plans must be submitted to and approved by the Certifying Authority prior to the issue of a construction certificate for civil works for each sub stage.

This extent of approval of engineering design has been successfully followed for all stages of Huntlee to date. Approval of engineering plans at the modification application stage may result in the need for additional modifications to be made should on-site conditions require adjustments, given the requirements for certifying authorities to ensure consistency between approved application plans and construction certificate plans. It is considered that provision of engineering plans at the modification application stage should be for information purposes only, with detailed plans to be provided as part of responding to Conditions C11 and C12. Importantly, C11 provides that the engineering design is to be generally in accordance with Cessnock Council's own 'Engineering Requirements for Development' guidelines.

#### 1.4 Timing of Intersection Works

The Department notes that the existing condition E7(a)(ix) requires the delivery of Hex Link Road / Village 1 North access (A-6) intersection and link road prior to the registration of 1500 Lots within Village 1. This modification seeks to delay this infrastructure until the registration of 1950 lots within Village 1.

The Department questions the delay of this infrastructure beyond the number of lots currently approved (and sought) within the Village 1 area (1457 lots, being substages 2-15) with no apparent additional land available for future subdivision within this area. The Department does not support the delaying of this infrastructure beyond the number of lots achievable within the Village 1 area. Further information to justify this aspect of the proposal is required.

#### **Applicant Response:**

The condition E7(a)(ix) as proposed to be amended is replicated below for ease of reference:

ix) HEx Link Road / Village 1 North access (A-6) intersection and link road shall be constructed during Stage 1. The intersection shall be a 2 lane circulating roundabout or traffic signals (intersection type to be determined by RMS). Further modelling will be required to provide the best outcome for the future operation of this intersection. The link road shall be one lane in each direction, allowing for a future additional one lane in each direction. (Required prior to the subdivision certificate of more than 1500 lots in Village 1). An interim intersection specifically a left-in/left-out is to be constructed prior to June 2022-2023 however this will be subject to upgrade to a roundabout of or traffic signal controlled intersection prior to the subdivision certificate of more than 1500 lots in Village 1 unless otherwise agreed with RMS.

The lot count plan submitted with Mod 20 identifies a total number of lots intended to be created as 1,989, in excess of the proposed 1,950 lot trigger for the upgrade of the left-in/left-out to a roundabout. As such the request is not to delay infrastructure beyond the scope of the Stage 1 DA as amended by Mod 20 if the traffic report and TfNSW concur to the new trigger for the roundabout construction. Furthermore, the Traffic Modelling Report for the Stage 1 Approval provides that the intersection is required for the full development – which is based on a residential yield of 7,500 dwellings. Stage 1 was modelled for traffic purposes on a yield of 2,345 dwellings (being 2,045 residential dwellings on residential land, and 300 dwellings within the Town Centre).

Access to Village 1 under the Stage 1 road upgrades from the Traffic Modelling Report does not indicate that intersection A-6 is required – only A-1, A-2, A-3 and A-5 (and A-9, near the large lots) are identified as proposed access points. It is intended that A-6 will be constructed as a left-in/left-out interim arrangement prior to June 2023, and then upgraded to a roundabout or traffic signals, during Stage 1, prior to 1,950 allotments. The additional 450 lots on top of the 1,500 per the current condition wording has been assessed by SECA Solution based on 2020 traffic data collected, prior to the provision of the roundabout intersection upgrade at A-6.



Transport for NSW have confirmed via email on 13 May 2022 that they have no concerns with the delay of the interim intersection (left in/left out) until June 2023.

#### 1.5 Traffic Assessments for North Rothbury

The initial approval provided that no access was to be via North Rothbury within stage 1 (aside from active transport and emergency vehicles), and consequently no traffic assessment was undertaken of the North Rothbury village road network in conjunction with the Preferred Project Report.

The modification report or traffic assessment has not considered the potential traffic implications for the North Rothbury residential area, including the suitability of the existing road network and intersections to Wine Country Drive. The Department requests that a Traffic Impact Assessment be undertaken of the potential traffic through North Rothbury and whether any traffic improvements are required.

#### **Applicant Response:**

The Departments comments are noted and it is proposed that Thomas and Mitchell Streets will not be connected for vehicular traffic of any kind and only be accessible for pedestrians (similar to what is proposed for Scott Street). It is proposed that Rothbury Street be treated such that it can be used as a gated emergency access point and also available for pedestrians and cyclists. Future consideration and review of this access location between Rothbury and Huntlee may be considered separately as part of a future modification.

#### 1.6 Access to Lot 34

At present Lot 34 DP 755211 obtains access via a Right of Carriageway over the former Lot 6 and 8 DP 729973. The Department notes that the proposed lot layout will impinge on this Right of Way. The Department requests that evidence be provided that consent has been provided by the landowner of Lot 34 DP 755211 for this Right of Way to be extinguished.

#### **Applicant Response:**

Condition E8 requires and ensures that access to Lot 34 will be maintained at all times, and if adjustment to the existing right of access is required in order to construct the new public roads, this will be discussed with the owner of Lot 34. The new proposed public road access to Lot 34 is shown on Modification 20, and Huntlee is not aware of an objection to this access location from the owner of Lot 34. The provision of the new public road access will be a significant improvement over the existing access to Lot 34.

Road connections to North Rothbury in the ultimate development scenario has always been proposed to be limited, to ensure the current safety and amenity of residents within the existing Township of North Rothbury. No long term road connection has ever been proposed to Scott Street - the connection of Scott Street was proposed to be a pedestrian and cycle access point only. Once the new public road access is in place to Lot 34, access to Wine Country Drive would be via Huntlee's internal roads and upgrade intersections on Wine Country Drive or the HEX Link Road which provide much safer access locations.

#### 1.7 Open Space and layout of Substage 13

The modified layout of Substage 13 seeks to remove opportunities for future road connections to Lot 34 DP 755211, and introduce small areas of open space. The Department questions the usability of these areas of open space being narrow in width and recommends that the modified layout of Substage 13 be reconsidered. In addition, the Department recommends you seek Bushfire Protection advice from an accredited Bush Fire Consultant for Substage



13 to allow for a cohesive subdivision pattern to be established across the subject site and Lot 34 DP 755211 and remove the need for the additional open space which Cessnock Council are not supportive of maintaining.

