ATTACHMENT B – NRPP Report DA25/0011

Pre - lodgement Summary and DA Assessment Comments:

Pre-lodgement Comments

- a. Development constitutes designated development as works are proposed in Coastal Wetlands area.
- b. What vegetation removal or impacts on Communities are required as part of this application.
- c. The proposed application results in a contravention of the objectives contained within Clause B1.4 of this plan. Specifically, public open space in accordance with Map 2 would not be provided.
- d. The proposed subdivision has potential to impact on surrounding rural land uses. Where impacts have not been considered or where there is considered to be a land use conflict, a Land Use Conflict Risk Assessment (LUCRA) may be warranted.

Separation buffers are considered to be the most common and useful buffer when considering land use conflict. The Living and Working in Rural Areas Handbook (NSW DPI) has considered various land uses and reccomended buffer distances for primary industries.

Where there is potential for land use conflict. A Land Use Conflict Risk Assessment is to be provided with the DA which may identify that further work is required e.g. noise impact assessment, site management plan etc.

- e. Justification for any non-compliance with the controls would need to be provided, demonstrating how the objectives for the control is still being met.
- f. The submitted development is subject to the minimum lot size controls contained with the applicable EPI (Tweed LEP 2014 and Tweed LEP 2000). Any detailed subdivision plan will need to demonstrate how compliance with these controls is achieved.
- g. The staging plan does not identify at what stage a number of the proposed reserves are to be dedicated to Council or what stage the proposed 'Lot 6000 Balance Lot' is proposed to be created. The specific lot alignment for reserve lots should be clearly identified.
- h. Two of the proposed land parcels (lots 143 and 144) appear to not benefit from road frontage or have direct vehicular access to the public road network (sites appear to be accessed via reserve land). Furthermore, the southern portion of Stage 4 contains numerous battle-axe allotments in a concentrated area which are considered to result in a less-than-optimum design outcome. An updated subdivision layout would need to be prepared to address these matters.
- i. The proposed subdivision would appear to necessitate significant clearing of vegetation. Any application submitted would need to clearly identify what vegetation removal or impacts on Communities are required as part of this application.
- j. Please note that Voluntary Planning Agreements are in place for a number of subdivisions in Area E. The agreements which can be viewed here relate to:

Broadwater Parkway / Maher Lane construction cost.

Flood Mitigation - works.

Flood Mitigation – land acquisition for flood levee.

Environmental Land – land acquisition of Lot 227 DP 755740.

Wetland and habitat restoration – land acquisition.

Structured Public Open Space - works.

Structured Public Open Space – land acquisition.

Broadwater Parkway – land acquisition.

Public Reserve – site specific dedication.

Additional plans and details required in the Environmental Impact Statement/Statement of Environmental Effects should include (but is not limited to the following)

- Engineering Report detailing prepared by a suitably qualified Engineer detailing all works associated with the proposed development, including (but not limited to) site access, water/sewer servicing, earthworks and stormwater management.
- The application should include a site analysis identifying surrounding land use, site constraints and opportunities (etc).
- Visual analysis
- Plan of management is required for Zone 7 (a) lands showing how any adverse effects arising from the development can be mitigated.
- Flora and Fauna Assessment prepared by a suitably qualified Ecologist detailing any vegetation to be removed as part of this application.
- Detailed site plan, earthworks plans and building plans.
- Traffic Impact Report to justify site access and parking requirements for both the construction and operational phases of the development as well as any proposed road network changes.
- Proposed works including cut and fill and location/depth of any retaining walls.
- Address any material to be imported to the site.
- Contamination report addressing the requirements of SEPP (Resilience and Hazards)
 2021, Chapter 4 Remediation of land.
- Construction management plan including dust, erosion and sediment control, waste management, etc
- Bushfire Threat Assessment Report prepared by a BPAD accredited Bushfire Consultant.
- Detailed plan of subdivision.
- Details on vegetation proposed to be cleared.
- Geotechnical stability of the land.
- A Stormwater Management Plan.
- Demonstrate sufficient usable landscaped open space is provided.
- Details on vegetation proposed to be cleared and impacts on flora and fauna. Please consider:
 - Biodiversity Conservation Act
 - Local Land Services Amendment Act
 - Land Management (Native Vegetation) Code 2018
 - Biodiversity Values Map

- Sensitive Regulated Land Map
- Native Vegetation Map
- Tweed Shire Council Bushland Layer
- Endangered Ecological Communities
- Endangered Fauna
- Tweed Coast Koala Comprehensive Plan of Management
- Aboriginal Cultural Heritage
- Tweed Aboriginal Cultural Heritage Management Plan 2018
 - The Tweed Shire area has a rich history of former Aboriginal settlement and activity. Tweed Shire Council has a shire—wide Aboriginal Cultural Heritage Management Plan (ACHMP). The ACHMP includes two mapping layers: Aboriginal Place of Heritage Significance (known) and Predictive Aboriginal cultural heritage (ACH). The ACHMP sets out the ACH assessment requirements for development within the mapped localities, including upfront consultation with the Aboriginal community, the first point of contact being the Tweed Byron Local Aboriginal Land Council (TBLALC).
 - It is noted that the consultation and any required assessment is to be undertaken PRIOR to lodging a DA and appropriate documentation submitted with the DA.
 - Where harm cannot be avoided you will also require an Aboriginal Heritage Impact Permit (AHIP) and may require Integrated Development approval from the NSW Office of Environment and Heritage.
 - If you require further cultural information, you should contact the Tweed Byron Local Aboriginal Land Council on phone (07) 5536 1763. Further information on investigating Aboriginal heritage matters can be found on the NSW Office of Environment and Heritage website, including access to a database of Aboriginal objects, places and other heritage values across NSW, known as Aboriginal Heritage Information Management System (AHIMS).
 - Please consider the National Parks and Wildlife Act 1974 Part 6.

DA Assessment Comment: As discussed throughout this report, the submitted site inspection report prepared by TBLALC is dated January 2023 and the project brief in that report is not clear. Following referral of the application to TBLALC, TBLALC provided return comments that indicate the scoping of the submitted report and the proposed development are dramatically different and that this warrants further investigation by a licensed archaeologist.

In addition, the SEE completed by Zone Planning Pty Ltd (dated 19 December 2024) refers to the TBLALC report and states that an Aboriginal Heritage Information Management System (AHIMS) search was undertaken (Attachment Q of the SEE). The SEE does not include the AHIMS search, search number the geographic extent of the search or the date of the search.

Given the disparity between the scoping that formed the findings in the report by TBLALC (dated 31 January 2023) submitted with the DA and the scope of the proposal, it is considered that there is insufficient information to ensure that the development does not compromise any Aboriginal cultural heritage values or places on the site.

Demonstrate sufficient usable landscaped open space is provided.

 Section 2.1 and Section 2.11 – Design Principle 9: Hazards and Resilience of DCP Section B24 requires the following information to be submitted with and Development Application for subdivision;

Section 2.1 Requirements

Subdivision Development Application Checklist

Beyond the requirements contained within Section A5 and other applicable documents, the following information is to be submitted with any Development Application for subdivision:

- ✓ Flora and Fauna assessment/s
- A Wetland Restoration Plan and Habitat Restoration Plan for all land zoned Environmental Protection
- Visual impact assessment
- ☑ Plans and site sections that demonstrate design measures employed which minimise bulk earthworks over the site
- Accurately represented and documented detail of all proposed site works including cut, fill, benching and retaining walls
- ☑ Landforming plans detailing the location, management and final placement of Class 6 Soils
- Any application seeking development consent prior to the construction of Broadwater Parkway, must be accompanied by a traffic study demonstrating the ability for the proposal to be accommodated by existing or alternative proposed road networks to the satisfaction of Council.
- Density Projection Plan including a breakdown and schedule of differing allotment sizes
- Structural System Plan (plan and schedule) to demonstrate the nexus between slope, allotment size and appropriate dwelling type.
- Public Domain Plan
- ☑ Soil Stability and Site Investigations
- ☑ Site Audit Statement (SAS) certifying the land is suitable for the proposed use.

