

28 February 2020

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Attention: Emma Butcher

Dear Sir/Madam

Proposed modification of the Fraser Drive Residential Subdivision (MP 06_0243 Mod 5) at Lot 2 DP 1000385 & Lot 212 DP 1231622 & Lot 9 DP 1039569; Fraser Drive TWEED HEADS SOUTH

I refer to Department's invitation for Council to provide comment on the proposed modifications (Mod 5) of the Fraser Drive Subdivision. Upon review of the modification application, please find below Council's comments:

1. Development Engineering

a. Geotechnical / Earthworks / Landforming

The proposed Cut & Filling Layout Plan - Drawing No 205 Rev 2 by Michael Bale & Associates indicates that there are significant amounts of cut and fill proposed up to 7m in depth over a large area. Tweed Shire Council's Development Design Specification D6 – Site Regrading specifies that the limits for land form change for urban expansion are as follows:

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

The proposed Slope Analysis Plan - Drawing No 206 Rev 2 by Michael Bale & Associates indicates a slope of greater than 50% at the rear of the existing lots off Hillcrest Avenue, Seaview Street and Ocean Avenue.

Concerns are raised with regard to the following:

- i. Does the proposed steep slope impact on any existing fencing or structures on private property;
- ii. Does the steep slope have any impact on existing properties such as land slip, movements etc;
- iii. How will the steeper slope be permanently protected; and
- iv. Consideration for catch drains on top of steeper batters.

b. Road Network/Horizontal/Vertical Alignment, Cross Section

The proposal includes the construction of four new roads and extending existing Merlot Court and Ocean Avenue. The proposed roads and

extensions are described below with associated gradients and cross sections details.

Road Name	Street Type	Longitudinal Gradient	Cross Section
Road 3	Access Street For up to 3000 vpd	Maximum proposed gradient of 15.97%	14.5m road reserve with a 7.5m wide pavement. 3% pavement cross fall with crown central of road. 2.5% cross fall on verge to property boundary. 1.2m wide footpath on one side of road.
Road 4	Narrow Access Street For up to 1000 vpd	Maximum proposed gradient of 7.14%	13m road reserve with a 6m wide pavement. 3% pavement cross fall with crown central of road. 2.5% cross fall on verge to property boundary. 1.2m wide footpath on one side of road.
Road 5	No typical section provided	Maximum proposed gradient of 16%	No typical section provided
Road 6	Narrow Access Street For up to 1000 vpd	Maximum proposed gradient of 16%	13m road reserve with a 6m wide pavement. 3% pavement cross fall with crown central of road. 2.5% cross fall on verge to property boundary. 1.2m wide footpath on one side of road.
Merlot Court Extension	Existing Access Street	Maximum proposed gradient of 15.71%	18m road reserve with a 11m wide pavement. 3% pavement cross fall with crown central of road. 2.5% cross fall on verge to property boundary. 1.2m wide footpath on one side of road.
Ocean Avenue Extension	Existing Access Street	Maximum proposed gradient of 15.43%	No typical section provided

Development Design Specification D1 – Road Design Table D1.6 specifies that the desirable maximum grade to be 10% and absolute maximum grade for an access street is to be 16%. For grades greater than 12% the requirements for pedestrians, cyclists, waste collection vehicles and transverse access are to be addressed explicitly in the design. Proposed Roads 3, 5, 6, Merlot Court Extension and Ocean Avenue Extension exceed 12% grade.

The cross sections proposed for Road 3, 4 and 6 are in accordance with Tweed Shire Council standards for width and gradients. However, no typical sections are provided for Road 5 and Ocean Avenue Extension.

c. Intersections

The proposal is utilising the same intersections being Merlot Court, Ocean Avenue and Hillcrest Avenue into the site. Existing conditions for intersections to remain.

d. Bus routes / Shelters

The applicant has proposed the following condition for the bus stops:

In order to ensure that pedestrians have adequate access to public transport, two bus stops are to be constructed on Fraser Drive at the locations indicated on Drawing ~~Drawing No 7214/29/01-DA027 dated 18 August 2008~~ **L19029 -100 Rev C prepared by Zone Landscape Architecture dated 24/10/2019**. The type, location and operation of the structures are to be submitted to the satisfaction of Council prior to the issue of the Construction Certificate for above ground works for Stage 1 (northern bus stop) and Stage ~~9~~**16** (southern bus stop) of the project.

The proposed location of the bus stops appear to remain the same, however concerns are raised with regard to the following:

- i. Major infrastructure such as bus stops and stormwater detention basin are relying on Stage 16 to be constructed. Concerns are that Stage 16 could be isolated or passed on to another developer which may not be viable to construct given the costs of major infrastructure.

e. Access

Proposed Lots 203 to 206, 209 to 216, 260 and 261 have direct access off proposed Road 3. Cross Sections B, D and Slope Analysis Plan indicate that the first 6m into the properties are between 35% to 50% in grade. This gradient exceeds the maximum gradient allowable for a driveway being 25%. In addition the proposed grades exceed the required transitions into the property.

Cross Section B indicates that property is at a proposed gradient of 28%, which does not allow a compliant maximum 25% gradient driveway for property access. Contours indicate the gradient of the proposed lots are steeper than 28% on Lots 215, 216 and 261.

Retaining walls are proposed on the frontage of Lots 172-180, 198-201, 225, 226, 229-236 and 238. The retaining walls are proposed to be a

maximum of 1.5m in height. In between the retaining walls are proposed driveways for access into the properties. Concerns are raised that lots are already at maximum 25% grade with a retaining wall of 1.5m in height. The applicant is to demonstrate how all lots with a retaining wall can achieve compliant access with S2890 transitions and maximum grades for residential properties. Demonstrate transitional requirements are compliant using a ground clearance templates as per Australian Standard 2890.1.

The proposal indicates driveway gradients for Lots 208, 209, 241, 243, 247, 249 and 251. No driveway gradients have been provided for proposed battle-axe Lots 189, 207, 209, 237, 242, 244, 248 250 and 252. A review of the submitted long sections for Lots 241, 243, 247, 249 and 251 indicate that the transitions into the lots do not comply with Australian Standard AS2890.

All access into lots are to comply with AS2890 transitions and maximum grades for residential properties. The applicant is to demonstrate transitional requirements are compliant using a ground clearance templates as per Australian Standard 2890.1.

For battle axe blocks, in particular shared driveways, the following should be provided:

- i. Provide appropriate easements; and
- ii. Provide a concrete driveway including servicing along the full battle-axe handle.

f. Pedestrians / Footpaths / Cycleway

There are two plans that indicate footpaths being:

- L19029 -100 Rev C prepared by Zone Landscape Architecture dated 24/10/2019; and
- Roadworks Alignment Layout Plan by Michal Bale & Associates drawing number C300 rev 2.

Both the above drawings do not indicate a footpath proposed for Road 6. All new public roads are to provide footpaths.