#### **Applicant response:**

The adjustment of the road and allotment layout in substage 13 remains consistent with the original intent of the Stage 1 Approval, as it still provides for residential development with public roads and access to open space. Road connectivity is still achievable to Lot 34 from the Huntlee development.

The development of sub-stage 13 as currently approved does not address stormwater quality and quantity prior to entering Lot 34. Given there is currently no DA in process over lot 34, no development of sub-stage 13 can currently occur without the new proposed stormwater management measures as documented in this modification, therefore preventing the development of approximately 58 residential lots.

Given the owners of Lot 34 are still to obtain consent to develop, address conservation and biodiversity offsets and ensure servicing strategies are in place for the site, Huntlee is continuing to progress the amendment of sub-stage 13 in order to meet market demand for residential lots within the Hunter region.

## 2.0 Agency Submissions Response

The following section outlines agency submissions and responses to each as required.

#### Table 1 Agency Submissions

Submission and Comment	Response
Department of Planning and Environment – Biodiversity and Conser	vation Division
Biodiversity The lot design of sub-stage 14 may not have considered the accurate boundary location between sub-stage 14 and lot 56 DP755211. Biodiversity Conservation Division (BCD) is aware that recent survey work conducted along the southern boundary of sub-stage 14 of the Huntlee developed revealed that the existing fence and cadastre is positioned further south than the true boundary. This boundary is shared with lot 56 DP755211. As clearing within lot 56 is not part of the Huntlee major project approval it is important that the design of sub-stage 14, including required Asset Protection Zones uses the true boundary in its design.  Recommendation 1: The proponent should confirm that the design of sub-stage 14, including required Asset Protection Zones does [not]	Huntlee's surveyor has confirmed that the Mod 20 layout uses the actual boundary from survey and not fence lines. The survey work BCD refers to was undertaken by Huntlee's surveyor, and as such there is no encroachment on lot 56.
encroach on lot 56 DP755211.  The proposal to remove all areas of vegetation within the MOD20	It is noted that there are no further Ecological issues
area is consistent with the Huntlee major project approval.	in relation to the Mod 20 submission to be addressed.
All areas within the MOD20 area were mapped in the Ecological Assessment Report - Huntlee (RPS 2010) as Central Hunter Ironbark – Spotted Gum - Grey Box Forest Endangered Ecological Community (EEC) or vegetation that is not listed.	BCD's comment #2 relates to other DA modifications. These have been previously responded to within those modification processes



Submission and Comment	Response
Unlike the Central Hunter Riparian Forest and Hunter Lowland Redgum Forest, which have clear commitments to protect 35ha and approximately 4ha within the Huntlee development area respectively (Table 5-3 in RPS 2010), there are no commitments to protect any areas of Central Hunter Ironbark – Spotted Gum - Grey Box Forest within the development area. Therefore, the proposal to remove all areas of vegetation within the MOD20 area is consistent with the Huntlee major project approval.  BCD reiterates the issues raised in advice about previous modifications, such as the letter of 28 January 2022 (DOC21/13367-11), that the conservation outcomes proposed under the original Huntlee ecological assessment and vegetation management plan are not being achieved.	and as such this BCD comment has not been addressed as part of Mod 20.
Recommendation 2: BCD remains concerned that issues outlined in previous correspondence that the project is not adhering to the initial intent of the Ecological Assessment Report - Huntlee (RPS 2010) to protect 35 ha of Central Hunter Riparian Forest and 4 ha of Lowland Redgum Forest (e.g., MOD 14 and 16).	
Flooding and flood risk BCD is satisfied with the flooding and flood risk assessment. BCD has reviewed the 'Huntlee New Town Modification 20' (Ethos Urban - dated14/3/22) and 'Huntlee Subdivision Modification – Stormwater and Flood Management Strategy' (Northrop – dated 17/12/21) with regard to flooding and water quantity / quality and have no comments.  Recommendation 3: No further flooding assessment is required	Noted.
Department of Planning and Environment – Crown Lands	
The Department of Planning and Environment – Crown Lands have reviewed the proposal. As no Crown land, roads or waterways are affected by the proposal, Crown Lands has no comments at this time	Noted.
Department of Planning and Environment – Water	
The Modification Report has been reviewed and as there are no activities that may intercept, extract, use, divert or receive water, DPE Water has no comments.	Noted.
NSW Environmental Protection Authority (EPA)	
The information provided indicates that the proposal does not constitute a Scheduled Activity under Schedule 1 of the Protection of the Environment Operations Act 1997 (POEO Act) and therefore will not require an Environment Protection Licence (EPL) under the POEO Act.	Noted.
Hunter Water Corporation	
The Huntlee development is not in Hunter Water's area of operations as reticulation water and sewer services are managed by a Private Network Operator (PNO).  Hunter Water provides bulk water supply to the Huntlee PNO under a Utility Services Agreement and this arrangement will not be impacted by the proposed Development Application Modification. Hunter Water has no comments on the proposed Development Application Modification	Noted.



#### **Submission and Comment** Response **Transport for NSW**

Condition E7A(ix) is proposed to be amended as part of Modification 20 per the following:

ix) HEx Link Road / Village 1 North access (A-6) intersection and link road shall be constructed during Stage 1. The intersection shall be a 2 lane circulating roundabout or traffic signals (intersection type to be determined by RMS). Further modelling will be required to provide the best outcome for the future operation of this intersection. The link road shall be one lane in each direction, allowing for a future additional one lane in each direction. (Required prior to the subdivision certificate of more than 1500 1950 lots in Village 1). An interim intersection specifically a left-in/left-out is to be constructed prior to June 2022 2023 however this will be subject to upgrade to a roundabout of traffic signal controlled intersection prior to the subdivision certificate of more than-**1500 1950** lots in Village 1 unless otherwise agreed with RMS.

Follow on discussions with Transport for NSW indicate that Transport for NSW agrees to the postponement of the left in/left out treatment to be June 2023, rather than June 2022, confirmed via email dated 13 May 2022.

A response to each of the below comments has been provided by SECA Solution at Attachment B.