Section 2.11 Requirements

Development Controls

The following information is to be submitted with any Development Application for subdivision:

- Detail of all site investigations (including underground and site boring) to provide adequate information to prepare designs and assess construction methods.
- Detail of all necessary geotechnical investigation and analysis to ensure that the subdivision and all works associated with the subdivision are stable and will not be subject to subsidence, landslip, mass movement or significant erosion in the short and long term.
- A Site Audit Statement (SAS) certifying the land is suitable for the proposed use. The SAS is to be prepared by an Environmental Protection Agency Accredited Contaminated Site Auditor under the provisions of the Contaminated Land Management Act, whom is to be engaged to oversee the contamination investigation and any necessary remediation of the site.

ROADS & STORMWATER COMMENTS:

General

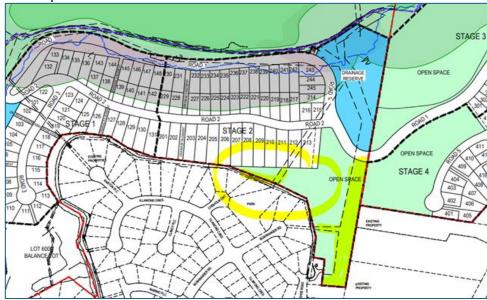
• Paved footpath for the full frontage of the site would be required and should be integrated into a legible pedestrian movement route through the site.

Access

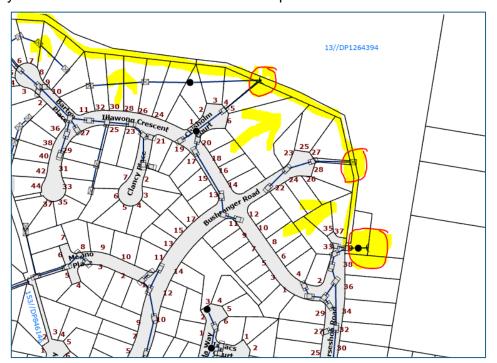
- Access to the development would need to comply with Council's "<u>Driveway Access to Property Design Specification</u>". An application under Section 138 of the Roads Act 1993 identifying driveway access and proposed levels and grades, will be required to be submitted and approved, prior to issue of the construction certificate.
- The provisions of AS2980.1 will also apply requiring maximum gradient of 5% for the first 6 metres past the property line.

Stormwater

- On site treatment of stormwater runoff would be required prior to discharge into the
 public system in accordance with Council's <u>Development Design Specification D5 –
 Stormwater Design</u> and <u>Development Design Specification D7 Stormwater Quality</u> An
 application under Section 68 of the Local Government Act 1993 should accompany the
 development application to identify all site drainage, stormwater quality devices and
 proposed stormwater outlets and any required erosion and sedimentation control
 measures.
- Stormwater management plan prepared by a qualified engineer in accordance with Council's Development Design Specification D5 Stormwater Design and Development Design Specification D7 Stormwater Quality *is to be provided with the development application.*
- On site detention of stormwater is required. The peak stormwater flow rate that may be discharged from the site to the public realm, in events of intensity up to the 1% AEP stormwater event shall be limited to pre-development rates - Subject to review by Council's Environmental & Sustainability Unit.
- Interallotment drainage to be provided for any allotment that cannot drain directly to a road.
- Removal of the existing drainage easements is not supported. Any future DA application
 is to demonstrate how the upstream drainage regime is preserved and maintained
 through to a legal point of discharge. Refer to advice from PAC and S&E Units below
 for further requirements.



• Stormwater drainage including interallotment drainage is to be provided for all perimeter allotments to a legal point of discharge. The existing drainage outlets and pathway to Duroby Creek / Terranora Broadwater are to be preserved and maintained.



- Proposed Stage 3 (adjacent to Mahers Lane) is to include provision for overland drainage paths for the 1% AEP storm event through the subdivision.
- Drainage for Mahers Lane is to be considered and designed to a legal point of discharge.
- Inter-allotment drainage required to capture upstream drainage from existing properties 89 & 93 Mahers Lane to ensure proposed Lots 405 to 408, 415 & 416 are not affected by upstream overland flow.

DA Assessment Comment: The submitted Stormwater Management Plan fails to cater for the entire catchment area. Further, the proposed stormwater flow gabion channel gives rise to public safety issues as it will form a high hazard floodway with little freeboard and no public safety improvements. Sewer infrastructure is also proposed in the gabion stormwater channels which is not supported. Furthermore, there are anomalies in the catchment calculations and the box culvert drainage fails to demonstrated that it has sufficient capacity to convey the 1% AEP stormwater event from upstream catchments. There is insufficient information available to demonstrate how upstream stormwater conveyance will impact on the existing gravel track and wetland to the north. For these reasons, the application is unsatisfactory for the purpose of stormwater management and compliance with relevant TSC design specifications.

- Existing sag points along the existing path behind Stages 1 and 2 will require stormwater management correction. This may require reconstruction and/or redirection to satisfactorily discharge through the proposed lots via an appropriate drainage system and easements.
- Existing Drainage Easements being built over are they planning to extinguish these or re-route? (Pipes do not extend for full length of easements.)
- The submitted Stormwater detail fails to include sufficient information to demonstrate
 - The detail for proposed 5m wide diversion swale (at the eastern end of Stage 2);

- The existing stormwater infrastructure in the southeastern portion of existing Lot 13 has not been included in the submitted Stormwater Management Plan (in 2 locations):
 - Adjacent Lot 282 DP 860577 Horseshoe Rd (sewer pump station) is a 450mm diameter pipe openly discharging over the downslope.
 - ii. Between Lots 224 and 225 Bushranger Rd should be a 375mm diameter discharge pipe openly discharging over the downslope.
- Existing minor stormwater outlet (150mm dia) from the rear of Lot 225 (No.28) Bushranger Rd to be picked up and catered for.
- Existing minor stormwater outlet (225mm dia) from the rear of Lot 277 (No.4) Barton PI to be picked up and catered for.
- Multiple minor stormwater outlets (2 x 100mm dia pipes and 3 x sub-soil outlets) openly discharge along the eastern boundary of proposed Lot 165, next to the existing path. Although Lot 165 is a residual lot, these outlets need to be picked up and catered for in the stormwater management plan likely to require a pipe system through Lot 165. This should be implemented now, so it can appropriately connect to the stormwater system being implemented for Stage 1.

Flooding comments

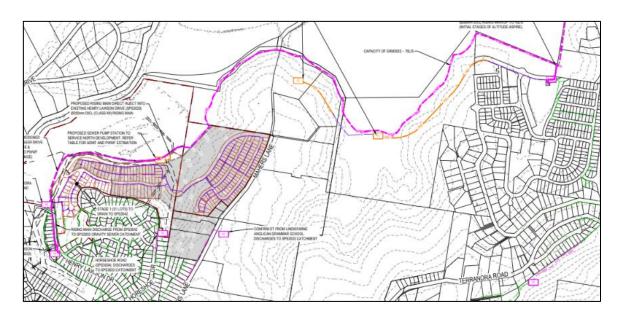
- Climate change design flood levels and Climate change flood planning levels are applicable to the subdivision being a greenfield site:
 - o Climate change design flood level 2.9m AHD
 - Climate change planning flood level 3.4m AHD
 - Probable Maximum Flood 5.7m AHD
- Majority of subdivision is located above the PMF, therefore evacuation provisions of Development Control Plan A3 are addressed.