Roadworks Alignment Layout Plan by Michal Bale & Associates Drawing No C300 Rev 2 indicates a pedestrian footpath to connect from Road 3 to existing Champagne Drive. Previously a footpath was connected to Champagne Drive via a park and open space. Appropriate additional wording to Condition B24 is recommended in this regard (refer to Item 8 below).

Similarly, a further amendment to Condition B24 is recommend with regard to the proposed additional pedestrian path connecting Road 5 to Road 4 (refer to Item 8 below).

g. Traffic Generation / Assessment

A traffic report has been submitted by TTM Consulting Pty Ltd (TTM) to undertake a traffic impact assessment of the proposed modification.

There is an inconsistency on the number of residential allotments proposed between the Modification report by Zone Planning and the traffic report by TTM Consulting Pty Ltd (TTM). The traffic report indicates less lots being created than the planning modification report.

TTM Consulting Pty Ltd (TTM) indicate the following for the proposed Hillcrest Avenue / New Road 3 intersection:

“The proposed Hillcrest Avenue / New Road 3 access intersection would be located approximately 40m (centre line to centre line) to the south of the existing Hillcrest Avenue / Lakeview Parade T - intersection.

Queensland Streets provides design guidelines for subdivisional street works. Queensland Streets outlines desirable minimum intersection spacings (centreline to centreline) to access streets on opposite sides of through streets is 40m. This is to ensure that intersections are located sufficiently far apart to separate traffic movements at each intersection and provide reasonable time interval between driver decisions.

The available separation between the Lakeview Parade and New Road NO.3 intersections with Hillcrest Avenue is sufficient to separate the traffic movements at each intersection and to provide a reasonable time interval between driver decisions. Therefore, TIM consider that there proposed New Road NO.3 T- intersection with Hillcrest Avenue is suitable”.

A traffic report by Cardno Eppell Olsen dated December 2006 originally submitted as part of the original approval provided the following comments at the same Hillcrest Avenue / New Road 3 intersection:

“This access would be located on the western side of the development where grades for both the development and the existing road network are relatively steep. It is understood that this access would connect to Hillcrest Avenue via an undeveloped piece of land intersecting just south of Lakeview Parade. The speed environment is 50km/h along Hillcrest Avenue.

Again the major constraint to this access location is the road geometry. To the south there is limited sight distance for vehicles turning right into or out of the site. The sight distance to the north is adequate therefore a left turn in and out of the development can be achieved”.

The traffic report by TTM Consulting Pty Ltd (TTM) is to consider the existing road geometry in their assessment and use NSW (Austroads) and Tweed Shire Council standards for assessment. The existing approval allows for only a left in / left out type treatment with traffic islands at the intersection of Hillcrest Avenue and proposed Road 3 to prevent a right turn.

In addition to the above, the TTM traffic report should also consider the existing approval, which indicates that a stop sign and traffic calming devices

are to be provided on Ocean Avenue at the intersection of Ocean Avenue and Seaview Avenue.

h. Stormwater Drainage

A stormwater management plan (technical letter) has been prepared and submitted by Meinhardt. The technical letter concludes that the existing detention basin of 956m² be increased to 1400m². Basin details are provided on Drawing No C700 by Michael Bale & Associates, which raise the following comments:

- i. Detention storage is relying on a combination of retaining walls (approx. 2m in height) and steep 1:2 (50%) batters with an approximate combined height of 4.2m. Retaining walls and steep batters should not be supported as this provides both a safety and maintenance issues for Council. The footprint of the proposed detention basin is half the area proposed to be dedicated as stormwater open space area;
- ii. The drawing indicates a 1.2 wide pedestrian footpath to be used as a maintenance path. For safety reasons a pedestrian footpath should not be used as a maintenance track – it is required to be separate;
- iii. The pedestrian footpath is in close proximity to the detention basin with no safety fencing; and
- iv. Condition B24 references a pedestrian footpath to be provided between Lot 161 and open space / detention area. No footpath is indicated on the plan. The only footpath shown is one closer to proposed Lot 184. A footpath should be located adjacent to Lot 161 to provide direct access to the proposed bus stop.

Concerns are raised regarding overland flow paths. The Mod seems to be reliant on road piping only. Overland flow should have its own dedicated parcel of land and not through properties. The land at end of Road 5 should be overland flow path and not an easement through private property. The proponent should re-visit overland flow paths to ensure properties are not affected in major storm events.

There is an existing stormwater pipe and concrete drain located within Lot 408 DP847872 that currently discharges into Lot 212 DP1231622 as shown below in Figure 1.



Figure 1: Photo of existing stormwater pipe & concrete drain

The proposal is for a proposed drainage reserve between Lots 189 and 190, 192, 193. The proposed drainage reserve does not seem to align with the existing stormwater drain. The applicant is to demonstrate how the above stormwater will be discharged through the proposed drainage reserve. Appropriate drainage gully pits and pipes should be considered for design.

In addition to the above, Tweed Shire Council mapping indicates a 600mm diameter stormwater pipe through Lot 17 sec 13 DP 28390 (No. 33 Seaview Street) as shown in Figure 2 below.

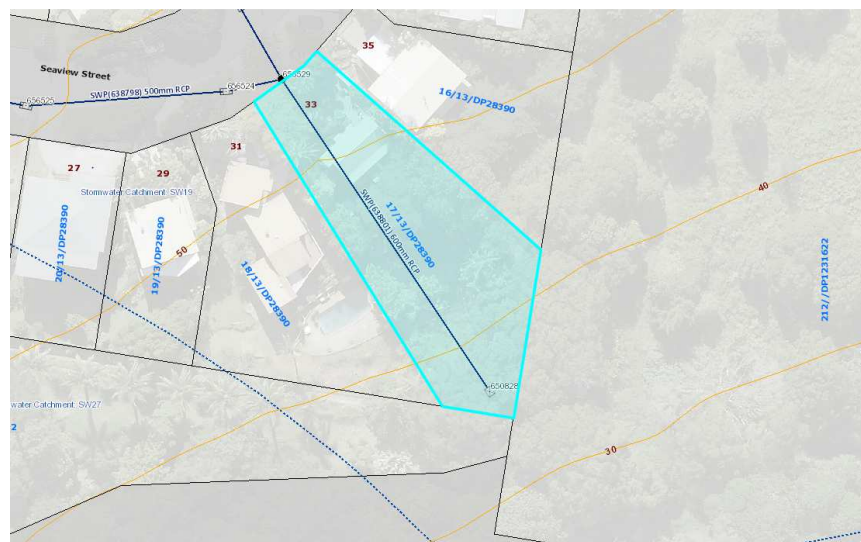


Figure 2: Council mapping of existing stormwater pipe

The above stormwater to be taken into consideration for design.

The applicant is to check if the proposed drainage reserve between Lots 189 and 190, 192, 193 provides adequate area for drainage and pedestrian linkage.

The applicant is to demonstrate how stormwater runoff will be captured from the existing higher lots off Seaview Street, Ocean Avenue and Hill Crest Avenue without impacting on the proposed adjacent lots as part of the subdivision.