<b>Volume</b> WCD Triton (All scenarios) (Wine Country Drive / Triton Boulevard) We request that the proponent provide a breakdown of the LV/HV volumes within the report. Given that the proponent undertook the count in 2020, this should be made available. The counted values for heavy vehicles should be used if available, instead of %.	Refer attached response from SECA Solution.
All Scenario ID/Section We request that the proponent confirm trip distribution assumptions that have been used. Has the trip distributions been adopted from the original Stage 1 Hyder Traffic Report which was completed in 2012?	Refer attached response from SECA Solution. The trip distribution is per the original Stage 1 prepared by Hyder in 2012.
2023 plus Scenarios We request the proponent to provide calculation of the future flows (both for the additional 900 lots and additional 1350 lots scenarios) - trip generation calculations and the trip distribution assumptions out of/into the 4 intersections modelled. The values shown in the last image 'Predicted Generated Flows (1350 lots) AM/PM' in the technical design note does not match up with what has been inputted into SIDRA.	Refer attached response from SECA Solution.
Additional information required - All We request that the proponent provide justification of the changes to the default growth rate (specifically the growth rates adopted) - is this for sensitivity testing?	Refer attached response from SECA Solution. A 2% growth rate has been applied.
Gap Acceptance Winepress (All scenarios) - Winepress Road / Wine Country Drive TWSC Calibration should be turned off as this will reduce the actual critical gap and follow-up headway values used by SIDRA.	TWSC has been turned off.
LinLout HEX (All scenarios) - HEX Link Road / Link Road off HEX TWSC Calibration should be turned off as this will reduce the actual critical gap and follow-up headway values used by SIDRA.	TWSC has been turned off.
WCD Triton (All priority-controlled scenarios)- Wine Country Drive / Triton Boulevard TWSC Calibration should be turned off as this will reduce the actual critical gap and follow-up headway values used by SIDRA.	TWSC has been turned off.
Network Data All – Network Change maximum number of iterations to 60 before processing each network.	This has been adjusted to 60.
Midblock	This has been reviewed and corrected.



Submission and Comment	Response
2023 plus 900 & 2023 plus 1350 scenarios – Network Volumes should be checked as the differences in midblock flows are quite large (>100) within the network - this also appears in the diagnostic messages for these networks	
Lane Movements  WCD Triton (Signal scenarios) - Wine Country Drive / Triton  Boulevard  Left turn on the east approach enters the short lane on the south approach. It is recommended to first utilise the full lanes before allowing vehicles to turn into a short lane.	This has been adjusted.
Network Layout Base and 2023 plus 900 scenarios – Network We request the proponent to justify why the Wine Country Drive / Triton Boulevard intersection was not modelled with the network.	Refer attached response from SECA Solution.
Lane Geometry  WCD roundabout (Base scenarios) - Wine Country Drive / HEX Link Road  We request the proponent to justify why a u-turn movement has been specified for the east approach lane for the 2023 + 900 & 2023 + 1350 scenarios but not for the base scenarios.	Refer attached response from SECA Solution.
WCD roundabout (Base scenarios), LinLout HEX (Base scnearios)- "Wine Country Drive / HEX Link Road & HEX Link Road / Link Road off HEX" We request the proponent to confirm whether the lane geometry of the intersection(s) are subject to change at a later stage (between 1500 lots and 1950 lots), and hence why it differs to the layout geometry of the 2023 base and 2023 plus 900 scenarios	Refer attached response from SECA Solution.
Cessnock City Council	
Substantially the same development  Concern is raised in relation to the ability of the modification to adequately address the requirements of Section 4.55 of the Environmental Planning and Assessment Act 1979 (the Act) in relation to the development being substantially the same development as that originally approved. In this regard, it is considered that a detailed assessment should be undertaken in relation to the quantitative and qualitative aspects of the development	The proposed development remains in line with the development originally approved as it retains same activity and proposed land use. Under the Stage 1 approval it was anticipated and assumed that the further subdivision would occur to accommodate allotment for residential development The modifications remain within the Stage 1 Project Approval boundary. The proposed allotments remain substantially the same as the Stage 1 approval and the Huntlee DCP.
<b>Traffic, Access, and Parking</b> The following general comments are provided which should be considered during the assessment:	Noted.
<ul> <li>Assessment should ensure that the Traffic Impact         Assessment adequately addresses traffic generation         confirming a positive level of service for all key intersections,</li> </ul>	A traffic assessment was provided as part of the Modification 20 package which focused on the proposed intersection changes. Further information is provided in <b>Attachment B</b> and also the SIDRA model provided.
<ul> <li>Lot configurations should ensure that connectivity is maintained to adjoining land,</li> </ul>	The proposed allotment configuration as part of Modification 20 allows for connectivity to be provided to adjoining land.
Consideration needs to be given to the requirements of the Development Control Plan to ensure that road hierarchy is consistent, and	The proposed road hierarchy as part of Modification 20 is generally consistent with the DCP, noting that the DCP is currently being updated by Council to reflect other changes throughout the site (given the



Submission and Comment	Response
	DCP was last updated in 2018). The only minor variance is the further extension of the Collector Street along the eastern edge of Substage 15, which ensures consistency with the western part of the broader Village 1 area.
Consideration of access and parking arrangements for lots created within the commercial precinct.	Access and parking arrangements for lots in the Town Centre will be considered as part of future built form applications. On-street parking will be provided as required. Commercial allotments within the Town Centre will likely provide on-site parking.
Ecology The impact of the development on existing vegetation has been satisfactorily addressed. It is; however, recommended that prior to clearing of any native regrowth onsite, a preclearance survey be performed by an experienced ecologist. This is to ensure that if any threatened species are present, namely flora species, the appropriate measures can be taken.	Noted.
Voluntary Planning Agreement  An additional 286 dwellings have been included within Stage 1 of the development since the original approval, representing an increase of 12% dwelling yield in Huntlee Stage 1. The local VPA was negotiated based on the original dwelling yield of 2,345 dwellings, and caps contributions for certain works in kind on this basis. In light of the increase in dwelling yield over successive modifications to the Major Project Approval, the VPA should be amended to remove reference to the contributions cap.  Table 6 on Page 20 of the SoEE states that:  a) The number of district sports fields will be reduced from 2 to 1. However, this is inconsistent with the current Huntlee VPA and VPA currently being negotiated, which both require 2 district sports fields.  b) The area of land dedication for the 2 district parks will be reduced from 8.28ha to 4.79ha. However, this is inconsistent with the VPA currently being negotiated, in which a total area of 6.08ha will be dedicated for district parks.  c) The area of land dedication for the 7 local parks will be reduced from 4.83ha to 3.44ha. However, this is inconsistent with the VPA currently being negotiated, in which a total area of 3.54ha will be dedicated for local parks	The Local VPA amendment process is progressing. Specific responses are provided below;  (a) Council has requested the original VPA contribution of 2 local sport fields be changed to 2 District Sports fields, with one of these being provided outside the current DA boundary. Mod 20 only shows the 1 sports field within the current DA boundary. A further modification will be required once the new VPA is agreed.  (b) Council has requested that the original VPA contribution of 2 district parks and one regional sports field be amended to consist of three district parks, with one of the district parks located outside the current DA boundary. Mod 20 only shows the two district parks located within the current DA boundary. A further modification will be required once the new VPA is agreed.  The latest VPA plan provided as part of the VPA amendment process shows a total Local Park area of 3.44ha.
Public Embellishment The Public Embellishments Plan that has been submitted with Modification 20 identifies open space that will be dedicated to Council. The shape and configuration of some of that open space may result in it being unfit for its intended purpose. Further consultation with Council is required to ensure the shape and configuration of open space is fit for purpose.	Noted. Discussions in relation to the community hub site have resulted in this being moved. Similar to the above, the new location is outside the current Stage 1 DA boundary, and as such once the new VPA amendment is agreed, a new modification will be required to implement these new community facility locations.
The Cycleway and Recreation Master Plan does show that a shared path and recreational trails will be positioned in areas of park and open space. Any additional impacts on native vegetation and watercourses (proposed creek crossings and culverts) as a result of these features must be considered in the modification.	Creek crossings over in Substages 8 and 11 have previously been considered in earlier modifications which identified two pedestrian/cycle crossings. Recreation trails were previously proposed within riparian corridors - this modification only seeks to refine locations, as such these impacts have been previously covered. Other required detail of recreational trails will form part of appropriate