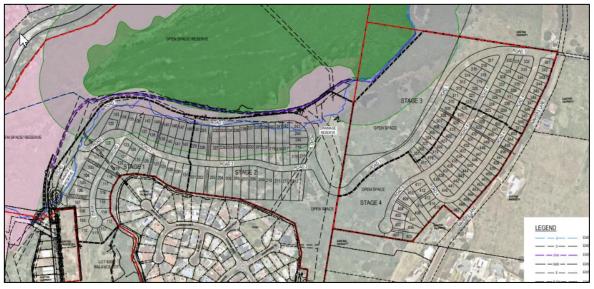
DA Assessment Comment: Subject to the above comments in relation to stormwater, the proposed subdivision achieves compliance with flood related development standards and controls in terms of flood immunity and safe evacuation to ensure risk to life and property associated with the use of land is minimised. However, the ecological impact of such is not sufficiently addressed in the application as required under Clause 5.21(2)(e) of TLEP2014. As the consent authority must be satisfied of this matter and as the development fails to sufficiently address this matter for consideration, development consent must not be granted under Clause 5.21(2)(e).

Traffic

- Expected to generate 212 x 7.4 = 1,569 daily trips
- Without the road extension associated with Area E all traffic would either use Henry Lawson Drive or Mahers Lane.
- Assessment of the suitability of Henry Lawson Drive and its intersection with Terranora Road for the expect traffic generation from the site is required. Henry Lawson Drive has a pavement width of approximately 8.5m. Council's road design specifications D1 advises that the indicative traffic volumes for an access street of 7.5m width or 9m is 3,000 vehicles per day. While no current traffic volume data is available, counts carried out in 2012 indicate 2,306 vpd just south of Eliza Fraser Court.
- There are no traffic calming devices along Henry Lawson Drive from the site to Horseshoe Road

- Mahers Lane is essentially a cul-de-sac with a major private high school at its northern end. The proposed housing development would at least add (118 x 7.4) 870 additional vehicle movements per day. Assessment of the suitability of Mahers Lane needs to be provided in a Traffic Impact Assessment accompanying any DA and is unlikely to be supported without the Mahers Lane/ Broadwater Esp connection.
- The connecting road between the proposed 2 residential precincts would only be supported when the Mahers Lane/ Broadwater Esplanade road is connected through to Fraser Drive.





DA Assessment Comment: The submitted DA includes a Traffic Engineering Report (TIA) which fails to adequately demonstrate that the intersection of Mahers Lane with Terranora Road will operate within its capacity upon completion. This is due to a lack of analysis during the significant 'peak hour' being 3pm-4pm. This peak hour coincides with the nearby Lindisfarne School pick up time resulting in extensive queueing at the Terranora Road/Mahers Lane intersection.

The submitted Traffic Report SIDRAA results demonstrate that the AM peak has a Degree of Saturation ("DOS") that exceeds the 0.8 recommended design capacity

(including the Mahers Lane connection). The DOS is also an underestimate (given the Mahers Lane connection cannot be supported). This highlights that Stage 1 and Stage 2 traffic relying on the Henry Lawson Dr/Terranora Road Intersection for access will exceed the intersection design capacity which is an unacceptable development outcome on the road network.

It is noted that once the planned Broadwater Parkway linking Mahers Lane to Fraser Drive is constructed the traffic flow is expected to change considerably and result in improved conditions at both the above intersections which may then have capacity to accommodate proposed developments such as this.

DEVELOPMENT ENGINEERING & LAND DEVELOPMENT

- Development footprint does not correlate with the boundary of the existing approved subdivision, S96/0066.20, Stage 17C. Lots 110 113 overlap into Stage 17C so it would appear that there is a need to adjust lot boundaries accordingly.
- Conflict with TSC DCP B1 that nominates dedication of the Public Reserve reflected in the existing consent.
- Proposal also conflicts with the existing consent, S96/0066.20, in that dedicates a large portion of the residential zoned land as Public Reserve (Lot 535).
- Noted that NW corner of Lot 3 DP 622318 is outside of 'Area E'. This could be a factor if any rehabilitation is required.
- Large residual land within Lot 13 DP 1264394 nominated for dedication as Public Reserve requires assessment as to whether Council would accept dedication of such land. Refer to comments from Parks & Active Communities below.
- Open Space areas being dedicated within original Lot 3 to be defined for specific purposes – recreational, ecological, escarpment protection etc.

Earthworks:

- MAJOR earthworks issues regarding landslip remediation generally over the western portion of Stage 2 and eastern portion of Stage 1. Council needs to ensure remediation methodology not only makes the area safe, but is safe to build houses on and must also consider future subdivision civil works and the roadworks and trenching that would be required: ensure existing 'uphill' properties will not be adversely affected by subsequent civil works.
 - It is acknowledged the applicant is in the process of submitting an REF for the landslip remediation, with a supporting 'Geotechnical Investigation Landslip Remediation' report by Butler Partners Rev.1 dated 14.06.2024. Council will be expecting a 'Factor of Safety' of 1.5 minimum to be targeted for remediation works anything less will require significant justification.
- Apart from the above-referenced landslip area, geotechnical investigations need to be undertaken over the remainder of the site seeking to be developed, to verify it is safe to build on.
 - In this regard Council references the significant earthworks issue stemming from the 2021 Court case that investigated the area adjacent to Stage 17C, in the vicinity of proposed Lots 109 113. The geotechnical investigations at that time were insufficient to satisfy Council or the Court that the existing landform is safe to build on. The general landform and geological make-up are assumed to be relatively consistent with this location, for the entire hillside proposed to be developed. The recommendations from the Joint Geotechnical Engineering Expert Report (by Edem Birdie of Construction Sciences and Ryan Kemp of Protest

Engineering, dated 16.06.2021) will be expected to be covered by any geotechnical investigation and reporting.

- VPA likely to be required for Mahers Lane component but may also be needed for western portion (Stages 1 and 2) for environmental land dedication and works associated with same. Current VPA's for 'Area E' have up to 9 components:
 - o Broadwater Parkway / Maher Lane construction cost.
 - Flood Mitigation works.
 - Flood Mitigation land acquisition for flood levee.
 - Environmental Land land acquisition of Lot 227 DP 755740.
 - Wetland and habitat restoration land acquisition.
 - Structured Public Open Space works.
 - Structured Public Open Space land acquisition.
 - Broadwater Parkway land acquisition.
 - Public Reserve site specific dedications.

Roadworks and layout

- All roads to be designed in accordance with DCP A5 and Road Design specification D1.
- Mahers Lane frontage will require road reconstruction: minimum half-road requirement but will be subject to Traffic investigation – sufficient road width to be constructed to cater for the additional vehicle movements being generated. Defer to Traffic Engineer comments.

Note: Council yet to determine future alignment for Mahers Lane – eg: one factor to consider is whether off-road cycleway is continued, requiring a wider footpath area.