The applicant is to demonstrate how stormwater runoff will be captured from proposed Lots 202 – 216 and 259 -261 without impacting on the lower allotments.

Retaining walls are proposed on the frontage of Lots 172-180, 198-201, 225, 226, 229-236 and 238. The applicant is to demonstrate that no stormwater runoff overtops the proposed retaining walls.

Tweed Shire Councils mapping indicates that there is an existing stormwater pipe in Ocean Avenue as shown in Figure 3 below.

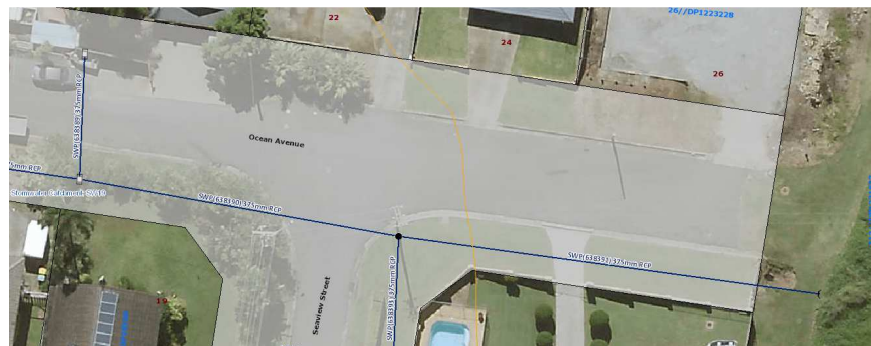


Figure 3: Council mapping of existing stormwater pipe

The proposed stormwater design does not appear to take into consideration this existing stormwater connection.

2. Roads & Stormwater

a. Flooding

The area of the site that is the focus of this MOD is mostly elevated above design flood level or PMF. Riverine flooding is of little concern.

b. Stormwater Quantity

Stormwater quantity matters are proposed to be addressed by incorporating stormwater detention to limit site discharges to pre-development level. This remains part of the proposed modified application. This approach is acceptable, however, it should be noted that very little design detail of the basin layout has previously been provided and, to Council's knowledge, it has never been demonstrated that the basin can be constructed in an acceptable manner (i.e. without extensive use of retaining walls).

Further design information is required of the ultimate layout of the stormwater management lot layout and earthworks. Refer to Item 2(g) below.

c. Stormwater Quality

The MOD relies upon an old 2006 Stormwater Management Plan (SWMP) by Cardno. This old SWMP is outdated and no longer complies with Development Design Specification D7 – Stormwater Quality. Compliance with D7 is required by Conditions B18 and B20.

The SWMP should be undated to comply with current best practice stormwater quality management and the current version of D7. Failing to do this would result in adverse environmental effects downstream of the site.

To comply with contemporary stormwater quality policy the development will almost certainly opt to incorporate a bio-retention basin in to the stormwater management lot adjacent Fraser Drive. This has been foreshadowed in recent design documentation submitted as part of a section 68 (Local Government Act 1993) application for the Stage 12 construction certificate. Early concept design suggests around 1400m² of bio-retention surface area will be required (see Figure 4 below). On top of this, batters to fit the basin onto the slope will increase the area required to accommodate the infrastructure.

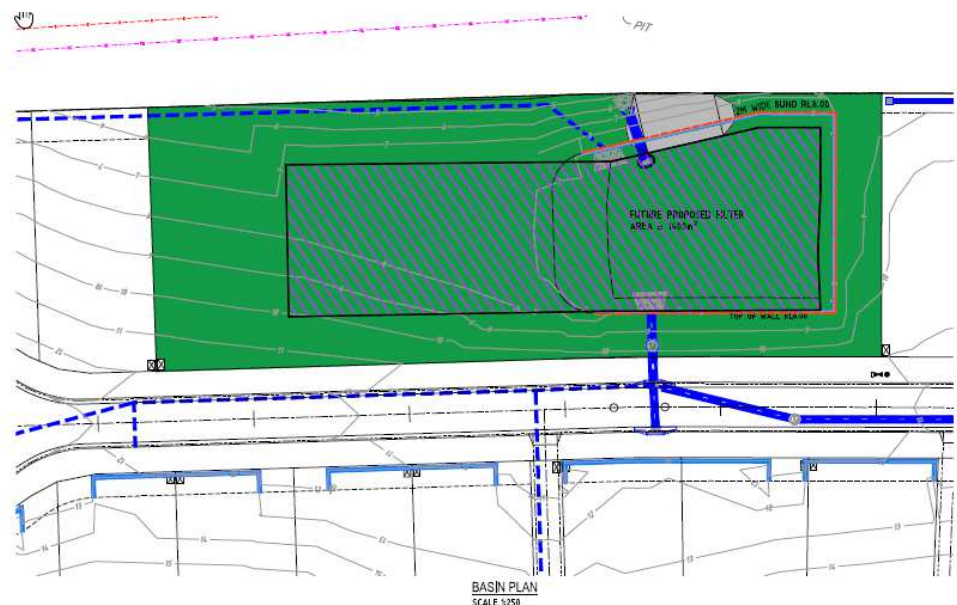


Figure 4: Council mapping of existing stormwater pipe

Complying with current best practice stormwater quality management and Development Design Specification D7 (as per Conditions B18 and B20) will require significant land area in the stormwater/open space lot adjacent Fraser Drive. This is not currently considered in the proposed lot layout.

The applicant should provide a compliant Stormwater Management Plan that includes a clear definition of the infrastructure required to comply with Development Design Specification D7 – Stormwater Quality. The

configuration and size of the stormwater management lot adjacent Fraser Drive must be sufficient to accommodate any necessary stormwater infrastructure. Refer to Item 2(g) below.

d. Lawful Point of Discharge and Stormwater Nuisance

The site slopes steeply to the East. There are many lots with adverse fall away from their road frontage into neighbouring private lots. Presumably, these will have inter-allotment drainage provided. On such sites there is a high risk of poor stormwater management outcomes such as flooding of private property and stormwater nuisance.

Tweed Development Design Specification D5 – Stormwater Drainage Design requires inter-allotment drainage systems to incorporate swales with capacity for 1% AEP flows. This may be difficult to achieve on the sloping site.

The currently approved lot layout incorporates roughly 11 lots with adverse fall into neighbouring private land. The proposed layout includes 33 such lots and an additional 13 that will accept runoff from external lots (Seaview Street). Therefore, the proposed layout significantly increases the need for inter-allotment stormwater drainage and the risk of operation phase stormwater flooding and nuisance.

The applicants MOD includes removal of current restrictions on dual occupancy developments. This will further exacerbate the above concerns as it will increase the density of these “adverse fall” lots mean more runoff and more potential for overland stormwater flooding and nuisance.

Further information is required on how inter-allotment stormwater will be managed. Including infrastructure, open drains (1% AEP), and easements in private land throughout the site. It should be noted that Council preference is to minimise the need for inter-allotment drainage, where possible. Refer to Item 2(g) below.

e. Management of Overland Stormwater Flows

The site is steeply sloping and caters for significant external catchments. There is a high potential for overland stormwater flooding at the site.