Submission and Comment	Response
	detailed design processes at the time of intended delivery within open space areas. The Master Plan provides for an overarching, high level layout of the proposed network.
Amendment to Substage 16 In relation to the proposed amendments to Substage 16 the following comments are made:  • The applicant is to ensure that the 'batter slope area' associated with the adjacent seniors living development will not identified within open space to be dedicated to Council.	The area of the batter slope proposed to be consolidated into the retirement site lot has been excluded from the open space plan. This boundary adjustment process is underway and expected to be completed shortly.
The dedication of additional public open space in Substage 16 has not yet been agreed to by Council in the current VPA negotiations with the developer.	These discussions are ongoing but have progressed between Huntlee and Council. Council have acknowledged that these areas contain stormwater management infrastructure which would naturally need to be dedicated to Council. Council are the logical authority to take ownership of these areas. Huntlee has proposed to develop as much of this area as possible and looked at alternative options, including the transfer of some of this land to the retirement site owners.
Huntlee DCP The Huntlee DCP will need to be amended to account for the new form of residential accommodation in the Town Centre and the additional "Town Centre Lane road types", referenced on Page 3 of the SoEE for Modification 20.	Noted. This could be accommodated when the DCP is next undergoing an update. However, detailed information for these has been provided within this modification and therefore upon modification determination it would be expected that these roads could proceed as documented.
Singleton Council	
Singleton Council raises no objection to the proposed modification application.	Noted.

#### 2.1 **Cessnock City Council**

Council, in their RFI dated 29 April 2022, raised concern regarding the modification's ability to adequately address the relevant requirements of Section 4.55 of the EP&A Act in relation to the development being substantially the same as originally approved. Our response is provided below.

It is worth noting that Clause 3BA (6) of the Schedule 2 of the Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017 (EP&A Regulation) states:

"In the application of section 4.55 (1A) or (2) or 4.56 (1) of the Act to the following development, the consent authority need only be satisfied that the development to which the consent as modified relates is substantially the same development as the development authorised by the consent (as last modified under section 75W):

(a) development that was previously a transitional Part 3A project and whose approval was modified under section 75W,

This onus is on the applicant to satisfy the consent authority that the modified development will be substantially the same (Seaforth Services Pty Limited v Byron Shire Council (No.2) (1991) 72 LGRA 44). As such, the following principles apply when determining whether a development as modified will be "substantially the same development":

1. The meaning of "modify" is to alter without radical transformation;



- 2. The term "substantially" in this context means "essentially or materially or having the same essence";
- The assessment involves a comparison between the development as approved originally and the development as proposed to be modified. One does not compare the development as modified with what exists currently on the site, or the development as last modified (if applicable);
- To assess whether a consent as modified will be substantially the same requires a comparison of before and after situations. Differences may involve differences of the result or outcome, as well as differences of the process of implementation (i.e., the way in which the development is carried out);
- The consent authority is required to undertake both a qualitative and quantitative comparison of the whole development as consented to and the whole development to which the consent as modified relates. In other words, the consent authority must compare the physical features or components of the development as currently approved and modified, and appreciate the qualitative differences between the approved and modified developments, including the context in which the original application was approved; and
- The consent authority also needs to consider whether the proposed modifications will generate any additional impacts, and whether the proposed modifications relate to "material or essential features" of the development as originally approved.

The development, as proposed to be modified, is substantially the same development as that originally approved in that it demonstrates the following:

- The modified development retains the same activity and proposed land uses as the approved development;
- The subdivision of existing super lots into residential allotments has been anticipated and assumed under the Stage 1 Project Approval which noted the further subdivision of substages 14 and 15 to provide 158 dwellings in these substages. As a result, this modification represents an outcome that is consistent with the MP\_10\_0137 approval, in that it subdivides super lots to provide allotments for residential development;
- The subdivision of existing super lots into residential allotments has been anticipated and assumed under the Stage 1 Project Approval which provided consent for up to 275 residential dwellings within the Town Centre. As a result, this modification represents a good outcome, consistent with the MP\_10\_0137 approval, in that it subdivides the super lots within the town centre to provide allotments for residential development and allows for activation of the town centre by representing a true mix-use of land uses, commensurate with the objectives of the B4 land
- The scale and density of the development are generally commensurate to those modifications previously submitted and approved for the Huntlee development;
- The increase of residential allotments as a result of the further subdivision for the large, approved lots in the town centre and substage 14, 15 and 16 areas are considered to be of minimal impact that has already been assessed from an environmental impact perspective. The modification relates to subdivision only and as such, will provide a critical first step in enabling lots to support future low density development on this location within the wider site. It will provide ongoing social and economic benefit to the immediate community in that it is providing opportunities for housing close to schools, shops, services, transport and open space, consistent with the original intent and delivering on the key objective for the Huntlee development; and
- The modifications remain within the Stage 1 Project Approval boundary. The proposed allotments remain substantially the same as the Stage 1 approval and the Huntlee DCP.