- Existing road formation is offset to west and carriageway is currently partly on private land.
- Potential exists for Council to fund extra road works from VPA to attain full width construction – if deemed appropriate at the time of construction (depends on other factors, including status of Broadwater Parkway and if owner opposite on Mahers Lane has/will subdivide or not.
- Road link between Stages 2 and 3 has some merit but has consequences for existing road network. Defer to Traffic Engineer's comments.
- Eastern end of Road 1 to follow the site's northern boundary to better align with Intrapac's proposal on the adjoining property.
- Intersections and tight curves to be improved. 'T' Intersections should have branch road at 90 degrees for (say) 15m before any curves.
 - Roads 1 / 2 (western end) is unacceptable: redesign to avoid tight reverse bends so close to intersection.
 - Roads 2 / 3 poor with sight distance: suggest less curvature for Road 2.
 - o Roads 1 / 4 to be improved with longer 'straight' before intersection.
 - Connecting road has very tight bend that should be reduced in curvature.
 - No road gradients provided: Need to adhere to D1. Particular attention required at intersections on steep grades: 'through' road to flatten through intersection per D1.10.2.

- Road 1 western end:
 - Location as depicted is beneficial as providing access to adjacent Council infrastructure (sewer rising main and water main) however conflicts with ecological values. See comments from Sustainability and Environment Unit.
 - Access to Council's existing infrastructure must be maintained at all times. This is to be demonstrated as the infrastructure in this vicinity is located below the design flood level, while all development will be required to be constructed above the design flood level.
- Pedestrian connectivity to be better addressed: for example, the Drainage Easement between Lots 202/203 down to between Lots 231/232 should 'double up' and be widened to cater for pedestrian use.
- Road 3 is an overly long cul-de-sac but supported in this instance, although length reduction would occur if Road 2 curvature reduced. Path connection to Stage 17C indicated and supported but requires Stage 17C to be shown correctly.
- Road 1 / 4 intersection appears too close to Mahers Lane for safety.

Lot layout

- Lot yield within Stages 3 and 4 (within Area E) increased compared to DCP expected yield. However, constraints issues raised by others likely to reduce this yield.
- Mahers Lane dual road frontage lots are not supported: Council do not want to see 400m of rear fences along this ridge line.
- Visual Impact/Scenic investigation reporting will be required.
- Dual road frontage Lots 133 136 similarly not supported.
- In response to the question posed in the meeting on the future status of Mahers Lane and direct access from lots fronting Mahers Lane, the following is advised:
 - Broadwater Parkway is being designed as a 'Normal Neighbourhood Connector' and that classification will also apply to Mahers Lane.
 - As per Council's D1 Road Design specification, Neighbourhood Connectors are "streets with predominantly residential frontages" so lots can access direct onto the road fronting them. This is consistent with DCP B24 Structure Plan and reflects the existing road status at the southern end of Mahers Lane, where multiple residential lots front the road.
- Battleaxe lots in Stage 4 warrant redesign. Lot layout Performance Criteria per A5.4.12 justification required, as amenity for future owners / occupiers considered hampered.
- A number of lot shapes are very awkward and will need reconfiguring. Lots 122, 132, 133, 243 & 317 heavily restricted with setbacks, so should increase in size.
- Corner lots to have 3-chord-splays in lieu of arcs.
- All Reserves to have Lot numbers + define their purpose: 'Open Space' to be Public, Environmental / Ecological / Escarpment etc. Refer to PAC and S & E Unit comments.
 - **DA Assessment Comment:** The proposed extent of cut and fill fails to address the Mass Landform Change Criteria under Tweed Shire Council Design Specification D6.05.3.1 which states:

"The proportion of a subdivision site (plan area) that contains cut or fill areas with finished surface levels that depart from the natural surface levels by more than 5m shall not exceed 10%."

The submitted Geotechnical Report contains insufficient information to refer it to an external consultant for peer review. To this end, it is noted that the groundwater monitoring and displacement monitoring fails to provide an appropriate number of observations over seasonal variations (2 observations over a 10-day period). Accordingly, the data set utilized in the Geotechnical Report is insufficient. This issue is likely to impact the hydrogeological assessment of the site and the stormwater discharge requirements. In addition, the report includes drainage comments (concrete flow spreaders required for down slope stormwater discharge) and the Biome stormwater design nominates gabion structures.

- The proposed height of and materials for retaining walls fail to comply with TSC Design Specification D6.
- Works over an external property: engineering DWGSK221, Section 6, depicts a
 future ground level going across an adjacent property (Lot 2 DP 622318) that is
 not part of the DA. This needs to be excluded from the plans or a notation
 provided to explain why it is shown.
- The proposed slope of land indicates that some residential lots will be of greater slope than the existing predevelopment levels. The proposed residential lot grades (> 50% and up to 68%) fail to comply with Section A5 of the DCP.
- Road widths per DWGSK090 fail to comply with Section A5: Roads 1, 4 and 5 have unsupported variations. The Mahers Lane cross-section nominating "Resumption" for both sides of the road is also not substantiated.
- Lots 112 115 (in the cul-de-sac bulb of Road 3) and Lot 411 fail to comply with the minimum frontage of 12.5m as required by D1.09.5 and Section A5.
- Proposed dual frontage for Lot 301-318 and 429 fails to comply with Section A5.
- Proposed battle-axe Lots 403, 408 and 429 fail to comply with Section A5.
- The proposal does not address the requirement for bus stops.
- Refer to previous stormwater comments which have been provided by Councils Stormwater and Flooding Engineer as well as Councils Development Engineer.

ENVIRONMENTAL HEALTH COMMENTS:

Acid Sulfate Soils and Dewatering

- The site has been identified as Class 1, 2 and 5 on the acid sulfate soil planning maps.
 For any proposed earthworks, the applicant shall address Clause 7.1 of the Tweed LEP 2014. Any acid sulfate soil investigation and management plan shall be prepared by a suitably qualified environmental consultant and address:
 - National Acid Sulfate Soils Guidance: a synthesis (June 2018);
 - NSW Acid Sulfate Soil Manual (1998); and
 - Waste Classification Guidelines Part 4: Acid Sulfate Soils (NSW EPA, 2014).
- The site is identified as having 'moderate', 'moderately high', and 'high' groundwater vulnerability. For any proposed earthworks where groundwater will be or is likely to be intercepted, a Dewatering Management Plan prepared by a suitably qualified environmental consultant shall be submitted and address:
 - o Council's Dewatering in the Tweed Guideline; and
 - Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG 2018).

DA Assessment Comment: The applicant is supported by an Acid Sulfate Soils Management Plan ("ASSMP") prepared by HMC Environmental Consulting. The ASSMP fails to demonstrate compliance with Clause 7.1 of TLEP2014 and the NSW Acid Sulfate Soils Management Guidelines (ASSMAC,1998) and fails to address site specific conditions. Further discussion regarding the information that is required and the other aspects of the proposal that could be affected by the lacking information is discussed later in this report.

NB: Where dewatering is proposed, then the ASSMP must cross refence any dewatering management plan.