To be effective, the proposed onsite-detention system must have all major flows directed into the basin. No detail has been provided on how overland stormwater flows will be accommodated and managed within the site. The additional proposed lots and increased number of lots with adverse fall increase the risk of overland stormwater flooding of properties.

Major stormwater flows through the site should be via public land and/or drainage reserves, not private land, regardless of easements.

The additional proposed lots and increased number of lots with adverse fall increase the, already significant, risk of overland stormwater flooding at the site. Further information is required on how overland stormwater flows will be managed throughout the site whilst meeting the requirements of Development Design Specification D5 – Stormwater Drainage Design. Refer to Item 2(g) below.

f. Dedication of Stormwater Management Lot and Bonding of Bio-Retention Works

Assuming that the applicant will update their SWMP to incorporate the expected bio-retention basin, care should be exercised in the timing of the dedication of this lot to Council and the bonding of the bio-retention basin establishment works. Bio-retention basin establishment works are typically undertaken only once 80% of the houses are built and are therefore likely to be one of the last construction works completed on the project.

Dedication of this lot should **not** be left to a late stage of the development and the works to establish the bio-retention basin must be bonded. This is to protect Council and the community from the developer potentially “walking away” from the project without completing the stormwater management (environmental protection) works.

g. Request for Information

- i. Further information is required to define the ultimate layout of the stormwater management lot layout adjacent to Fraser Drive. This must include stormwater treatment infrastructure, stormwater detention basin, batters, access, any required fencing and any other elements required within the lot;
- ii. The configuration and size of the stormwater management lot land parcel must be sufficient to accommodate all necessary stormwater infrastructure (see above)
- iii. The applicant is to provide a compliant Stormwater Management Plan that includes a clear definition of the infrastructure required to comply with Development Design Specification D7 – Stormwater Quality.
- iv. Concern is raised with regards to the significant increase in number of lots with adverse fall into neighbouring private land. These lots do not have a clearly defined lawful point of discharge and would require extensive inter-allotment drainage networks to cater for them. This significantly increases the potential for stormwater flooding and nuisance during the operational phase of the development, when compared to the existing lot layout.
- v. The additional proposed lots and increased number of lots with adverse fall increase the already significant risk of overland stormwater flooding at the site. Further information is required on how overland stormwater flows will be managed throughout the site whilst meeting the requirements of Development Design Specification D5 – Stormwater Drainage Design. This must also include external catchments draining to the site.

3. Traffic Engineering

The Traffic Report refers to an increase in Lot numbers to 31 where other documents cite an increase of 41 Lots.

The report cites “Queensland Streets” for reference instead of the appropriate Austroads Road Design Guidelines and TSC DCP’s / Design Specifications.

The report estimates traffic generation on Lot numbers not on expected use of the Lots (e.g. does not consider the possibility of dual occupancy development).

The Mod 5 documentation does not incorporate any detailed design of the proposed bus stops.

a. Request for Information

- i. The proposed conditions (B26 & E10) to delay the construction of the Bus Stops on Fraser Drive to Stage 16 are not supported. Further detailed design should be provided to confirm that the southern bus stops are compatible with the current on road shared path (i.e. consider the recent construction of a cycleway on the western side of Fraser Drive); and
- ii. The submitted Traffic Report needs to be updated to confirm that all intersection designs (internal and external connections) are complying with the appropriate Austroads and Tweed Shire Council design criteria. The estimated traffic generation should be reviewed for any increase in lot numbers and increased traffic generation as of a result of intensified traffic generation by further redevelopment or potential subdivision and the traffic assignment needs to be justified.

4. Water & Wastewater

a. Request for Information

The Modification Report states the following in Section 7.2, however it's not clear how these figures were derived, and appear to be incorrect.

Water and Wastewater

Calculations of the design flows have been determined through comparing the proposed layout relative to the previous approved plan. These calculations have been based on Council's Design Development Guidelines D11- Water Supply and D12-Sewerage System. Below is a summary of before and proposed development scenarios.

Sewer Flows

- Original Masterplan – Flow = 10.1 l/sec
- Modified Masterplan – Flow = 11.1 l/sec

Water Flows

- Original Masterplan – Peak Instantaneous Demand Flow = 11.6 l/sec
- Modified Masterplan – Peak Instantaneous Demand Flow = 17.4 l/sec

Consequently, the proposed modifications are not considered to be significant.

le: For peak demand (water supply):

Formerly 157 lots = $157 \text{ ET} \times 0.075 = 11.775 \text{ L/s}$

Proposed 198 lots = $198 \text{ ET} \times 0.075 = 14.85 \text{ L/s}$

le: for peak wet weather flow (sewerage):

Formerly 157 lots at 23.5 ha (approx.) = 16.3 L/s

Proposed 198 lots at 23.5 ha (approx.) = 18.7 L/s

Noting that this does not include additional population for the multi residential lot to the rear of 43 Fraser Drive.

It is recommended that further information be provided to outline how these figures were derived.

b. Attachment 4 – Engineering Services Report and Plans

There appears to be no report included within Attachment 4, only plans. As highlighted above, there has been insufficient information provided regarding the provision of sewerage and water supply to the lots. A Water and Sewer Services Report is required to outline how the developer proposes to supply water and sewer to the development. The D11 and D12 Development Design Specifications outline the requirements for water supply and sewerage for a development and this should be provided.

c. Water Supply Layout Plan Dwg No D500 (Rev 2)

This development area is across three water supply zones, which has not been considered as part of the development. The development will need to be serviced by different zones which need to be considered in the layout.

The Hillcrest Reservoir BWL is RL 63.84m AHD and therefore any water mains higher than approximately RL 35m AHD need to be serviced by a different water main (zone) than the lots lower than approximately RL 35m AHD, which can be serviced by the Hillcrest zone.

The Herb St Reservoir BWL is RL 84.12m AHD and therefore lots higher than RL 35m AHD can be serviced by this zone.

Council also has a Hillcrest Boosted Zone which services many lots along Lakeview Avenue at around RL 40m AHD.

d. Sewer Layout Plan Dwg No C600 (Rev 2)

The plans do not appear to have considered the existing sewerage that runs west to east in two locations across the development.

Lots 163 and 164 do not appear to have sewerage considered for the lots. Fall of the lots does not allow 90 per cent of each lot to be serviced by sewerage.

The sewer shall be located within the property boundary rather than in the road reserve as outlined in D12 (ie: Road 6).

Sewers shall not be located within overland flow paths (ie: between Road 4 and 5).

It not clear how sewerage will be provided on the lots where the existing concrete drain is located.

Plans show retaining walls on lots, which is likely to be where infrastructure easements and water service connections are proposed. Further detail about the proposed retaining wall structures is required, noting that retaining walls are not permitted in / over easements.

