enquiries refer
Peter Drew
in reply please quote
22/51075

4 August 2022

Andrew Watson
DA Coordinator
Key Sites & Regional Assessments
Department of Planning and Environment

Attention: Michelle Niles

By NSW Planning Portal

Dear Andrew

Re: Submission to Modification Proposal - Epiq Lennox Head MP 07_0026 MOD 7

I refer to your email of 8 July 2022 regarding an amended application to modify the current approval relating to Super Lot 5 in the Epiq Estate at Lennox Head.

The following comments are provided by Council staff from a technical perspective for consideration by the Department in the assessment and determination of the modification application.

1. Perimeter Road

Council has previously raised the provision of a perimeter road to separate development on Super Lot 5 from the conservation zone.

As can be seen from plan Illustration C8 (Plate 1), perimeter roads are used throughout the estate to separate the residential portions of the site from the conservation zone and this type of approach is typical in situations of this nature. This is also consistent with what was anticipated on this land with Illustration C8 showing a perimeter road separating the majority of the concept approved retirement lots on Super Lot 5 from the conservation zone.

Council's preferred approach is for the design to incorporate a perimeter road, particularly on the basis that it provides for a better address of key issues such as bushfire management, mosquito management and conservation zone management.

Council does not support the proposed arrangement for a public reserve with 4m wide gravel path, in lieu of a perimeter road, between the development and conservation zone for the following reasons:

- This arrangement creates a maintenance burden for Council with high cyclical maintenance cost in perpetuity to maintain the public reserve as an Asset Protection Zone (APZ).

  Where new subdivisions need to provide APZs, they are typically required to be located on private land. Council will generally only consider the provision of APZs on public land when they are located within a public road and it can be demonstrated that regular

vegetation management is not required to be undertaken by Council. The proposal is inconsistent with Council Policy F03 – Fire Asset Protection Zones – Private Use of Public Land.

- The buffer to the conservation zone predominately provides a private benefit to the development (e.g. bushfire protection and mosquito management) but provides minimal public benefit to the wider community.
- The proposed 4m gravel walking track is considered unsuitable as a public access path and will likely require high level maintenance during wet season years.
- The proposed reserve will have limited passive/natural surveillance given it is not clearly visible from public roads. This is not a preferred design solution in terms of Crime Prevention Through Environmental Design (CPTED) principles.
- From an ecological context, a grassed park next to the conservation zone has the potential to have a greater range of adverse impacts on the downstream conservation zone including rubbish dumping, increased weeds and nutrients entering the reserve by dog faeces and grass clippings compared to the presence of a public road.

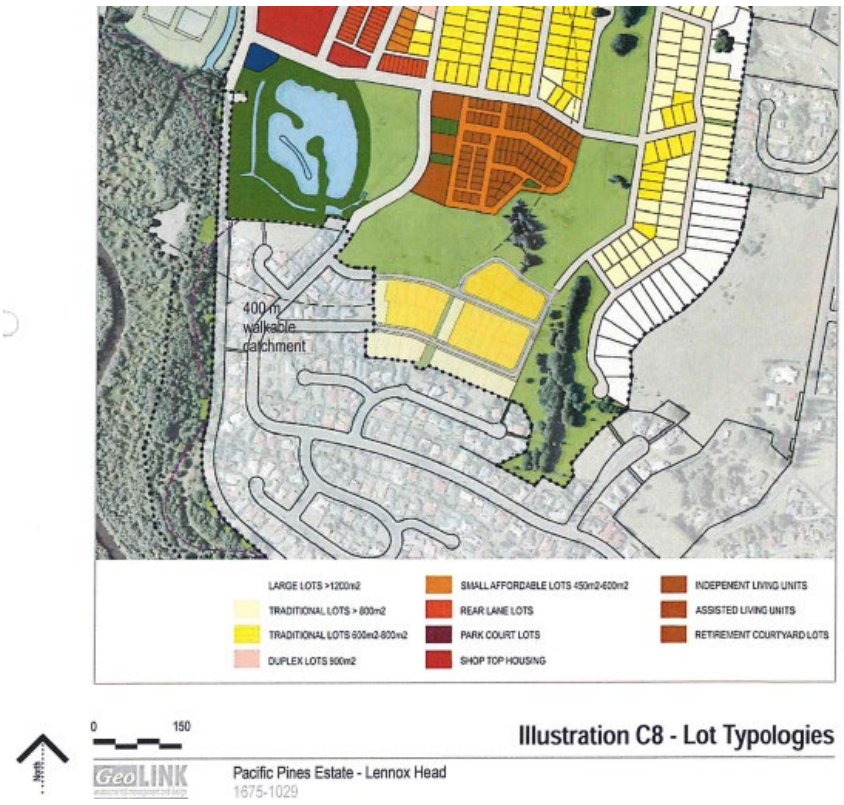

Plate 1: DPIE Approved Concept and Project Plan associated with Mod 4.