Amenity

- A Construction Environmental Management Plan (CEMP) will be required with the Development Application that addresses all potential environmental impacts from the proposed works, including but not limited to, sedimentation and erosion control, stockpiles, water quality, hazardous materials, waste, traffic including construction and worker vehicles, noise and vibration, air quality including odours and dust emissions, hours of operation, staging, complaint management, monitoring and reporting mechanisms for non-compliance, corrective actions, 24 hour contacts and response, and training for employees and contractors. The CEMP must incorporate any recommendations within the Construction Noise and Vibration Management Plan that has also been requested.
- A Construction Noise and Vibration Management Plan (CNVMP) prepared by a suitably qualified acoustic consultant in accordance with NSW EPA guidelines and Australian Standards will be required with the Development Application. The CNVMP shall include, but not be limited to, identification of noise sensitive receivers, consideration of noise and vibration sources and activities associated with the development including duration, frequency, and respite periods, hours of operation, staging, community consultation, complaint management, and outline measures to minimise and mitigate potential noise and vibration impacts to surrounding occupiers of land.
 - *Note: a suitably qualified acoustic consultant means a consultant who possesses the qualifications to render them eligible for membership of the Australian Acoustic Society, Institution of Engineers Australia, or the Association of Australasian Acoustical Consultants at the grade of member.
- The applicant shall address impact from any external lighting with the Development Application. The applicant shall demonstrate the development will meet the requirements of AS4282 Control of the Obtrusive Effects of Outdoor Lighting and consider preventative measure such as timers and shielding to prevent the spill of light or glare creating a nuisance to onsite occupants and neighbouring or adjacent premises.
 - **DA Assessment Comment:** The proposed development is staged and would take in excess of two years. There is insufficient information in the submitted Construction Noise Assessment and Management plan to ensure it aligns with the intent of the Draft Construction Noise Guideline (DCNG). In particular:
 - 1. Traffic Noise Impacts: The assessment identifies a 2dB increase in road traffic noise. To improve the management of these impacts, please:
 - a. Document whether alternative traffic routes for construction vehicles have been considered to minimise noise exposure.
 - b. Include more specific guidance on vehicle operation and maintenance practices aimed at reducing noise (e.g., driver practices, vehicle maintenance).
 - c. Detail more comprehensive traffic management measures, such as defined delivery hours and nominated routes, as suggested in Appendix C of the draft guidelines.

- d. Ensure community notifications will include specific information regarding anticipated construction traffic movements, including peak times and routes.
- 2. Proactive Noise Monitoring: In line with the DCNG's emphasis on evaluating performance, please incorporate proactive noise monitoring into the noise management. The current plan is focussed on reactive monitoring and is vague in it's actual application. An amended plan should establish a schedule for periodic noise audits, particularly during noisier construction phases or when working near sensitive receivers, even in the absence of complaints. Further details on how the noise management data will be used to valid noise predictions and ongoing community consultation/engagement should also be included.
- 3. Community consultation and engagement: The proposed plan focuses on reactive community engagement measures. Whilst this is necessary, a greater focus on proactive consultation is required to align with the DCNG. Please amend the report to address to the following:
 - a. Early and Ongoing Engagement Detail how you will proactively inform and consult the community before and throughout construction, not just react to complaints.
 - b. Proactive Notification Clearly specify how you will communicate potentially disruptive works using methods like letterbox drops and a project website. Ensure relevant details such as timing, duration, nature of noise and contact information is outlined as important information to disseminate.
 - c. Engagement Methods: Name the specific ways you will engage with the community, considering the project's scale.
 - d. Outline how community preferences regarding work scheduling or respite periods might be considered.

Contamination

- The applicant shall address current and previous land uses in accordance with State Environmental Planning Policy (Resilience and Hazards) 2021 with the Development Application. This includes works associated with development consents issued and the importation of material onto the sites.
- All contaminated land reports submitted for Council review must be prepared by a suitably qualified environmental consultant in accordance with NSW Environment Protection Authority (EPA) contaminated land guidelines and be accompanied by a Contaminated Land Summary Table to ensure that key mandatory information has been incorporated (available at https://www.tweed.nsw.gov.au/ContaminatedLand).
 - **DA Assessment Comment:** The application fails to include sufficient information to satisfy matters for consideration under Clause 4.6 of SEPP (Resilience and Hazards) 2021. The consent authority cannot be satisfied that the land can be remediated for the proposed residential use as there is no information as to the extent of remediation required.

Demolition

The Development Application shall include a Demolition Work Plan. Further information on the required contents of a Demolition Work Plan may be found in Council's 'Additional Information to Accompany Development Application to Demolish a Structure'. Council's Pre Demolition Testing guideline (amended) may apply and shall be accompanied by the Northern Rivers Contaminated Land Program - Contamination Report Summary Table available at https://www.tweed.nsw.gov.au/ContaminatedLand.

DA Assessment Comment: Demolition of an existing dilapidated metal farm shed on the north-eastern part of the site is proposed. No demolition work plan has been submitted with the DA.

Land Use Conflict

• The site and surrounding areas are being used for agricultural activities. Any Development Application will need to consider its relationship to any ongoing agricultural activities of the site and nearby land and include a Land Use Conflict Risk Assessment (LUCRA) prepared by a suitably qualified person. The LUCRA must consider and address Living and Working in Rural Areas (NSW DPI) and Tweed Development Control Plan Section A5 – Subdivision Manual, including appropriate buffers, and demonstrate how land use conflicts will be avoided, minimised, or ameliorated.

DA Assessment Comment: The application is accompanied by a LUCRA assessment. Whilst the majority of the LUCRA is acceptable, it is vague in terms of appropriate buffer distances from the adjacent coastal wetland. This issue has not been specifically addressed as a reason for refusal on the DA (given the issue is raised under Chapter 2 of SEPP (Resilience and Hazard) 2021 and Section A19 of the DCP. It is however, noted for the consent authority's consideration.

Mosquitoes and Biting Midges

- The site includes mosquito breeding areas identified in Council's GIS. Council currently carries out both ground and aerial spraying for biting insects within and around this area to prevent a public health risk to the community. The applicant is to address Tweed Development Control Plan 2008, Section A6 Biting Midge and Mosquito Control with the Development Application.
- occupants of that development. Mosquito management may include ongoing mosquito larvae treatment at the expense of the applicant or developer. It is recommended that the applicant makes enquiries with Council regarding ongoing treatment opportunities/arrangements.

DA Assessment Comment: A plan has been prepared having regard to the above comments and Section A6 of the DCP. Consultation with Council's Pest Management Unit has revealed that the location of future dwellings will satisfy relevant buffer distances from pest management regimes in the Terranora Broadwater and Mahers Land and 'Bolsters Wetland' mosquito breeding and aerial treatment areas. This notwithstanding, there are other aspects of the proposal that insufficiently demonstrate that the stormwater management system is adequate for the proposal. Accordingly, it is unclear whether the stormwater management and bioretention system will achieve the submitted Biting Insect Impact Assessment Report recommendations in relation to water elimination and storage, particularly in a storm event.

In conclusion, whilst the proposed location of the buildings achieves the buffer distances for treatment of Broadwater and Mahers Land and 'Bolsters Wetland' mosquito breeding and associated aerial treatment areas, there is insufficient information available to determine that the proposed stormwater management and disposal satisfies the recommendations in the Biting Insect Impact Assessment Report. The application is considered to be incapable of support on these grounds.

On-site Sewage Management

- The applicant is to confirm that the lots will be serviced by Council's reticulated sewerage system.
- Onsite sewage management would not be supported.

 A sewage pump station has been identified. Further comment required by Water and Wastewater Unit regarding ownership and operation.

DA Assessment Comment: See comments later regarding reticulated sewerage connections and the lack of planned capacity for sewage.

Red Imported Fire Ants

- The importation of any of the following fire ant carrier material from invasive ant biosecurity zones must be in accordance with the current NSW Biosecurity orders available at www.dpi.nsw.gov.au and meet the requirements of NSW Department of Primary Industries:
 - o organic mulch, compost, growing media, manure, soil and anything with soil on it, hay, chaff, or silage;
 - potted plants;
 - turf;
 - o agricultural equipment or earth-moving equipment;
 - mining and quarrying materials;
 - grass;
 - o vegetation and clippings; or
 - o other fire ant carrier material identified within the order.
- Prior to the importation of each material type, the supplier must provide the receiver and the Principal Certifier or Council with the relevant form and/or certificate as identified within the order. All material shall meet the requirements of the relevant form/certificate.
- It is an offence under the *Biosecurity Act 2015* if this material comes from within 5 kilometres of a known invasive ant infested area (e.g. identified Fire Ant Biosecurity Zones in Queensland), or any other place at which the person knows, or ought reasonably to know, that an invasive ant has been detected, unless the carrier material has been managed and treated to reduce the risk and meets the certification requirements listed in the order.