5. Parks & Active Communities

a. Overall Open Space

As shown in Figure 5 below, Lot 120 is nominated for wetland conservation and buffer. Lot 16 is primarily stormwater detention with 2500m² of usable open space. Lot 16 and Lot 32 have been constructed and comprise of 2500m² and 2212m² of usable open space respectively. Lot 120 is proposed to be dedicated at Stage 13.



Figure 5: Northern Catchment Open Space

Figure 6 below shows Lot 185 and Lot 142 (1604m²) to the west. Lot 142 is no longer proposed for open space contribution. The application states previously approved Lot 167 (3832m²) in size provided 1692m² of usable open space, while proposed Lot 185 in a similar location is 3177m² and proposes 1870m² of usable open space. The southern corner Lot 155 is a cultural heritage site of 559m² and is not considered an accessible, usable, appropriate open space site.



Figure 6: Southern Catchment Open Space

b. Removal of Lot 142

In principle, Council has no objection to Lot 142 no longer being proposed if the overall open space provided within the development meets the relevant controls of Section A5. However following assessment of overall open space, the proposal is not considered to comply and therefore the removal of Lot 142 is not supported.

c. Usability of Lot 185

Council generally accepts the submitted calculation with regard to the required area of open space area provided:

Based on the existence of this additional embellished open space previously delivered as part of the development, the area requirement for local park within the development has been reviewed. Calculations are provided as follows:

- 83 residential lots delivered in stages 1 to 7 = 83×2.6 persons = 215.8
- 1 development lot delivered in stages 1 to 7 (26 dwellings assumed) = 26×1.7 persons = 44.2
- 114 residential lots proposed in revised Stages 8-16 = 114×2.6 persons = 296.4
- Total persons = 556.4 persons @ 1.13ha per 1000 persons = 6287.32m² of open space.
- Open space provided on Lot 32 = 2212m²
- Open space provided on Lot 16 = 2500m²
- Additional open space required = **1575.32m²**

The application proposes Lot 185 provides 1870m² of usable area where most of the Lot is a stormwater detention basin or of steep topography.



Figure 5: Lot 185 Open Space proposed 'Useable Area'

Figure 7: Lot 185 Usable Area

As noted above in Item 2, the applicant is required to undertake a review of the SWMP, with it considered likely that the majority of Lot 185 will be utilised for a bio-retention basin and would therefore not be available as "usable" open space.

Details within the SWMP (refer to Figure 8 below) highlight the topography and quality of the open space provision.

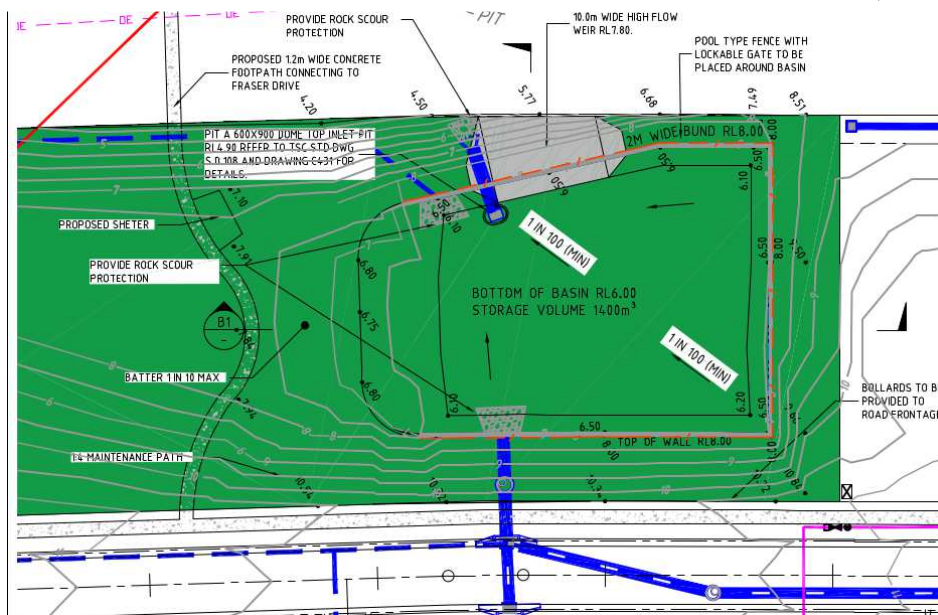


Figure 8: Lot 185 Topography & Stormwater Basin

In addition, it appears the basin will retain water ongoing to a depth of 0.5m with 1.5m high walls on three sides and 10m wide concrete weir. The water retention generally requires fencing around all sides for safety (greater than 300mm in depth). Fencing is only provided along the top of the 1.5m high walls with fencing excluded on the northern side which directly faces the 'park' embellishments, reflecting poor open space design. It is considered that the infrastructure does not allow for the northern half of Lot 185 to be included in the open space contribution. Further, topography of the proposed open space is too steep to be considered usable. The path through the 'park' does not meet the required maximum 1:14 access gradient. 1:1 to 1:4 batter is proposed within the open space area for most of the northern area. This renders much of this site not usable open space.

d. DCP A5 Open Space Requirements

The open space provision is assessed against with Tweed Development Control Plan 2008 – Section A5 – Subdivision Manual.

Clause A5.4.11 Open Space Network outlines controls relevant to the provision of open space.

It is not considered that the proposed Lot 185 meets the following performance criteria:

Public open space function and distribution

• Public open space should:

- o *meet the needs of the local and district communities to be served;*

Lot 185 does not meet criteria for the local community open space within Table A5-8 Summary of Categories of public open space to be provided in

subdivisions and Table A5-8.2.1 – Local Parks Development Standards as detailed later.

Casual Open Space (parks) for community recreation, social needs and passive enjoyment is required to be dedicated and embellished.

The park and embellishment is not in accordance with Table A5-8 Summary of Categories of public open space to be provided in subdivisions and Table A5-8.2.1 – Local Parks Development Standards as detailed later.

Dual use of drainage facilities for open space purposes is encouraged as a means of establishing a linked open space network, however only those parts of the drainage areas that conform to the Chapter 4 standards will be credited towards structured and casual open space commitments.

This is mostly acknowledged by the developer, however the strip to the west which is unusable given the steep nature of the batter towards the drainage infrastructure is not considered as contributing to the space.