2. Design of Lot 203 Proposed Central Public Reserve

The design of the proposed central park is not supported by Council for the following reasons:

- Approximately half the small reserve space is considered unsuitable for use due to the steep gradient. Council requires a usable flat space with a max 4% grade for public use safely.

- Council generally requires a minimum usable park area of 2000m^2. The reserve is undersized for a public park and the usability is further restricted due to gradient issues.
- The reserve should be located and designed to maximise street frontage and public access, and encourage passive surveillance from surrounding residents and the street.

3. Mosquito Management and APZs

A minimum 25 metre mosquito buffer should be provided between the edge of the conservation zone and private allotments (as opposed to distancing from the dwelling) as a strategy to reduce mosquito impacts (mosquito buffers should not extent into the conservation zone). The current plans provide a 20 metre buffer which is further reduced to 15 metres by the native vegetation strip now shown on the plans.

The mosquito buffer should incorporate the following:

- Free of vegetation (other than mowed grass) or other structures which facilitate mosquito dispersal and provides harbourage for resting adult mosquitoes. The current proposal provides for 5 metres 'native repellent vegetation' adjoining the conservation zone and within the mosquito buffer and trees within the now 15 metre buffer. This 5 metre native vegetation strip reduces the mosquito buffer to 15 metres and Council is unclear how the proposed use of vegetation results in repelling of mosquitoes.
- Free of structures or features that have the potential to act as mosquito breeding sites.
- Not contain any type of dwelling.
- Easily maintained. The current proposal shows a gravel path and otherwise 'mosquito repellent' vegetation, trees or grass within a road reserve. This is not considered to be easily maintained and, as it will be a Council maintenance responsibility, is not considered appropriate in the circumstances.

Council provides guidance of mosquito management within the Ballina Shire Development Control Plan Chapter 2. An extract from this element of the DCP is provided in Plate 2

Notes:

Ideally mosquito buffers should be free of vegetation except for mowed grass but the maintenance burden of such areas can be challenging. If alternate vegetation is proposed, the vegetation types must be tall growing lightly foliaged native trees with a high canopy that cast minimal shade over the ground around it, while airflow around the lower limbs and base is maximised.

Dense low shrubs, closely planted can provide refuge for mosquitoes. The extent of plantings should therefore be minimised or allowances made for open areas between plantings so they do not create connections between more substantial adult mosquito refuges and residential developments.

The denser the foliage and canopy of a tree or shrub, the greater likelihood is that it will provide suitable refuge for mosquitoes. High density plantings especially around recreational facilities (e.g. swimming pool, playgrounds, picnic areas) further contribute to the creation of suitable refuge areas.

If vegetation is proposed to be removed from the site in order to provide a mosquito buffer, the vegetation removal must form part of the development proposal and appropriate flora and fauna assessments are to be undertaken and submitted with the application. Council will generally not support the removal of vegetation, unless it comprises only minor tree removal, in order to provide a mosquito buffer.

Plate 2 - Notes from section 3.6 xvi in Chapter 2 of Ballina DCP 2012

Given that the ultimate revegetation outcome within the conservation zone to the south and east of Super Lot 5 is now likely to be swamp forest (tall dense and wet), compared to the original proposed hairy joint grass (low and open), the provision of a suitable mosquito management setback is considered to be particularly important.

If the applicant is of a mind to provide further information in support of the proposed mosquito management arrangement as it has been presented, one option is for the proposed changes to be assessed by a suitably qualified entomologist to determine if they are suitable to address the mosquito risk if this has not already been undertaken.

4. Residential Component

Given the scale of the development and limited timeframes to consider the proposal, Council has not been able to undertake a thorough assessment of the expected residential component of the development.

Whilst it is noted that the residential development will be subject to a separate application(s), the subdivision and subsequent developments are interconnected (i.e. once the subdivision is approved there is limited opportunity to refine the dwelling designs due to the proposed lot sizes being significantly less than the minimum lot size permitted under the Ballina LEP 2012).