#### 2.1.1 **Comparative Task**

A comparative task has been undertaken at Table 5. The proposal is considered to be in alignment with the existing approval in that is proposed to fulfill part of the long-term intent for Huntlee to provide residential within the Town Centre as well as the eventual subdivision of the large lots in Substages 14, 15 and 16, well within the limitations as originally imposed.

#### Table 2 **Comparative Task**



Item	Original Approval	Approved Mod 16	Proposed Mod 20
Total Huntlee residential lots	1,473	1,659	1,919
Town Centre non-residential ots	0	67	59
Total Huntlee dwellings	2,345	2,345 (2,631)	2,345 (2,631)
Minimal Enviror	nmental Impact		
Traffic Impact	The original traffic assessment submitted with the Stage 1 Major Project provided traffic modelling on the assumption (at fully completed development) that there would be 1,700 residential dwellings within the Town Centre (with a further 5,800 in the balance of the Huntlee residential land), and found that this, in alignment with the planned road upgrades to WCD and the HEX link road, as well as the installation of the Hunter Expressway found that the impacts of residential development in Huntlee were acceptable. The original Stage 1 traffic modelling took into account up to 300 residential dwellings within the town centre.  The original traffic assessment submitted with the Stage 1 Major Project provided traffic modelling on the assumption (at fully completed development) that there 5,800 dwellings in the balance of the Huntlee residential land, and found that this, in alignment with the planned road upgrades to WCD and the HEX link road, as well as the installation of the Hunter Expressway found that the impacts of residential development in Huntlee were acceptable.	No change.	No change.
	Notwithstanding the above, an additional traffic statement has been provided at <b>Appendix B</b> of the original Modification 20 lodgement package which states that the subdivision of super lots within the Town Centre for residential lots does not intensify traffic generation or create impacts on intersections as the Town Centre was always expected to include residential development.		
Bushfire Impact	The original bushfire assessment submitted with the Stage 1 Major Project nominated temporary 100m APZ / BAL zones around the perimeter of the Stage 1 site boundary at the Town Centre.	No change.	Increase in APZs in particular locations throughout the development in multiple substages in accordance with updated legislative requirements
Flooding Impact	The original flooding and stormwater assessment submitted with the Stage 1 Major Project undertook comprehensive flood modelling for the entire site and found that land subject to potential flooding would be concentrated on the eastern	No change.	No change.



Item	Original Approval	Approved Mod 16	Proposed Mod 20
	side of Wine Country Drive and would not affect lots within the Town Centre. Additionally, the lot amendments contained in substages 13, 14 and 15 have all been planned in accordance with the latest floor modelling and are above the flood affected levels for these areas.		
Land Use and Economic Impact	The Stage 1 Major Project proposed B4 mixed use for the town centre in order to enable a true mixed use and diverse centre that was capable of accommodating employment and residential uses, with up to 275 dwellings within the town centre.	No change	No change.

As seen above, the changes are still substantially the same as the original approval.

## **Public Submissions Response**

The following provides responses to each of the public submissions received.

Table 3 **Public Submissions** 

Submission and Comment	Response
North Rothbury	
I object to the proposed modifications related to substages 14 and 15. I believe that the addition of 169 new residential lots will have a significant negative impact on the traffic volume and road conditions of North Rothbury. I also believe that it will be detrimental to North Rothbury's small village "personality" and further erode the surrounding natural environment (i.e. the further destruction of local flora and fauna around North Rothbury's border). I propose that the modifications to substages 14 and 15 be rejected on these grounds or be amended to include a significant natural barrier between the substages and North Rothbury.	The original Stage 1 Project Approval for Huntlee identified the Substage 14 and 15 location as appropriate for residential development to achieve the proposed residential yield. As part of the application process for Huntlee, substantial traffic studies were carried out to identify the impact on the road network – these impacts were determined to be appropriate. Further, Huntlee have entered into a Voluntary Planning Agreement with Cessnock Council that included funding for the upgrade of North Rothbury roads. It is noted that the Huntlee DCP identifies a local road connection through from Substage 15 into North Rothbury (the Rothbury Street alignment), with Thomas and Mitchell Streets proposed to be terminated via T-intersection treatments when meeting the Huntlee land. These intersections could be treated with gated access for emergency access only, thereby limiting through connections from Huntlee Substages 14 and 15 to Rothbury Street only.
Dodges Ferry	
Is there a policy of notifying neighbours, particularly those surrounded by the development?	As part of the public exhibition process carried out by DPE neighbours would have been notified.
I am concerned at the lack of detail contained in the proposed changes to lot layout and road hierarchy, particularly when the detail can be changed and approved by private certification, chosen and paid by the developer. There is obviously a conflict between pleasing the developer and achieving the best community outcomes. This has been evident in recent past amendments where lack of detail has allowed	The scale of the Huntlee project and the original Stage 1 Project Approval provides for an overarching approval across the entire site. The detail design follows this approval and is subject to assessment by a private certifier against Cessnock Council's current Engineering Requirements for Development.



#### **Submission and Comment**

#### Response

approval of two-dimensional plans only to be compromised by subsequent approval of different horizontal levels, when compared to the plans submitted with the original development approval and not shown in the Statement of Effects.

By way of example:

A) The constructed longsection of the road adjacent to the southern boundary of Lot 34 was raised significantly, as compared to the longsection originally approved, necessitating a retaining wall. This has been constructed along the southern boundary of Lot 34, in some cases over 2 meters high. This has prevented the connectivity shown in approved stage I concept plan.

The road referred to crosses a natural creek line where an online detention basin is located. In order for this detention basin to operate as required to avoid an increase in peak flows across Lot 34, it must be elevated to create the storage within the creek line and ensure that the road level is above the 1:100 year flood line plus appropriate freeboard.

Connectivity would still be possible from Lot 34 - this would simply require engineering solutions such as fill and retaining walls to create the road connection. The owner of Lot 34 (Mr Dennis Beddall) has been previously contacted by Huntlee in regards to allowing batters into the land to avoid the need for retaining walls along the boundary (Stage 7, along the southern edge of Triton Boulevard) and to enable future access into Lot 34, however this option was declined.