The development is required to meet the following provisions:

Table A5-8 Summary of Categories of public open space to be provided in subdivisions

Category of open space	Area requirements	How provided	Development standards
b. Casual Parks b1 Local park b2 Neighbourhood park b3 District park	population based formula, aggregate area (of b1+b2+b3), 1.13ha per 1,000 persons	Dedicated on site unless below threshold area then by s94 contribution	Table A5-8.2.1 Table A5-8.2.2 Table A5-8.2.3
e. Excess to requirements open space	nil	By negotiation	Table A5-8.5

TABLE A5-8.2.1: LOCAL PARKS - DEVELOPMENT STANDARDS	
Small intimate space used for children's play and adult respite	
OPEN SPACE DESIGN ELEMENT	DEVELOPMENT STANDARDS (See also Development Design Specification D14 - Landscaping and Open Space)
AREA DISTRIBUTION	Area of 0.25 to 0.4ha. The number and distribution of these parks is to be such that 95% of residents are located within a 400m walking distance.
CONFIGURATION SHAPE	Contain a central activity zone of 400m ² for play areas and equipment (with a 20m buffer to residential boundaries), balance of area to be for passive use. The length/width ratio shall not to exceed 3:1
LANDFORM	>80% of area to have slopes <8%. Site well drained with surfaces grassed, landscaped, paved or provided with soft fall. In floodplain areas must be filled to at least, Q100 -1m. To be considered for detention basin dual use must have at least Q1 flood immunity.
ACCESS	Vehicular access from local roads (preferably more than 1, but internally configured to discourage through traffic) in locations that are permeable to the catchment with adequate access for garbage collection and maintenance. Safe and easy access to bicycle/pedestrian networks.
ROAD FRONTAGE	>50% of perimeter.
AMENITIES	Appropriately embellished with play equipment, soft fall surfaces under play equipment, kick about area, paving for ball games, seating with shade, landscaping, drinking fountains, general shade and lighting. Play areas appropriately fenced from balance of park area to delineate changed use.
SERVICES	Access for garbage collection, regular maintenance, water, electricity.

Lot 185 is required to meet b1 – Local Park as listed above, with the park to be dedicated and embellished.

An area of 1575m² is required to meet the 'Area Requirements' of Table A5-8, with each site meeting the minimum usable area of 2500m² (Area distribution Table A5-8.2.1).

Regarding 'Landform', a minimum of 80% of the area is to be less than 8% grade. Figure 7 above states 1870m² of usable space is provided on Lot 185, however given the topography as outlined in Figure 8, it is considered that only approximately 350m² meets this criteria.

Therefore when considering the park distribution and open space provision; the maximum 400m walking distance 'Area distribution' requirement in Table A5-8.2.1 and open space available to the southern catchment of the development with the removal of Lot 142 from the proposal, the open space provision for the proposal is not considered acceptable and is not consistent with Section A5 of Tweed DCP 2008.

e. **Embellishment of Lot 185**

The Statement of Landscape Intent (refer to Figure 9 below) shows the proposed embellishments.

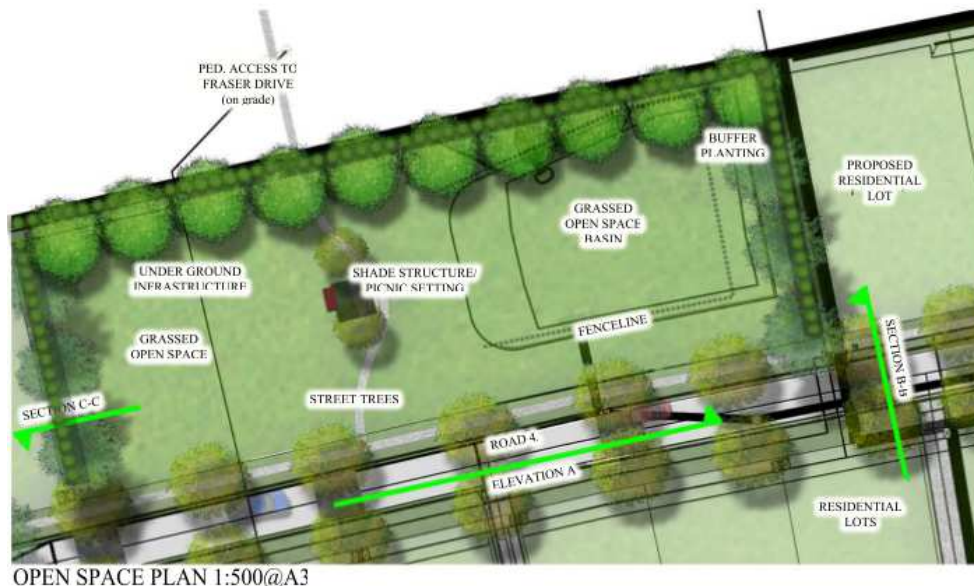


Figure 9: Lot 185 Open Space Embellishment

The level of proposed embellishment features plantings, a path, shade structure and picnic setting. In addition to less than 350m² being usable, in accordance with 'Amenities' in Table A5-8.2.1, the site is required to be *"...Appropriately embellished with play equipment, soft fall surfaces under play equipment, kick about area, paving for ball games, seating with shade, landscaping, drinking fountains, general shade and lighting. Play areas appropriately fenced from balance of park area to delineate changed use"*.

As such, the level of embellishment is not considered acceptable, however can be conditioned to be provided at a future stage of development should an appropriately sized open space site be proposed.

f. Timing Open Space Delivery:

The provision of open space for the southern half of the development is proposed at the last stage, Stage 16. Council does not support this timing of delivery, which should be at approximately Stage 10 of the development.

g. Entry Statements:

Council does not support the construction of entry statements on public land. The entry statements appear to be proposed within the Council road reserve and it is Council Policy to not accept these. Should these be approved, they are to be located wholly on private land.

6. Sustainability & Environment

a. Retention of Lot 142

It is recommended that the Stage 11 Seaview Street Park (proposed Lot 142) be maintained for the following reason:

- Based on recent site inspection the area captured within the Seaview Street Park (proposed Lot 142) comprises a number of significantly sized (greater than 800mm diameter girth) mature remnant rainforest tree species such as *Guioa semiglauca* (Guioa), *Jagera pseudorhus* (Foambark), *Cupaniopsis anacardioides* (Tuckeroo) and *Elaeocarpus obovatus* (Hard Quandong). Council is of the opinion that there may be opportunities through responsive park design, consistent with the Landscape Concept Plan no. 248 prepared by Boyds Bay Environmental Services, dated 10 September 2010 (referenced in Condition B30), to selectively retain remnant rainforest specimens. Such opportunities for tree retention would be limited under the proposed modification plans whereby the Stage 11 Park is developed as freehold residential allotments.

It is noted that access from the Seaview Street Park to Champagne Drive across an existing Council unnamed road reserve is well formed. Impact on biodiversity values along the road reserve to upgrade access to a standard necessary to allow safe pedestrian/cycle access would be expected to be minor.

b. Transfer of SEPP 14 Wetland Conservation Area

No issues are raised with regard to the proposed staging involving the transfer of the SEPP 14 Wetland Conservation Area Lot 120 to Council (at Stage 13) as shown on Dwg. No. C100-G17222-DA Rev. 02 Lot Layout & Staging Plan dated 16 October 2019. It is considered that the sequencing/timing of the transfer generally correlates with that shown under the current staging plan (transfer to occur at Stage 11).

7. **Environmental Health**

It is considered that additional information is required prior to Council providing further comment. It is requested that the applicant provide the following further information to allow Council to finalise comments in this regard:

a. **Noise**

The development is subject to various approved acoustic reports that require acoustic fencing along Fraser Drive and identify lots that require additional acoustic treatment to ground and first floors of future dwellings.