DA Assessment Comment: The above advice would form conditions of consent if the application was determined favourably.

Waste

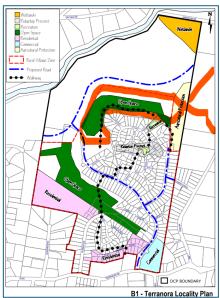
- The applicant must address Tweed Development Control Plan Section A15 Waste Minimisation and Management with the Development Application.
- The exportation or importation of waste (including fill or soil) from or to the site must be
 in accordance with the provisions of the *Protection of the Environment Operations Act*1997 and the NSW Environment Protection Authority "Waste Classification Guidelines".
- The importation of waste to the site is restricted to the following:
 - Virgin excavated natural material (as defined in Schedule 1 of the Protection of the Environment Operations Act);
 - Any other waste-derived material subject to a resource recovery exemption under Part 9 Clauses 91 and 92 of the *Protection of the Environment Operations (Waste)* Regulation 2014 that is permitted to be used as fill material.
- The exportation of waste must be transported to a licensed waste facility or an approved site subject to a resource recovery order and exemption.

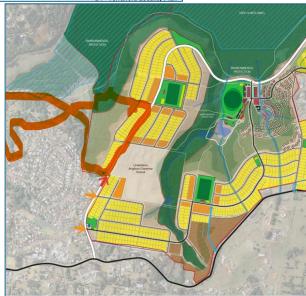
 Any virgin excavated natural material or waste-derived fill material subject to a resource recovery exemption must be accompanied by documentation as to the material's compliance and must be provided to the Principal Certifying Authority or Council on request.

DA Assessment Comment: These matters could be conditioned on a consent.

PARKS AND ACTIVE COMMUNITIES:

- The western section is subject to Section B1 TDCP 2008. In this section although CP21 applied to Terranora Village, the contributions plan did not extend to the north and therefore CP5 applies. However, the subdivision development will need to address the onsite requirement for public open space in accordance with Section A5 TDCP 2008 Subdivision Manual.
- The eastern section is subject to Section B24 TDCP 2008 which is to date is subject to a VPA for structured open space with land dedicated for casual open space.





 Orange denotes approximate location of the proposal relative to Section B1 TDCP on the left and Section B24 TDCP on the right.

- It is noted that Development Consent S96/0066.20 (as amended) includes land that forms part of the proposal to the west. The western area of residential lots is nominated as public open space under this consent. The proposal involves a substantial variation to the DCP (B1) and the existing consent in this regard. The scale of this variation is unlikely to be in the public interest.
- The public open space approved under S96/0066.20 for the land subject to the western residential area was proposed for habitat restoration (Lot 535 Condition 47C) for Stage 17C.
- The proposal includes large areas of public open space. Clarification is required as to the purpose of the open space (i.e. environmental or recreational) and whether the areas comply with Section A5 TDCP in this regard.
- Please note that Council is not obliged to accept public open space when it is not considered in the public interest. Land dedication where there is no clear recreational value, environmental value and a potential maintenance burden will not be accepted.
- Any future DA will need to provide an open space network plan. Consideration of the surrounding open space provision is required. The open space plan will need to nominate casual/passive open space that complies with Section A5 including Table A5 8.2.1 Local Parks preferably located centrally and to the east given the existing playground to the west. Diversity of facilities will be required. Details will be required particularly regarding topography of the proposed park. It is noted that extensive drainage easements are located in the areas of open space. In order for areas to be credited as usable public open space, parks cannot include these easements.
- Regarding casual/passive open space, land is to be dedicated and embellished in accordance with Section A5 TDCP. Based on a yield of 212 residential lots, 5,749m² of usable casual/passive open space is required to dedicated and embellished.
- Regarding structured/active open space, it is noted that there is a VPA in place in this regard for land subject to Section B24 TDCP. For consistency and given the land subject to this development is not nominated for structured open space, a VPA is a possible avenue to pursue for the subject development to address the required 8,650m² of dedicated and embellished structured/active open space. Any further DA submitted will need to address how structured/active open space is being provided for.

DA Assessment Comment: Refer to discussion under Section A5 of the DCP in relation to delivery of Open Space.

WATER & WASTEWATER COMMENTS:

Water

- It is noted that the original development approval (S96/66) was for 101 lots. To date the number of lots created is 89. Balance of 12 lots.
- It is proposed to service these lots from the future Mahers Lane Reservoir Zone. This is detailed in the attached plan Terranora Area E Water Infrastructure Concept Plan Updated 190724. Council has secured the land for this reservoir.
- Planning for the area envisaged that this area will be serviced by the Mahers Ln reservoir and associated supply main/distribution main/reticulation, which does not exist yet.
- Currently, there are 75 properties directly connected to the trunk 600mm water main from North Tumbulgum Reservoir plus another 9 from the approved subdivision in the southern portion of Lot 13 DP1264393.

- It is proposed by the proponent to service Stage 1 and 2 (93 lots) by an interim connection to this trunk water main. Trunk main repairs and works would interrupt supply and the provision of fire flows more frequently than necessary and we would not meet our level of service requirements.
- Hence the new Mahers Lane Reservoir and its 200mm supply main and pump station, need to be constructed to service Stages 1 and 2 and facilitate Stage 3 and 4 of the proposed development. The proposed 200mm reservoir supply main traverses the Altitude Promenade Development Stage so timing is depended on this stage progressing.
- In the absence of this system being in place, and if Altitude has not yet constructed the required trunk main connection through their development area (formerly named the Promenade), this developer could provide the same trunk main connection though their development, to facilitate an early/temporary connection. This would be in-lieu of the trunk main connection via Altitude land. Feasibility of this to be further investigated and confirmed.
- Irrespective of early-stage connection configuration, the reticulated system for the area would need to be designed / constructed in a way, so as it could subsequently be reconfigured to be supplied from the Mahers Ln once this system has been provided.
- No additional connections to the trunk (North Tumbulgum) system will be accepted.

DA Assessment Comment: The proposed water servicing strategy exceeds the capacity in the existing water supply network given that the staging of the development is premature to the construction of the Mahers Lane Reservoir, which is related to land adjacent to the site (and not owned by the current developer). Consent for the Mahers Lane Reservoir has not been granted given that any subdivision of land in Area E does not trigger the construction of this reservoir.

Sewer

- No capacity for additional sewer connections above previously planned.
- It is noted that the original development approval (S96/66) was for 101 lots. To date the number of lots created is 89. Balance of 12 lots.
- Referencing earlier content provided by AB/JP (see Brendon Yeats related email 18/06/24), there has been no allowance made in Council's planning for STG1 and STG2 areas. Noting that the area relating to STG1-2, was originally identified to be Public Reserve, as determined by the associated Approval S96 0066 (see attached, extract below).
- STG3 and STG4 lots are within the Area-E delineated footprint, it was always envisaged that this would be serviced by Altitude infrastructure.
- As there is no capacity in the existing Henry Lawson sewer system (or a feasible means
 to suitably upgrade the system to accommodate additional loadings), STG 3 and 4 will
 need to be serviced by Altitude development, dependent on their future infrastructure
 timing.
- Given that there is no available capacity in the SPS3033 system flows from STG1 and STG2 areas preferably should be directed to the Altitude catchment.
- Additionally, provision of a new SRM3037 requires that section of Broadwater Parkway
 to be constructed, and this SRM (Sewer Rising Main) is not required until the final stages
 of the Altitude development. This is another hinderance to being able to upgrade
 SPS3033 capacity in the short to mid-term. Therefore, STG1 and STG2 can cannot be

suitably accommodated by existing SPS3033/SRM3033 infrastructure, without risk of overloading the existing system.