B) On the western boundary of Lot 34 roads have been terminated and WQCP approved which will prevent the connectivity as shown in the approved Stage 1 Concept Plan. This has been done without recognition of the easement for access and service connections from Lot 34 to existing Scott Street in North Rothbury. I notice the road hierarchy plan for Mod 20, shows relocated access for Lot 34, which does not join Scott Street. I can find no discussion of this, so don't know if this is assumed to be approved by referencing the plan in any approval. This appears to have been the case in the past where road connectivity has been deleted in plans modified from the approved Stage 1 Concept Plan without any written discussion in the associated statement of effects.

Condition E8 requires and ensures that access to Lot 34 will be maintained at all times, and if adjustment to the existing right of access is required in order to provide access over a new public road, this will be discussed with the owner of Lot 34. The new proposed access to Lot 34 is shown on Modification 20, and Huntlee has not received an objection to this access location from the owner of Lot 34.

Road connections to North Rothbury in the ultimate development scenario has always been proposed to be limited, to ensure the current safety and amenity of residents within the existing Township of North Rothbury. No long term road connection has ever been proposed to Scott Street - the connection of Scott Street was proposed to be a pedestrian and cycle access point only. Once the new access is in place to Lot 34, access to Wine Country Drive would be via Huntlee's internal roads and upgrade intersections on Wine Country Drive or the HEX Link





Submission and Comment	Response
Comment on Mod 20: The modification does not comply with the approved Development Control Plan.	The proposed changes to the State 1 Major Project Approval remain consistent with the provisions contained in the Huntlee DCP. The modification has been designed in accordance with the controls contained within the DCP in terms of subdivision design, minimum lot sizes and complies with the relevant road widths for the surrounding road hierarchy.
The applicant must demonstrate that the development is substantially the same as outlined on page 17of 33 of the Statement of Effects. In my opinion the applicant has not demonstrated the differences between Mod 20 and the original approved development consent.	The proposed development remains in line with the development originally approved as it retains same activity and proposed land use. Under the Stage 1 Approval it was anticipated and assumed that the further subdivision would occur to accommodate allotment for residential development.
1.The reconfiguring of Stage 13: a. further reduces the future options for connection the development of lot 34. The approved Stage 1 Concept Master Plan identified 5 proposed road links from Stage 13 across the eastern boundary of Lot 34. These roads could have provided vehicular and pedestrian links as well as connectivity for services.	The adjustment of the road and allotment layout in substage 13 remains consistent with the original intent of the Stage 1 Approval, as it still provides for residential development with public roads and access to open space. At this stage there are no development plans available for Lot 34, however given the maximum dwelling yield of 123, sufficient road and pedestrian linkages will be possible into Lot 34 from all four sides when development does progress.
b. The reconfiguring of the lot layout causes the loss of 8 residential lots effectively sterilises what was previously considered developable land. This is not desirable in these times of housing shortages. It is likely that the creation of the drainage reserve on the high side of the southern boundary of Lot 34, will impact the future developable land in Lot 34, as compared to the proposed orderly plan in the Approved Concept Master Plan.	The development of sub-stage 13 as currently approved does not address stormwater quality and quantity prior to entering Lot 34. Given there is currently no DA in process over lot 34, no development of sub-stage 13 can currently occur without the new proposed stormwater management measures as documented in this modification, therefore preventing the development of approximately 58 residential lots.  Given the owners of Lot 34 are still to obtain consent to develop, address conservation and biodiversity offsets and ensure servicing strategies are in place for the site, Huntlee is continuing to progress the amendment of sub-stage 13 in order to meet market demand for residential lots within the Hunter region.
c. The creation of an isolated pocket of public land which is not connected to other environmental corridors, produces less environmental benefit than adding that area of land to a larger environmental parcel which form part of a connective corridor. An isolated pocket creates long term community maintenance obligations which are lessened if the area is part of a larger contiguous parcel.	These new green pockets which will serve as stormwater management areas are connected to two riparian corridors which then connect to the main north-south creek line which runs through Lot 34.



Submission and Comment	Response
d. The approved Stage 1 Concept Master Plan provided obvious links for stormwater along the east west roads to the existing natural riparian area.	As above, these links to the existing riparian corridors within Lot 34 which serve as the natural drainage path still exist, and the sub-stage 13 stormwater management plan ensures that stormwater quantity and quality is addressed before leaving the Huntlee site and entering the existing vegetated riparian corridors.
e. 3.1.2 states that the changes to the Stage 13 layout are necessary to accommodate increase APZ as required in revised Bushfire Planning. The suggested increase of 2m in the APZ will not be necessary on Lot 34 is developed and will only require the stage 13 lots adjoining Lot 34 not be built on until Lot 34 is developed. This could easily be done with a suitable 88(b) on those lots.	The sub-stage 13 amendments are largely driven by stormwater management requirements and likely delayed timing of the development of Lot 34. Any APZ's would indeed become redundant once Lot 34 is developed or if the owners of Lot 34 allowed the APZ to be accommodated within their lot, however without either of these, the Modification 20 documentation adopts the current information and status of current agreements/approvals on hand.
Greenacre	
There needs to be public toilets and parking	Noted. These facilities are provided throughout the development at key locations.
Nelson Bay (One)	
No information provided on how the existing water, electricity and communication services to Lot 34 DP755211 will be maintained.	Condition E8 requires and ensures that access to Lot 34 will be maintained at all times, and if adjustment to the existing right of access is required in order to provide access over a new public road, this will be discussed with the owner of Lot 34. Huntlee will similarly protect and maintain, and where required re-align any existing services to Lot 34 through any new public roads. This will be similarly discussed with the owner of Lot 34 when any actions are required,  The new proposed access to Lot 34 is shown on Modification 20, and water, power and communications services would be placed in the same location as the proposed access.
	Condition E8 can be extended to cover protection and realignment of services through new road reserves if required.
No information on how Lot 34 will have access to public roads for future development and future access to HWC, Energy Australia and NBN services. The public road connectivity to Lot 34 will affect the ability of the relevant service Authorities to provide the necessary services for future subdivision of Lot 34.	In addition to the above, the surrounding Substages 1, 2, 13 and 15 to Lot 34 allow for connectivity to public roads and services.
The public road connectivity will affect the ability of HWC to provide sewer infrastructure from North Rothbury to the Branxton Treatment works. CCC Huntlee DCP is not consistent with the proposed modification master plan. How will road connectivity be maintained for the future development of Lot 34?	The surrounding Substages 1, 2, 13 and 15 to Lot 34 allow for connectivity to public roads and services.  Huntlee is not aware of the intention of Lot 34 to connect to Hunter Water's sewer treatment works, noting the existing dwelling has on site sewer at present. Future development plans on Lot 34 will need to review feasibility of connections to Hunter Water or Altogether's private network.  Road connectivity is still achievable to Lot 34 from the Huntlee development. It would be subject to plans being provided by the owner/developer of Lot 34 to identify connection locations and an internal road network and subdivision pattern that allowed for appropriate connections to be made.
No specific details on connectivity of North Rothbury to the Huntlee stage 14/15 Road network for future extension of water and/or	As outlined above, public road access to Lot 34 is shown on the Modification 20 plans which will allow connection of any required services.