The acoustic consultant has confirmed that due to the topography of the site in relation to Fraser Drive and the amended layout of the remaining stages, further acoustic review will be required prior to determination to ensure the modification would meet the recommendations of the report.

An amended acoustic report shall be prepared and submitted for review that identifies the revised lot numbers requiring acoustic protection as shown on the Subdivision Plan Drawing No. L19029 – 100 Rev C prepared by Zone Landscape Architecture dated 24 October 2019 and confirms that the proposed lot layout will comply with the recommendations of the report.

The report shall be prepared in consultation with the *Environmental Noise Impact Report* dated 17 February 2010 (CRGref: 09097a, as amended 22 October 2014 CRGref: 09097a Letter 19_11_12) and *Modification to Lot Numbering Fraser Drive Tweed Heads* dated 22 October 2014 (CRGref: 09097a Letter 22_10_14) prepared by CRG Acoustics Pty Ltd.

The report shall include all lots along Fraser Drive including lots 181-184 and 256-258.

8. **Planning**

A review of the proposed amendments of conditions has been undertaken. Having considered the abovementioned comments, the following comments on the proposed amendments to existing conditions of consent and Statement of Commitments are provided for the Department's consideration.

A1 Project Description

Project approval is granted only to carrying out the project described in detail below:

- 1) Boundary adjustment between lots 10, 11 and 12 DP 1163855 (Drawing No. 19567B) dated 4 April 2013;
- 2) Subdivision of lot 9 in DP 1039569 into two master lots (Master lot 1 and Master lot 2 of the subdivision) (completed via DP 1163855);
- 3) Subdivision of Master lots 1 and 2 into ~~156~~197 residential lots;
- 4) Creation of a 1.4313 hectare super lot for a future integrated housing development (lot 15);
- 5) Creation of open space lot that contains an artificial wetland for the purposes of stormwater management (lot 16);
- 6) Creation of an open space lot for the retention of the SEPP 14 Wetland and buffer area (lot 120);

- 7) Dedication of a 10m wide and variable buffer for the future upgrade and widening of Fraser Drive;
- 8) Site rehabilitation works to stabilise current land slip hazards;
- 9) Construction of roads, revetment structures and drainage infrastructure;
- 10) Creation of open space lots 32, 142, 155 and 167 **186**; and
- 11) Creation of lot 2 for Local Shop

Comment:

It is considered that the applicant's reference to 'Lot 186' is a typographical error and should reference 'Lot 185' instead. In any case, as noted in Item 5 comments above, the proposed use of Lot 185 for open space purposes is not considered to meet Council's requirements. Accordingly, the proposed amendment of Condition A1 is not supported.

A2 Staging

The project is to be constructed into ~~fifteen (15)~~ **sixteen (16)** stages, generally as shown on the ~~Proposed Subdivision Plan prepared by B & P Surveys, Drawing No 17900B-H dated 13 December 2013~~ **Zone Landscape Architecture, Drawing No L19029 – 100 Rev C dated 24/10/2019**.

Comment:

Council's comments above clearly show that additional information / redesign of various aspects of the proposal is required. As such, until the applicant has adequately addressed the outstanding matters and Council provided with another opportunity to review the amendments, the proposed modification of Condition A2 is not supported.

A3 Project in Accordance with Plans

Comment:

The applicant has provided an updated list of plans associated with Mod 5. As noted above, given that there is substantial additional information / redesign of various aspects of the proposal required, the proposed modification of Condition A3 is not supported at this point in time.

A4 Project in Accordance with Documents

The project will be undertaken in accordance with the following documents:

- (1) Environmental Assessment Report prepared by PMM Sydney on behalf of Greenview Pty Ltd and MFS Diversified, dated May 2007;
- (2) Preferred Project Report/Response to Submissions prepared by CONICS Pty Ltd;
- (3) Modification Report prepared by Darryl Anderson Consulting Pty Ltd, dated May 2010;

- (4) Letter prepared by Darryl Anderson Consulting Pty Ltd dated 13 September 2010; and
- (5) Revised Statement of Commitments prepared by Darry Anderson Consulting Pty Ltd dated October 2010.
- (6) Amended Modification Report by Darryl Anderson Consulting Pty Ltd, dated March 2013 (MOD 3), letter prepared by Darry Anderson Consulting Pty Ltd dated 13 December 2013 and the response to Item (f) of the Department's Request for Information dated 12 September 2013, prepared by Darryl Anderson Consulting Pty Ltd dated 24 February 2014.
- (7) **Modification Report by Zone Planning Group Pty Ltd, dated 28 October 2019 (MOD 5)**

Comment:

Similarly, there are a number of outstanding matters which require further detail / amendment. Accordingly, the proposed modification to Condition A4 is not supported.

A6 Certification and Staging

1) Staging of the Development

The staging of the development is to occur generally in accordance with the following sequence:

- a) Stage 1A – Completed via DP1163855
 - Boundary adjustment of Lot 2 in DP 1000385 and Lot 9 in DP 1039569;
 - Subdivision of Lot 9 in DP 1039569 into two master lots (master Lot 1 and master Lot 2);
 - Separation of battleaxe handle for future consolidation with Lot 17 Section 11 in DP 28392
 - Refer to B & P Surveys Drawing No 125128-8 dated 23/02/2010 & 161048-A dated 26/02/2010
- b) Stage 1B
 - Boundary adjustment between Lots 10 and 11 in DP 1163855
 - Fraser Drive road widening dedication
 - Consolidation of Lot 100 in DP 1166414 (formerly Champagne Drive)
 - Refer to B & P Surveys Drawing No 195678 dated 4/04/2013
- c) Stage 1 (Lots 2 - 16)

	No of Lots
- Residential lots	12
- Local shop site (Lot 2)	1
- Future integrated housing site (Lot 15)	1
- Open space lot - stormwater detention/water quality (Lot 16)	1
- Total Stage 1 lots	15
- d) Stage 2 (Lots 7 - 32)

- Residential lots	15
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- Open space lot - park and recreation (Lot 32)	1
- Total Stage 2 lots	16
e) Stage 3 (Lots 33 - 43)	
- Residential lots	11
- Total Stage 3 lots	11
f) Stage 4 (Lots 44 - 57)	
- Residential lots	14
- Total Stage 4 lots	14
g) Stage 5 (Lots 58 - 68)	
- Residential lots	11
- Total Stage 5 lots	11
h) Stage 6 (Lots 69 - 78)	
- Residential lots	10
- Total Stage 6 lots	10
i) Stage 7 (Lots 79 - 88)	
- Residential lots	10
- Total Stage 7 lots	10
j) Stage 8 (Lots 94 - 97, 100 - 104)	
- Residential lots	9
- Total Stage 8 lots	9
j) Stage 8A (Lots 236-240)	
- Residential lots	5
- Total Stage 8A lots	5
k) Stage 8B (Lots 230-235, 241-246)	
- Residential lots	12
- Total Stage 8B lots	12
k) Stage 9 (Lots 105 - 120)	
- Residential lots	15
- SEPP 14 wetland conservation (Lot 120)	1
- Total Stage 9 lots	16
l) Stage 9A (Lots 219-220, 228-229, 247-252)	
- Residential lots	10
- Total Stage 9A lots	10
m) Stage 9B (Lots 253-260)	
- Residential lots	8