Accordingly, the Department should be satisfied with the dwelling design outcomes likely to result from the subdivision prior to approval of this modification. In this regard consideration should be given to the following:

- Residential amenity for future residents (privacy, solar access, overshadowing, cross ventilation, and private open space).
- Principles of adaptability and aging in place.
- A minimum of two residential car parking spaces being provided to each dwelling, in accordance with the Ballina DCP 2012, contained wholly within the subject allotments.
- Adequacy of street frontage provided to dwellings to allow for garbage bins to be presented on the road reserve for collection (e.g. lots, 13 to 15, 22, 23, 46 to 48, and 60 to 62 have not or limited street frontage for placement of bins). This should be considered in relation to street trees and driveway locations which can reduce the available area.
- Ability of the future dwellings to align with the standards set for medium density within Ballina Shire under the Ballina LEP 2012 (especially FSR) and Chapter 4 of the Ballina Shire DCP 2012 (for example, the proposed site coverage exceeds what is enabled under the DCP and LEP via a 0.5:1 FSR).
- Design solutions, such as 'Dwellings with south facing living areas have access to direct northern daylight to upper bedrooms', do not achieve good residential design outcomes for future residents and increases reliance on artificial heating, cooling and lighting. The main living areas and principal private open space of all dwellings should be capable of being located towards the north or east, in accordance with the requirements of Chapter 4 of the Ballina DCP 2012. In particular solar access for future dwellings on individual lots should be carefully considered (e.g. the orientation and solar access capacity for lots 14, 21, 27, 34, 49 and 50 are of concern).
- The proposed 8.8 metre height foreshadowed in the design guidelines exceeds the minimum height control development standard under Clause 4.3 of the Ballina LEP 2012.

A broad scale exceedance of the building height standard in this location is not underpinned by a detailed justification and is not supported.

- Minimum 6m building setbacks should be provided to Snapper Drive and Montwood Drive to accord with the standard setbacks applied to residential development within the estate.
- Due to the narrow lot frontages many of the roads will likely be dominated by garages at pedestrian level, with an inability to incorporate traditional street addresses into many of the dwelling designs.

5. Engineering Servicing

Modification 7 was initially submitted in August 2018. This application was for a subdivision to create 145 residential lots and associated plans defined the configuration of lots, roads and reserves etc in the proposed subdivision. The application was accompanied by an attachment 4 "Engineering Services Report" that provided concept engineering assessment and proposals for land forming and servicing of the subdivision. The report addressed:

- Bulk earthworks
- Road layout and site access
- Traffic assessment
- Developer contributions
- Stormwater management including sub-catchments, catchments, pipe and overland conveyance, treatment, attenuation and points of discharge
- Sewer services
- Water (potable and recycled) reticulation
- Sediment and erosion control.

The Engineering Services Report was used by Council's development engineers to assess the proposal in order to assist the Department in its consideration of the proposal. There have been several letters and emails to the Department (and the applicant) over ensuing years that have attempted to address outstanding Super Lot 5 engineering services issues. A number of these issues, particularly relating to stormwater management have also had environmental consequences, particularly to the downstream receiving waters in the adjacent conservation zone.

The current Modification 7 application is for an "updated subdivision design" that is a significantly different subdivision layout (to the 2018 version) with the number of proposed residential lots reduced to 102 residential allotments.

The current "updated subdivision design" is accompanied by a number of engineering type plans (Bulk Earthworks, Civil works plan, Civil Services Plan, Sewer Rising Main Plan), but has no accompanying updated/amended "Engineering Services Report" to address, explain and justify the engineering response to the "updated subdivision design".

In this regard, the 2018 Engineering Services Report essentially relates to a different subdivision. In the absence of an updated "Engineering Services Report" to inform the "updated subdivision design", there is insufficient information to accurately assess the revised proposal. Based on the submitted information, Council has concerns about stormwater management, compliance with Concept Term C17 Water Management Plan, bulk earthworks/land forming, road grading, intersections, driveways and ongoing responsibility for the perimeter reserve to the conservation zone.

a) Bulk Earthworks

The proposed landform grading and retaining wall design for the proposed park on Lot 203 does not provide an acceptable overland flow path directed to Road 1 and Montwood Drive.

b) Intersections

The proposed full function intersection of Road 1 to Montwood Drive in the "updated subdivision design" is not acceptable. This matter was partially addressed by the applicant following exhibition of the August 2018 version of Mod 7 by amending the intersection to left in/left out only. The applicant has now reversed this remedy. In Council's letter to the Department RN 20/54210 dated 5 August 2020 it was advised:

"2. Site Access

- *The proposed left in/left out access onto Montwood Drive is supported. Until detailed design is finalised, it is not known if widening of the Montwood Drive pavement will be required to accommodate the width of the proposed median. However, this and other similar road design details can be dealt with through Project Conditions and the S138 Roads Act application process.*
- *Council strongly opposes any direct lot access onto Montwood Drive. Montwood Drive is a key connector road link in the Ballina Shire arterial road network and its capacity and functionality would be compromised if any direct lot access were permitted from Super Lot 5."*