- In response to questions on capacity posed in the meeting, the following is advised:
 - Pump station SPS3037 has not been augmented.
 - The limiting factor for the SRM3033 is the pressure head in the 4.5km pipeline.

In summary for sewerage

- Stages 1 and 2 will need to be accommodated via infrastructure to be provided as part of the Area E Altitude Promenade development.
- Stages 3 and 4 exist within Area E.
 - No capacity for additional sewer connections via SPS (Sewer Pump Station) 3033 and SRM 3033.
- Stages 1 and 2 would need to be accommodated via infrastructure to be provided as part of the Area E Altitude Promenade development – currently not provided for in any future planning.
- Stages 3 and 4 exist within Area E and similarly will need to be provided for as part of the Area E Altitude Promenade development.

DA Assessment Comment: The proposed sewer strategy fails to acknowledge the above advice and seeks to connect to existing infrastructure which is at capacity.

SUSTAINABILITY & ENVIRONMENT COMMENTS:

Desktop ecological values

- The site supports a Coastal Wetland Area (CWA) gazetted under State Environment Planning Policy (Resilience & Hazards) 2021 [SEPP (R&H)]. The CWA comprises a heterogeneous mix of vegetation types identified and categorised under the Tweed Vegetation Management Strategy 2004 (Update 2009) as Swamp She-oak Closed Forest to Woodland, Broad-leaved Paperbark Closed Forest to Woodland and Saltmarsh Communities. The aforementioned vegetation communities may (subject to field verification) be representative of the following respective candidate Endangered Ecological Communities:
 - Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions
 - Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions
 - Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions
- In addition to the CWA, the site occurs within the Coastal Wetland Proximity Area, Coastal Environment Area and Coastal Use Area under the SEPP (R&H)
- The CWA corresponds with high conservation values identified on the NSW Biodiversity Values Map made under the *Biodiversity Conservation Act 2016* (BC Act)
- Based on interpretation of aerial imagery and previous vegetation surveys (Lot 13 DP 1264394), vegetation extending beyond the CWA on the floodplain within the proposed development envelope is likely to comprise similar units of littoral/riparian vegetation that form part of the CWA. Units of Freshwater Wetlands may occur in depressions above the limits of current marine tidal water influence, whist riparian vegetation occurring along the banks/terrace of Duroby Creek to the north of the site may be analogous with

- a Coastal Forest Red Gum Open Forest to Woodland type. On land within the proposed development envelope above the floodplain, units of woody vegetation are likely to be representative of Camphor Laurel Dominant Closed to Open Forests.
- Mapped Preferred Koala Habitat as shown in the Tweed Coast Comprehensive Koala Plan of Management 2020 occurs onsite.
- Vegetation on the site is identified as bushfire prone land Bushfire Prone Land 2023 mapping.
- Duroby Creek (fourth order stream) forms the northern boundary to Lot 13. A first order watercourse is aligned along the common boundary between Lot 13 and Lot 3 draining to the CWA.
- Key fish habitats are identified on the site (DPI mapping) generally associated with the Coastal Wetland Areas.
- The site is identified as a subregional wildlife corridor linkage node from Terranora Broadwater to Terranora Ridge and Tweed-Cobaki Climate Change Corridor.
- Threatened fauna and flora species listed under the BC Act and/or Environment Protection and Biodiversity Conservation Act 1999 such as Rose-crowned Fruit-dove, Black-necked Stork, White-bellied Sea-Eagle, Yellow Satinheart and Fine-leaved Tuckeroo have previously been recorded within the study area.
- Based on desktop review, the following red flagged values [as defined in Development Control Plan Section A19 Biodiversity and Habitat Management (DCP A19)] may occur within the study area:
 - Listed ecological communities
 - Over-cleared vegetation types
 - Over-cleared landscapes Byron-Tweed Alluvial Plains
 - Important wetlands
 - Other wetlands
 - Other bushland on a slope greater than 18 degrees
 - Land within a defined wildlife corridor
 - Areas within flora and/or fauna species polygon that are known or predicted to occur at the site
 - First order and fourth order streams
- The site is subject to draft zone changes under the Tweed Conservation Zone review. The site meets multiple criteria for conservation zoning as identified by the NSW Department of Planning's Northern Councils E Zone Review Final Recommendations Report 2016. The applicant should ensure the concept plan responds to the proposed draft conservation zoning as the project progresses.

Specific DAP question raised

Proposed dedication and arrangements for management and handover of environmental lands

- The following areas are to be formally protected consistent with DCP A19 development envelope control C9:
 - All relevant red flagged areas across the entire site
 - o Associated ecological setbacks within 100m of the development envelope(s) and

- Ecological setbacks to important wetlands, estuarine areas, third order streams or greater across the entire site
- Management would be required in perpetuity.
- Having regard for DCP A19 controls, provisions of DCP Section A5 Subdivision Manual (DCP A5 Part 5.4.5 Environmental Constraints) DCP Section B24 Area E Urban Release Development Code (DCP B24), statutory protection and in-perpetuity management and funding arrangements would be expected to be secured through an appropriate mechanism. Examples of such mechanisms/arrangements are provided in DCP A19 under development envelope control C10 the Advisory Notes, including the execution of a Planning Agreement as envisaged under DCP B24.
- All areas captured under the DCP A19 development envelope control C9 should be assigned to an appropriate stage of the development to ensure all impacts from the staged release of urban development are appropriately avoided and mitigated.

DA Assessment Comment: As advised in DAP and detailed later in this report (see key issues), insufficient information has been supplied to ensure that statutory protection and in-perpetuity management and funding arrangements can be provided for this land. As such, Council fundamentally does not accept the dedication of proposed Environmental Management Land due to a lack of resources for management in perpetuity.

Mahers Lane Precinct - Stage 4

- The proposed development envelope appears to extend outside the urban footprint identified in DCP B24 extending within areas of 'Bushland' shown in Figure 2.3 Environmental Attributes of the DCP. This appears to include proposed Lots 301-310, Lots 401 to 406, Lots 408-411 and section of Road 5 including the cul-de-sac head. As indicated in Section 2.2 of the DCP B24 'This Code does not support urban development outside the urban footprint unless for critical/essential infrastructure'.
- In addition to the provisions of the DCP B24 relating to the acceptable urban footprint, freehold Lots 1 and 2 DP1266773 adjoining and proximate to the site to the south are burdened by environmental covenants on title requiring the land on those sites (generally outside the DCP B23 urban footprint), to be managed for conservation purposes.
- Having regard for the land-use, planning and management constraints, urban development extending beyond the urban footprint identified in the DCP B24 is unlikely to be supported. Future Lots and servicing road network should therefore be reconfigured in this location accordingly.
- The application should be accompanied by a Plan of Management to address Clause 25 of the *Tweed Local Environmental Plan 2000* with respect to the land zoned 7(a) Environmental Protection (Wetlands and Littoral Rainforests)
- All environmental protection land, red flagged values and ecological buffers on Lot 3 should be assigned a development stage for protection and management. It is noted that a portion the environmental zoned land to the north-east of Lot 3 does not fall within a stage.
 - **DA Assessment Comment:** The proposed development envelope appears to extend outside the urban footprint identified in Section B24 of the DCP by extending into areas of 'Bushland' shown in Figure 2.3 Environmental Attributes of the DCP. As indicated in Section 2.2 of the Section B24 'This Code does not support urban development outside the urban footprint unless for critical/essential infrastructure'.