Submission and Comment	Response
sewer mains to Lot 34 DP755211. The construction of substantial retaining walls essentially blocking connectivity is apparent along the southern boundary of Lot 34 DP 755211. Require details of any proposed retaining walls along the boundary with Lot 34 and with existing North Rothbury.	
Further clarification on the timing for the construction of the extension of Rothbury Street.	This is the subject of a separate DA8/2018/853/1 with Cessnock Council, however the timing of this extension is likely late 2022 or early 2023.
The connectivity of North Rothbury is dependent on the construction of stage 15 and Rothbury Street. Further clarification on the timing for the construction of the extension of Rothbury Street. Huntlee could delay the last stage and never have to connect the subdivision streets to North Rothbury.	It is noted that as part of the original traffic modelling carried out for Huntlee, these streets were assumed as not being connected. As such, Huntlee only proposes to provide for emergency access here, with only Rothbury Street indicating a through connection to Huntlee, consistent with the road hierarchy outlined in the DCP.
The drainage from Stage 1 is not compliant with the approved Worley Parsons drainage system (as attached). The 1% AEP flood event should not pond against the Triton Boulevard boundary of Lot 34.	Figure 14A provided by Northrop at <b>Attachment A</b> compares the existing and developed 1% flood depths across lot 34, with no increase identified.
The proposed non connectivity of Stage 1 reduces the ability for roads to convey the overland flows and the piped minor storm events to the drainage channel.	Northrop's stormwater management strategy ensures the management of stormwater flows prior to leaving Huntlee's site and entering Lot 34.
Insufficient details on the online detention basins 1 and 2.	The details for these online basins have previously been provided in earlier approved DA modifications and are not the subject of approval in Modification 20.
Insufficient details on the overflows across Lot 34 for the current approval and proposed by Mod 20.	As discussed in the Stormwater and Flood Management Strategy, ultimately runoff from the impacted sub-catchments will be conveyed to offline water quality facilities and offline detention facilities before discharging across the Lot 34 site boundary. Mitigation facilities will be designed to ensure all water quality and quantity objectives are met prior to discharge. In accordance with Council requirements these objectives include reducing post developed flows to pre-developed rates prior to discharge from site to avoid impacting downstream properties. Indicative detention and biofiltration basin locations are illustrated in Appendix E of the Modification 20 lodgement package, refer page 54.
Nelson Bay (Two)	
Objection to the proposed modification to the consent is submitted for the following reasons  The lot and road layout referred to on the Stage 1 constraints amended lots plan - author Daly Smith Consultants to drawing No 20406 – Dated the 2nd Nov 2021 notes a potential conflict with the existing right of access referred to herein and the proposed road and lot layout in the immediate locality. Recent site inspection noted that the land adjacent to the said right of access is	This issue has been discussed with the owner of Lot 34, Condition E8 also already protects the access to Lot 34. Access will be maintained at all times and construction of new public road access to Lot 34 will be staged to ensure access is available at all times.



#### **Submission and Comment**

#### Response

currently vacant with existing roadways terminating at the intersection of Laverty Ave and Amberton Parkway.

Stormwater Management

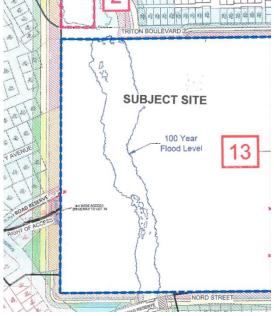
Attached to the submission is a report prepared by consultant civil engineer Paul Meredith of Tricad Design referencing:

Responses provided below to each query raised, it is however noted that Modification 20 is not seeking approval of the stormwater structures which are the subject of these comments. Detailed reports were included in previous approved modifications and these structures are already constructed.

Comment on design and location of Detention Basin 3 currently under construction adjacent to the southern boundary of the subject property

Basin 3 has been designed, approved, and constructed under a separate application. Notwithstanding this we note that the basin location and volume (approximately 10,000m3) has been consistently maintained since the original proposal prepared by Worley Parson in 2012 (refer Huntlee Project Trunk Stormwater and Flooding Assessment – Stage 1 Project Application).

Comment on stormwater management and detention issues relating to the proposed road layout within Stages 1 & 13 adjacent to the subject site and projected points of access connection to the subject site as noted in red colored cross on the attached plan.



As discussed in the Stormwater and Flood Management Strategy, ultimately runoff from the impacted sub-catchments will be conveyed to offline water quality facilities and offline detention facilities before discharging across the Lot 34 site boundary. Mitigation facilities will be designed to ensure all water quality and quantity objectives are met prior to discharge. In accordance with Council requirements these objectives include reducing post developed flows to pre-developed rates prior to discharge from site to avoid impacting downstream properties. Drainage reserves have been located based on the sites natural topography to maintain the sites pre-developed drainage regime. Access to the proposed basins within the nominated drainage reserves will be provided in accordance with Council maintenance requirements.

#### **TriCAD Design Commentary**

Rainfall Depths - access to the BOM web site has yielded the rainfall depths shown in the adjacent table. Although the depths for 20%, 10% and 1% AEP events appear consistent - the 50% AEP storm events do not. Can this please be clarified?

Areal reduction factor depths have been presented for the 50% AEP and not for remaining return intervals. Application of the Areal reduction factor depths is detailed is the Basin 3 design report.

The Designers have suggested that applying a 0% blockage factor to the drainage structures is the "worse-case" scenario. Respectfully, this

Yes correct, 0% blockage is considered worst-case for pre-to-post modelling. Blockage has been applied to the basin outlet when defining maximum water levels and calculating the required detention volume.