Council's position on the issue remains unchanged. A full function intersection is not acceptable. A left in/left out intersection may be considered acceptable, subject to detailed design process to determine if widening of Montwood Drive is required to accommodate the central median required to prevent right turns.

c) Driveways and Parking

The applicant has noted that the "updated subdivision design" has increased on-street parking from 55 to 69 spaces which is considered an improvement. However, it is noted that the on-street parking supply is predominately located in the eastern part of the subdivision and that the western section has less than one on street space available per allotment/dwelling. This may not be sufficient to accommodate delivery/service vehicles, visitors and overflow domestic vehicles.

The applicant has not determined driveway locations or demonstrated that proposed driveways can be located to provide sufficient sight distance for drivers. There is concern that the indicative landscaping submitted will obstruct sightlines from driveways and increase safety risk.

Due to the narrow lot widths of the proposed lots, there is also concern that driveways for future dwellings may be unable to be located to avoid the prohibited locations shown on Figure 3.1 (Cl3.2.3(a)) of AS 2890.1. This issue needs to be considered and addressed at the subdivision stage.

In accordance with Chapter 4 of the Ballina DCP 2012 (and general requirements under the Housing Code), car parking spaces forward of proposed garages should be a minimum 5.5m from the front boundary to the property (not 5m as proposed under the design guidelines).

6. Ecological Assessment

When Modification 7 was submitted in August 2018 it was supported by biodiversity assessment report. The revised modification application proposes a significantly different subdivision layout (to the 2018 version) but is not supported by an updated biodiversity assessment report. Council also notes that the previous biodiversity assessment report identified that stormwater discharge arising from the development could have an adverse impact on the conservation zone.

The biodiversity assessment report dated 12 March 2018 did not appear to undertake assessment of discharging stormwater into the conservation zone as the engineering report was dated 27 September 2018.

It is suggested that the Department should seek an updated biodiversity assessment report that incorporates address of contemporary stormwater management information

7. Internal Site Landscaping

Landscaping should be designed to ensure appropriate tree species are selected and placed suitable distances away from all services, stormwater and other pits and lights.

Council's letter of 5 August 2020 raised concerns about the impact of proposed street trees on a range of matters. A review of the applicant's response confirms those matters remain outstanding (refer to Plates 3-5). This issue has been further complicated as the development now includes planting works located immediately adjacent to proposed retaining walls. It is also likely that due to the lack of space the trees, with their lateral spread, will come into direct conflict with the future buildings.

While the applicant states the planting species could be altered to negate the above conflicts, the applicant should be required to address this matter as part of the application (including submission of a revised landscape plan with new species schedule, distances to services and infrastructure identified), as reducing the size and density of the plantings is not likely to have the same effect on screening and reducing the bulk and scale of the future buildings.