- The layout is inconsistent with DCP B1 Terranora in terms of providing the Open Space identified on the associated B1 Map 1. The ecological merits of departing from the DCP would be expected to be justified through a comparative analysis study of open space alternatives based on detailed flora and fauna survey. Any alternative open space area (conservation) should be commensurate in terms of areal extent and values to be protected additional to that required to address DCP A19. Please note merit-based assessment would not be limited to ecological matters only. Please refer to other DAP comments in relation to this.
- All forms of any proposed development including (but may not be limited to), roads, Lots, earthworks, stormwater infrastructure and the like will not be supported within a 50 metre ecological buffer zone measured from the mapped Coastal Wetland Area. Preliminary analysis indicates that sections of proposed Road 1, drainage reserves, Lots 132 to 136, Lots 143 to 148, Lots 230 to 243 all occur within the CWA 50 m ecological buffer. The ecological buffer is required to manage/avoid conflict associated with urban development whilst allowing for the landward movement of sensitive marine vegetation habitat under a range of tidal scenarios and projected sea level rise horizons.

DA Assessment Comment: The submitted application fails to justify the ecological merits of departing from the DCP through a comparative analysis study of open space alternatives having regard to the ecological values of the area currently identified as Open Space in Section B1 of the DCP to the south of the site. Any alternative open space area (conservation) should be commensurate in terms of areal extent and values to be protected additional to that required to be addressed in Section A19 of the DCP.

General comments

- Use of perimeter roads should be maximised where adjacent to red flagged values and associated ecological buffer zones, particularly those ecological buffers to the CWA's.
 Interface between the CWA buffers and private Lots would unlikely to be supported.
 - **DA Assessment Comment:** As discussed throughout this report, the ecological buffer distances have not been achieved with the proposed urban footprint. Furthermore, the extent of Asset Protection Zones beyond the perimeter road would further impact the CWA and its ecological values. Finally, the existing legal point of stormwater discharge occurs adjacent to the coastal wetland and the submitted stormwater studies fail to consider the entire catchment area. It is therefore unclear as to whether the existing infrastructure is suitable for the proposed development.
- Hydrological investigation including groundwater dependent ecosystem impact assessment would be required to determine ecological implications of altering the current hydrologic regime and to consider potential alternative solutions to avoid any potential adverse impact.
- All red flagged values, ecological buffers and ecological setbacks in accordance with DCP A19 development envelope control C9 should be assigned/tied to an appropriate stage of the development to ensure all impacts from the staged release of urban development are appropriately avoided and mitigated.
- Any application should be accompanied by an Ecological Assessment (EA) prepared in accordance with Part D Section 5 of the DCP A19. The EA should include assessment with all relevant development envelope controls of DCP A19.
- Full habitat restoration details of ecological buffer zones and all red flagged values onsite
 in the form of a Conceptual Habitat Restoration Plan would be expected to accompany
 any future application including arrangements for in perpetuity management and
 statutory protection of those areas.

• The site drains into a protected wetland. Industry best practice water sensitive urban design would be required on the site to ensure the values of the downstream wetland area is not degraded. Any stormwater management infrastructure and associated works on site would be expected to be positioned outside the 50 m CWA ecological buffer. Direct piped discharge into the CWA is unlikely to be supported. Demonstrate how stormwater quality and quantity treatment is to achieve pre-development conditions and avoid adverse impact upon the health, function and integrity of the CWA.

DA Assessment Comment: There is insufficient information to determine whether the Water Sensitive Urban Design (WSUD) provisions would cater for the entire catchment area. Accordingly, there is insufficient information to confirm that protection of the wetland in terms of water quality can be regulated under the current DA. Furthermore, the proposed infrastructure is within the ecological buffer.

- Any proposed perimeter road upgrades would be expected to include fauna sensitive design measures such as (but not limited to) sufficient culvert/overpass/ bridge sections across any waterways to facilitate fauna movement.
- The proposal may be declared designated development by way of *State Environmental Planning Policy (Resilience and Hazards)* 2021 [Section 2.7(2)] where the proposal involves activities/development prescribed in Section 2.7(1) of the SEPP (R&H).

DA Assessment Comment: The application fails to include sufficient information to assess the developments performance against Clause 2.7(1) of this policy and therefore it is unclear as to whether the proposal would form Designated Development.

- A Biodiversity Development Assessment Report (BDAR) (prepared by an accredited consultant in accordance with the Biodiversity Assessment Method 2020) would be required where:
 - The proposal exceeds the Biodiversity Offset Scheme clearing threshold of 0.25 hectares based on minumum lot size. Potential clearing along new proposed boundary lines (generally in accordance with *Local Land Services Act 2013* Allowable Activity provisions) would need to be considered. All native vegetation clearing for the purposes of subdivision (including installation of services, land application areas, earthworks, APZ's, development envelopes) is to be taken into account when making a determination on the BOS threshold; or
 - Native vegetation removal within the high conservation value area mapped on the NSW Biodiversity Values Map for any purpose is likely; or
 - An assessment of significance (5-part test) made under Section 7.3 of the BC Act performed on all threatened entities known or likely to occur on site determines that the proposal is likely to significantly affect threatened species or ecological communities, or their habitats.

DA Assessment Comment: The submitted BDAR fails to satisfy the relevant matters for consideration under the Biodiversity Conservation Act 2016 – Biodiversity Offsets Scheme. In particular, the BDAR has not been prepared in strict accordance with the NSW Biodiversity Assessment Method 2020. The proposal does not accurately identify the extent and type of threatened biodiversity entities present. The proposal also does not sufficiently document suitable measures to avoid and mitigate impact to threatened entities, including Serious and Irreversible Impact (SAII) species.

• The State Environmental Planning Policy (Biodiversity and Conservation) 2021 – Chapter 3 (RU2 and 1(a) zoned land) and Chapter 4 (all other zones) would apply to any future development on site. The Tweed Coast Comprehensive Koala Plan of Management 2020 ("KPoM") is an approved Koala Plan of Management under the SEPP. With reference to the KPoM the site occurs within the Tweed Heads Koala Management Area and preferred koala habitat is identified on site. Any future application

would be required to address Part 5.8, and where relevant (dependent on results of the Koala Habitat Assessment), Parts 5.9 and Part 5.10.

DA Assessment Comment: The application fails to address this requirement and the KPoM.

- Bushfire Threat Assessment Report (BTAR) prepared by a BPAD accredited Bushfire Consultant should accompany any future application. Any BTAR should have regard for all habitat restoration and vegetation protection requirements necessary to satisfy the development envelope controls of DCP A19.
 - **DA Assessment Comment:** Submitted BTAR fails to achieve the above. The proposed performance solution fails to respond to the Environmental Management Area (EMA) in Open Space Stage 4.
- Full details of bulk earthworks, civil infrastructure, services and any necessary structures to enable development should be provided with any future application.
 - **DA Assessment Comment:** Detail has been provided demonstrating (and the application is recommended for refusal due to) works proposed on adjoining land with no landowner's consent. The extent of earthworks is also unacceptable having regard to Section A5 of the DCP. See the Section A5 discussion later in this report.