Submission and Comment	Response
maybe the case in ascertaining the flow rates down stream – but it certainly would not be the worse-case scenario in regards to the sizing of Basin 3. ARR 2019 recommends that a blockage factor of at least 50% should be applied to all cross-drainage structures.	Blockage strategy is outlined in the Basin 3 design report – E14. A 50% blockage has been applied to the low flow outlets, and a reduced 15% has been applied to the secondary outlet structures. A reduced 15% blockage has been adopted for the secondary outlet structures generally in accordance with the "multiple cells" philosophy outlined in ARR 2019 and is considered appropriate.
If a 50% blockage factor is applied – then more water would need to be detained in Basin 3, increasing the volume required to detain the flow.	Blockage has been applied to the basin outlet when defining maximum water levels and calculating the required detention volume. Blockage factors are detailed in the design report and in the above response.
The Designers have not reported on the issue of storm water over topping Nord Street in the event of major storm events or indeed during the PMF. This may have implications of safety on the design and level of Nord Street as well as the sizing of the outlet structures from Basin 3.	The basin is not overtopped during the major storm design event and the Basin 3 Design report provided as part of previous DA modifications (refer Appendix E of the Modification 20 lodgement package, sub-Appendix D) suggests no proposed lots are impacted during the regional PMF flood event and rising road evacuation is available on both sides of the creek. As flood free land and rising road evacuation is available on both sides of the crossing, no increased sizing for the outlet structures is required from a floodplain risk management perspective.
· The Designers have suggested a 65% fraction impervious for the developed catchment areas. Can this value be justified please?	Impervious fractions have been adopted in accordance with the approved Stormwater Management Strategy for Stage 1 (refer Huntlee Project Trunk Stormwater and Flooding Assessment – Stage 1 Project Application Worley Parson 2012). This strategy proposed a standard residential density across the lot areas within sub-stages 14 and 15. MOD 20 has not proposed an alternative use for this area and as such the impervious fraction has been appropriately adopted.
The Designers have not elaborated on the need for detailed erosion and scour protection at the outlet of Basin 3. Given that outlet velocities greater than 4m/sec are expected it is considered necessary that some form of energy dissipation would be required at the outlet. It is suggested that an 11m long rock apron will not mitigate the erosion issues that may occur as a consequence of these velocities.	Rock scour erosion protection has been sized for the 1% AEP design flow rates and velocities in accordance with current best practise guidelines. In accordance with the project approval design of Basin 3, including the inlet and outlet structures and protections, have been accessed and approved by NRAR (NSW Department of Natural Resources Access Regulator).
It is noted that the Designers have opted to use a 0% fraction impervious for some of the impervious catchments. It is suggested that no catchment is 0% impervious and that a minimum value for rural type catchments should be 10%.	Impervious fractions have been adopted in accordance with the approved Stormwater Management Strategy for Stage 1 (refer Huntlee Project Trunk Stormwater and Flooding Assessment – Stage 1 Project Application Worley Parson 2012). MOD 20 has not proposed an alternative use for the riparian or green space corridors and as such the impervious fraction has been appropriately adopted.
No details have been provided to show where the proposed water quality measures are to be used.	The water quality treatment targets and devices are outlined within Section 5 of the submitted Stormwater and Flood Management Strategy. Indicative biofiltration basin locations are also illustrated in Appendix A, refer page 54.
Pluviograph data has been adopted by the Designers using the Millfield site which is 32.5Km (by road) from the subject site. Adoption of Site 061014 Branxton is only 9.2Km away and would be a closer approximation of the subject site rainfall.	To develop a model that could comprehensively assess the performance of the proposed stormwater management plan and to be consistent with the Original Report (WorleyParsons, 2012), 6-minute pluviograph data from the BoM station 061174, located in Millfield, was used. As per the Original Report (WorleyParsons, 2012), rainfall between 1969 and 1973 was used for all MUSIC water quality simulations. This period is reported to represent '5 consecutive years of approximate average rainfall'.
Although it is acknowledged that Catchments C14, C15, C98, C84 and C96 all contribute to the	We acknowledge that Millfield is approximately 24km from the site however note that it provided a better sample of consecutive rainfall



#### **Submission and Comment** Response volume of the proposed Basin 3 - it also evident data. Consecutive rainfall data which represents approximate average from Figure 7B within the Northrop Report that rainfall is fundamental to ensuring accurate water quality treatment there are areas of catchment C15 plus all of design. catchments C18, C23 and C25 are wholly unmanaged before they enter Lot 34. How do the Designers propose to manage these areas for water quantity and quality? The Designers have not provided any details on Figure 14A (Attachment A) has been provided to show any differences the extents of the post-development flooding during the pre and post major storm event from the major creek line (1% AEP and PMF) within Lot 34. The coloured traversing the site, as is evident, no increases in the extent of flooding images extracted from the 2-D modelling do occur on Lot 34 during the major storm event. As discussed in the not give any clarity to the differences between Stormwater and Flood Management Strategy, ultimately runoff from the impacted sub-catchments will be conveyed to offline water quality the pre and post development impacts on Lot 34. Can this please be clarified? facilities and offline detention facilities before discharging across the Lot 34 site boundary. Mitigation facilities will be designed to ensure all water quality and quantity objectives are met prior to discharge. In accordance with Council requirements these objectives include reducing post developed flows to pre-developed rates prior to discharge from site to avoid impacting downstream properties. Indicative detention and biofiltration basin locations are illustrated in Appendix E, refer page 54.

## 4.0 Changes to the Development

There are minor changes proposed to the development based on the submissions made. These include:

- Introduction of gates at the road interfaces between North Rothbury and Substage 14 to allow pedestrian, cyclist and emergency access from Rothbury Street, and pedestrian and cyclist access only from Thomas Street and Mitchell Street. These will be implemented on detailed design plans; and
- Deletion of Condition C5(h) relating to the dedication of a 4ha land parcel for a zone substation. This has been confirmed as not required by Ausgrid (Attachment C).

## 5.0 Additional Environmental Assessment

Given the minor changes to the development which are in response to ensuring no vehicular access (except in case of emergency) from the Huntlee development site to North Rothbury, no additional environmental assessment is considered necessary.

## 6.0 Conclusion

We trust that the information provided in this response addresses the matters raised by DPE, other agencies and the public, and allows the planning assessment to proceed. The amendments to the Huntlee development confirms that all



major key elements of the proposed development as originally proposed and exhibited have remained mostly unchanged.

Yours sincerely,

**Christopher Curtis** 

Clurks

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