Plate 3: Landscape plan depicting tree planting adjacent to Blocks 5-9 and 18

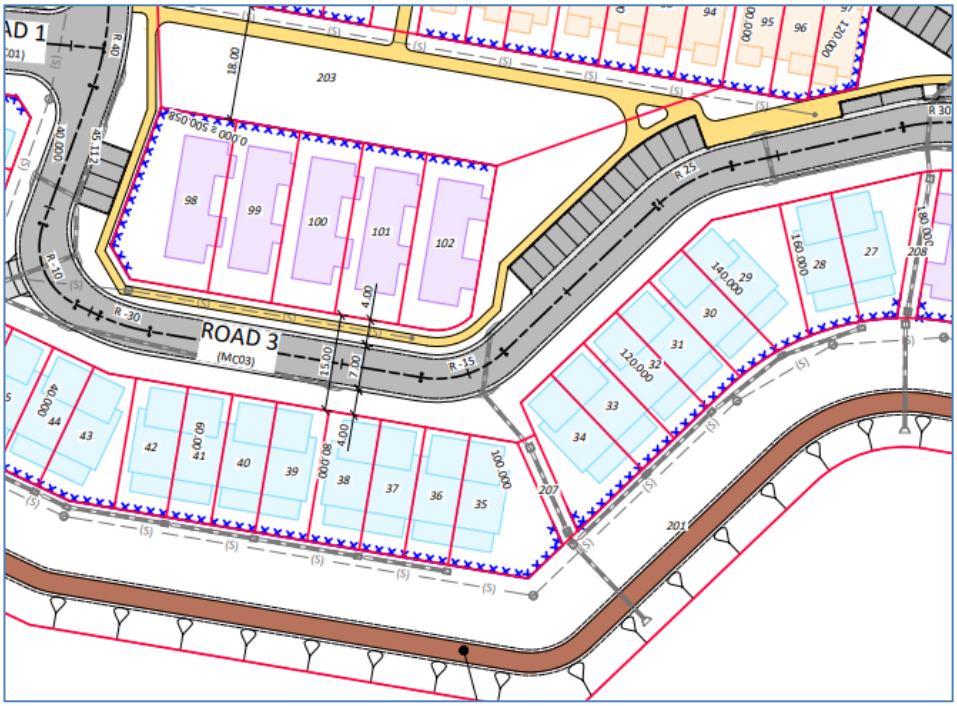

Plate 4: Engineering plans showing an area 4m occurs between formed road and the edge of the allotments. The available space for tree planting to the south of units 98-102 is impacted by the proposed footpath. Retaining wall are also present to the north of Lots 98-102.

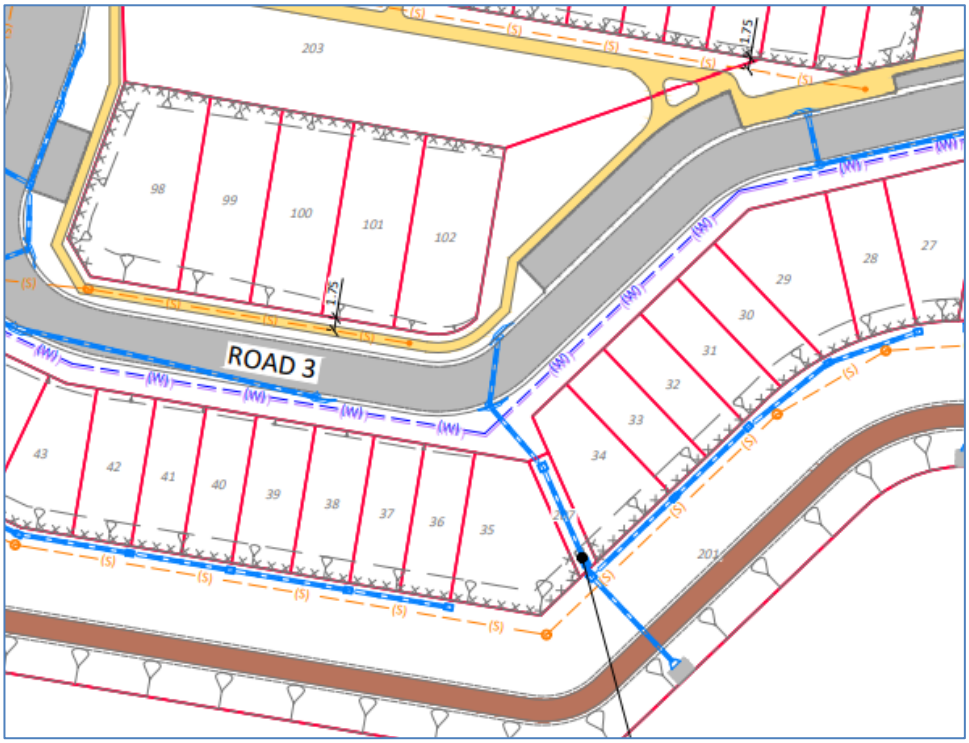

Plate 5: Service mains located within the nominated planting areas Lots 27-43.

8. Stormwater Management

The road and bulk earthworks plans indicate a substantially amended landform and road grading which results in changes to:

- Configuration and area of stormwater sub catchments
- Location, volumes and points of discharge of overland "major" stormwater flows
- Points of discharge for stormwater sub catchments
- Stormwater conveyance paths and discharge volumes downstream of points of discharge, particularly through the conservation zone areas.

The above changes and the landform grading of proposed lot 203 result in an unacceptable concentration of overland stormwater flows to Road 1 and hence to Montwood Drive.

The reduction of upstream sag points in Road 3 (in the "updated subdivision design" compared to the August 2018 application) which provided relief to overland stormwater flows prior to reaching Road 1 is not acceptable as it could result in flooding of Montwood Drive (a major collector road carrying significant volumes of traffic) and associated road safety risk..

As no details of stormwater sub catchments and areas has been provided it is uncertain as to what volumes will be discharged across Montwood Drive to the east and what proportion will be discharged to the sensitive conservation zone area south of Super Lot 5.

The proposed stormwater discharge conveyance paths through the conservation zone have not been assessed for capacity or associated environmental impacts as a result of stormwater flows or necessary stormwater channel regular maintenance and vegetation clearing.

Stormwater attenuation and treatment for the "updated subdivision design" does not appear to have been addressed.

In regard to this version of Mod 7 application, it is not evident that the MP07_0026 Concept Approval Term "*C17 Water Management Plan - Future applications for the development require the submission of an updated Water Management Plan, prepared by a suitably qualified person(s) that ensures the hydrological regime of the Freshwater Wetlands EEC is maintained and associated threatened species will be protected throughout the life of the project."* has been addressed.

9. Stormwater Discharge

Council notes that DPE requested the proponent to undertake an "*assessment of potential impacts to the wetlands and other vegetation communities of water flow to be directed into the conservation area*".

Based on the available material it appears the applicant has provided a limited response to this request and the comments contained within the applicant's letter of response dated 15 June 2022 do not seem to be underpinned by any current technical reports.

While the applicant's response focuses on the extent of the Freshwater Wetland it is also evident that between 2016 and 2021 the distribution of two threatened species of flora namely, Hairy joint Grass (HJG) and Square Stemmed Spike Rush (SSSR), have declined by approximately 60% and 45% respectively (Plate 6).

Council understands the species have not recovered and has recorded similar abundance levels as part of the 2022 reporting season.

Table 3.20 HJG, SSSR and Freshwater Wetlands Distribution Comparison

Year	Area (m^2)	Change (%)
Hairy Joint Grass		
2011	16,864	
2016	23,388	+38.69
2017	7,182	-69.30
2018	6,965	-3.02
2019	7,935	+13.93
2020	4,789	-39.6
2021	9,293	+94.0
Square-stemmed Spike-rush		
2011	23,885	
2016	24,569	+2.86
2017	23,603	-4.00
2018	19,887	-15.74
2019	22,604	+13.66
2020	12,629	-44.13
2021	10,935	-13.42
Freshwater Wetland		
2011	43,112	
2016	36,925	-14.35
2017	38,409	+4.02
2018	36,892	- 3.95
2019	36,866	- 0.07
2020	35,300	-4.25
2021	39,196	+11.04

Monitoring results indicate that both HJG and SSSR declined in 2017 and 2018 and despite a slight recovery in 2019, declined again in 2020. In 2021 however HJG has shown the largest recovery/ increase in distribution since monitoring began in 2016. HJG has shown a total reduction of 39.73% since 2016 (when distribution was particularly robust), with an overall reduction of 55.1% since baseline monitoring in 2011. SSSR had its biggest reduction in 2020 of 47.1% since baseline monitoring in 2011 but improved slightly again in 2021. Freshwater wetlands have shown a reduction of 9% since baseline monitoring in 2011.

Plate 6: Extract from 2021 Vegetation Monitoring Report prepared by GeoLINK

The reasons for these declines remain unknown. Council notes Section 10.6 of the Conservation Zone Management Plan limits each species loss to less than 10% after which a range of contingency measures are required to be implemented. Required actions include adaptive management and securing genetic material, comparisons with other HJG populations, re-establishing poorly performing areas of HJG, SSSR or Freshwater Wetland habitat and/or more significantly making a Biobanking payment. Council considers these matters to be relevant considerations for the Department in relation to the current proposal given the interaction of the proposed subdivision (and the subsequent dwelling development) with the conservation area.

Hydrological conditions and implications on flora relative to the Conservation Zone Management Plan and previous conditions of approval should be considered in further detail to inform decision making on the current proposal (e.g. to determine whether any identified adverse impacts may be exacerbated or improved as a result of the modification). This includes reference to required reporting, mitigation and monitoring measures and expected environmental outcomes. An updated water management plan for the estate that takes this modification into account may assist the Department in its assessment.

Overall, Council is concerned about the present condition of the conservation zone relative to the expected outcomes under stormwater management plans, water management plan and conservation zone management plan. Without an assessment of the current condition

of the conservation zone relative to the previously conditioned outcomes, it is difficult to determine the extent to which the modification will impact the area and whether or not this is acceptable. A holistic approach to the conservation zone is necessary to achieve the best outcome for the environmental attributes present.

By way of some examples relating to the condition and management of the conservation zone, observations from a recent site inspection indicated the existing stormwater water treatment train is impacting on the conservation zone with rubbish deposition evident and urban stormwater entering the conservation zone during most rainfall events (Plates 7-9).

Plate 7: Rubbish deposited into the Conservation Zone as part of Release Area 1a. Scouring is also occurring.

Plate 8: Stormwater entering the Conservation Zone after a minor rainfall event. Note, the rubbish and degraded condition of the wetland.

Plate 9: Rubbish deposited into the Conservation Zone as part of Release Area 5. Stormwater entering the Conservation Zone after a minor rainfall event.

The applicant indicates that diverting stormwater generated from the development under Montwood Drive has the benefit of avoiding the conservation zone. Council's understanding is that this conclusion is incorrect, as the proposed conveyance pathway is still located within the conservation zone. Although Council previously suggested this approach could be an option for further investigation, detailed hydrological assessment is necessary to determine whether a viable stormwater conveyance pathway exists and the expected extent of any impact on ecological values.

A recent site inspection confirmed the drain is overgrown, with aquatic vegetation (Plates 10-11). Ultimately, if this option is pursued it is expected Council will incur significant ongoing monitoring and maintenance costs in removing aquatic vegetation to ensure conveyance through the conservation zone.

Plate 10: Stormwater swale next to Montwood Drive overgrown with cumbungi and other aquatic reed species.

Plate 11: Nominated drainage path below Montwood Drive

As a further example of a hydrology related issue in the conservation zone, Council previously raised concerns about the results of the soil moisture monitoring program. Council notes the applicant's letter dated 15 June 2022 indicates the technical difficulties with the monitoring equipment occurred between mid 2019 and August 2020.

However, as can be seen by Plate 12 the monitoring equipment has largely been dis-functional from April 2019 until December 2021, a period of some 2 1/2 years with one of the loggers MP1 not providing any information since March 2018. The timing of these malfunctions is considered significant in an ecological context, as Ballina LGA experienced a significant drought in 2019, followed by two years above average rainfall associated with La Nina weather patterns.

As the soil moisture monitoring commenced after construction works started at the site it appears the project has no pre development information to compare against the post development moisture results. It is assumed BMP1 was established as reference logger, but as the bulk earthworks for Release Area 5 started in early 2019 the reliance of that logger to operate as reference logger is compromised.

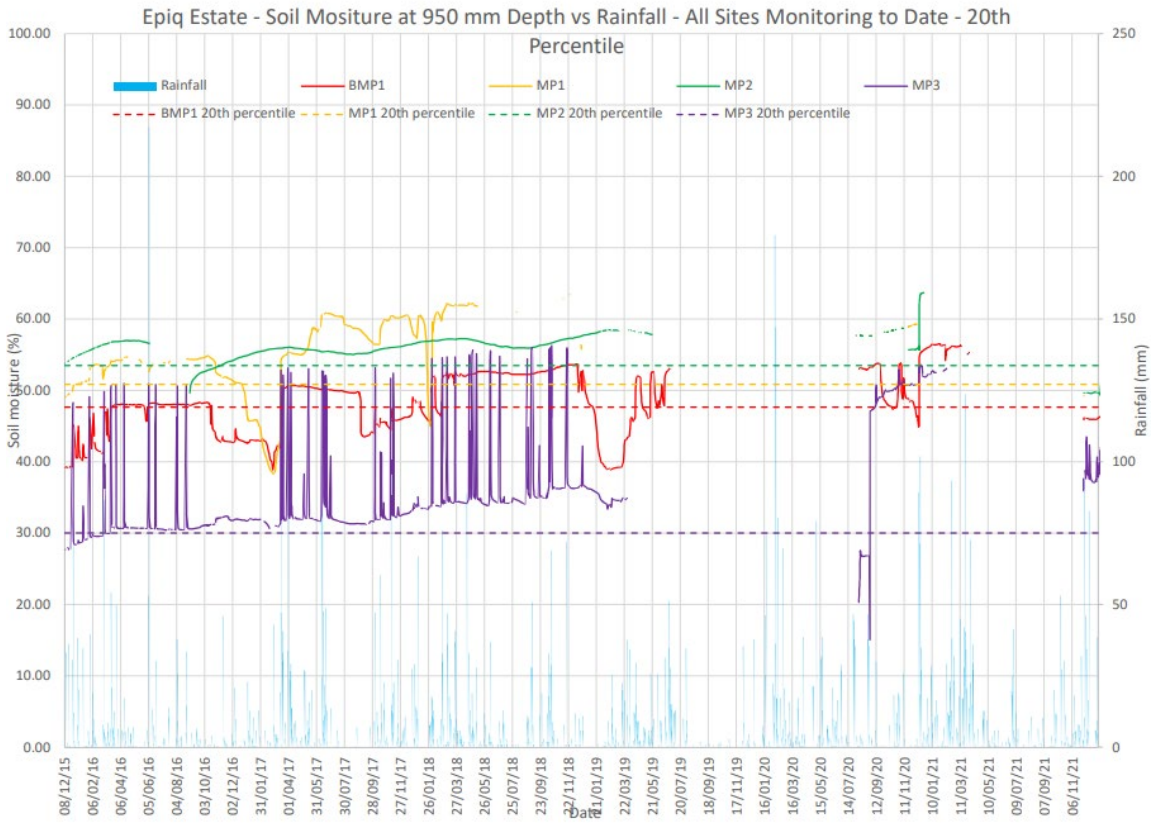

Plate 12 - Graph sourced from the 2021 Soil Moisture Report

10. Infill Plantings – Conservation Zone

To address the decline of HJG habitat it has been agreed between the applicant, Council, and state and federal government agencies that significant portions of previously HJG occupied habitat will converted to treed vegetation communities.

While the final form of these infill planting areas are the subject of ongoing discussions and the results of those further investigations, the planting works have the potential to impact on the bushfire and mosquito buffering requirements. Consequently, once the composition of the infill planting is agreed between the developer, Council and BCD a revised bushfire and mosquito assessments may be required. Essentially, this is another indication of the linkage between the management of the conservation zone and the modification design.

With respect to the landscaping plan it is evident that the proposal is to plant a 5 metre strip immediately adjacent to the conservation zone. Most plant types selected within the mosquito proofing planting mix contained in the Landscape Concept Design Report are not endemic to the site, and may pose a weed problem for the conservation zone.

11. Stormwater Works within the Conservation Zone.

The applicant's letter dated 15 June 2022 states that only minor works are required adjacent to Montwood Drive to correct an existing drainage issue and that Council has endorsed the work. Whilst this is reflective of an in-principal agreement reached between the applicant and Council, the current modification proposes to use the drain to discharge stormwater into the conservation zone (Plate 13).

This requires further assessment as the ecological impact of these works have not been examined in depth. It is noted in this regard that the works will result in the loss of an area of mapped Freshwater Wetland EEC depicted in Plate 14. Also, the hydrological capacity of the drain to convey the stormwater has not been assessed.

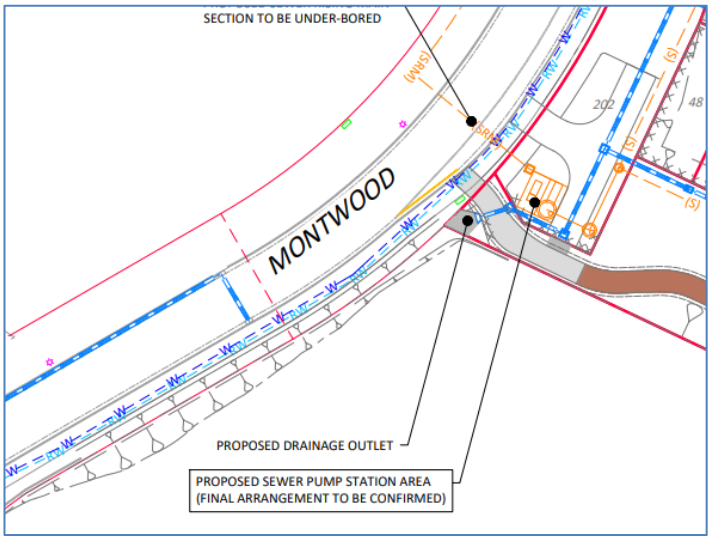

Plate 13: Exert from the submitted plan set showing stormwater discharge into to a non-existent drain.

Plate 14: Area of Freshwater Wetland to be impacted by the proposed drainage works.

Given the significance of the issues raised in this submission and as the conservation zone is to be ultimately dedicated to Council, it is requested that Modification 7 is not approved until:

- Additional hydrological investigations to be undertaken.
- The current and the long-term status and health of the conservation zone is fully understood and documented and potential impacts associated with the modification are examined in more detail. This should be reviewed relative to the conditions of approval and the various management plans that are in place.

There are a significant number of issues which require additional assessment and/or remain unresolved from Council's perspective.

Council is not in a position to support the modification from a technical perspective based on the available information. Our view is that we are also not able to provide suggested conditions of consent given the nature of the matters raised in this submission.

However, should the Department decide that the modification is capable of approval, then Council requests an opportunity to provide further advice to the Department on potential conditions of approval based on the Department's assessment.

In particular, it is essential that Council is consulted further on any conditions relating to public land (including potential public land) and interfaces with public land, public roads and in relation to the imposition of developer contributions (the development should not be approved without conditions addressing contributions applicable under s7.11 of the EP&A Act and developer servicing charges for water and wastewater infrastructure).

Thank you for providing Council with an extension of time to review and comment on the proponent's additional information.

If you have any enquiries in regard to this matter please contact Peter Drew on 1300 864 444.

Yours faithfully

Matthew Wood

Matthew Wood
Director
Planning and Environmental Health Division