- Total Stage 9A lots	8
l) Stage 10 (Lots 121-130)	
- Residential lots	10
- Total Stage 10 lots	10
n) Stage 10 (Lots 212-218, 221-227,261)	
- Residential lots	15
- Total Stage 10 lots	15
m) Stage 11 (Lots 131-149)	
- Residential lots	18
- Open space lot - park and recreation (Lot 142)	1
- Total Stage 11 lots	19
o) Stage 11A (Lots 190-197)	
- Residential lots	8
- Total Stage 11A lots	8
p) Stage 11B (Lots 198-206, 209-211)	
- Residential lots	12
- Total Stage 11B lots	12
n) q) Stage 12 (Lots 150 -161)	
- Residential lots	11
- Dedication of Lot 155 as public reserve (Midden site)	1
- Total Stage12 lots	12
e) Stage 13 (Lots 162-167)	
- Residential lots	5
- Open space lot - stormwater detention/open space (Lot 167)	1
- Total Stage 13 lots	6
r) Stage 13 (Lots 163-171, 186-189)	
- Residential lots	13
- SEPP 14 wetland conservation (Lot 120)	1
- Total Stage 13 lots	14
p) s) Stage 14 (Lots 89 -91)	
- Residential lots	3
- Total Stage 14 lots	3
q) t) Stage 15 (Lots 98 -99)	
- Residential lots	2
- Total Stage 15 lots	2
u) Stage 16 (Lots 172-185, 207-208)	

- Residential lots 15
- Open space lot - stormwater detention/open space (Lot 185) 1
- Total Stage 16 lots 16

Total lots ~~164~~ 204

Comment:

Until such time that the outstanding matters have been satisfactorily addressed and the final number of allotments per stage are known, the proposed amendment of Condition A6 is not supported.

CONDITIONS TO BE SATISFIED FOR STAGES 1A – ~~15~~ 16

PART B—PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE FOR STAGES 1A–~~15~~ 16

Comment:

No objections are raised in regards to the proposed amendments to the above headings, in terms of staging.

B2 Noise Attenuation

Prior to the issue of a Construction Certificate for any stage that creates housing lots that abut Fraser Drive, details of a 2m high noise barrier prepared by a suitably qualified person shall be submitted to and approved by Council. Details of the noise barrier shall be generally in accordance with:

- 1) The recommendations contained in the Environmental Noise Impact Report prepared by CRG Pty Ltd dated 17 February 2010 as amended by the Acoustic Report prepared by CRG Pty Ltd dated 19 November 2012;
- 2) Sketch No.2 contained in Appendix A of the Environmental Noise Impact Report prepared by CRG Pty Ltd dated 17 February 2010 as amended by the Acoustic Report prepared by CRG Pty Ltd dated 19 November 2012; and
- 3) ~~Survey Drawing 17900-B Revision H prepared by B&P Surveys dated 13 December 2013.~~
- 3) Subdivision Plan Drawing No L19029 – 100 Rev C prepared by Zone Landscape Architecture dated 24/10/2019

Comment:

As noted in Item 7, additional information is required with regard to noise impact. As such, until the applicant has adequately addressed the outstanding matters and a satisfactory subdivision layout is known, the proposed modification of Condition B2 is not supported.

B6 Cut and Fill levels

- 1) Cut and fill levels for each stage Stages 1-7, 12 & 14 within the project are to be in accordance with Cardno Drawing No. 7214/29/01-DA09 Cut and Fill Depth and Contours Plan dated 8 December 2006. Design plans are to be approved by Council prior to issue of the Construction Certificate for each stage of the project.
- 2) Cut and fill levels for Stages 8-11, 13, 15 & 16 within the project are to be in accordance with Michael Bale & Associates Drawing No. C205-G17222-DA Bulk Earthworks Cut/Fill Layout Plan Rev 02 dated 16 October 2019. Design plans are to be approved by Council prior to issue of the Construction Certificate for each stage of the project.
- 2) 3) The source of any fill material is to be identified and reported by a practicing geotechnical engineer certifying that the material is suitable for the intended purpose prior to the issue of the Construction Certificate for each stage of the subdivision. The report is to include any conditions on the use of the material and a report from a registered NATA laboratory on the soil properties of the fill material.

Comment:

Council's comments above clearly show that additional information / redesign of various aspects of the proposal is required. As such, until the applicant has adequately addressed the outstanding matters and Council provided with another opportunity to review the amendments, the proposed modification of Condition B6 is not supported.

B11 Pre-Construction Dilapidation Reports

The Proponent is to engage a qualified structural engineer to prepare a Pre-Construction Dilapidation Report detailing the current structural condition of all existing and adjoining buildings, infrastructure and roads. The report shall be submitted to the satisfaction of the Certifying Authority prior to the issue of the Construction Certificate for Stages 8-15 of the project. A copy of the report is to be forwarded to Council.

Comment:

Whilst the applicant has not proposed any amendment to Condition B11, it is noted that Stage 16 is not included in this condition. Accordingly, it is recommended that Condition B11 be amended such that Stage 16 be included for pre-dilapidation reports.

B21 Roads

- 1) Kerb and gutter, stormwater drainage, full road width pavement including traffic facilities (roundabouts, median islands etc.) and paved footpaths shall be constructed along the full length of the new roads.

- 2) All roads shall be designed in accordance with the relevant requirements of Council. Final road design plans shall be prepared by a qualified practising Civil Engineer and submitted to the Certifying Authority prior to the issue of a Construction Certificate for below ground works for each stage of the project.
- 3) Construction of proposed Road No.3 is to be a minimum 7.5m wide pavement within a 14.5m wide road reserve with upright kerb and guttering. Traffic calming devices are to be incorporated into the design. Final design plans shall be prepared by a qualified practising Civil Engineer and submitted to the Certifying Authority prior to the issue of a Construction Certificate for below ground works for Stages 8-~~13~~ **11** of the project.

Comment:

The proposed amendment of Condition B21 is not supported. It is recommended that Condition B21 be amended such that all stages that incorporate Road 3 be referenced (i.e. Stage 8 – 11, 13 and stage 15).

B24 Footpath / Stairways

- 1) A 1.2m wide footpath / stairway shall be constructed between proposed lots ~~103/104-245 & 243 / 244~~ and 70/71 within the proposed 5m drainage reserve. The footpath and drainage reserve is to demonstrate that the Q100 flow is completely contained within the drainage easement. The design of the footpath / stairway shall be submitted to the Certifying Authority for approval prior to the issue of a Construction Certificate for Stages 6 & ~~8~~ **8B**.
- 2) A 1.2m wide footpath / stairway shall be constructed between proposed Lot 161 and the drainage reserve / open space area (**Lot 185**) adjacent to Fraser Drive, providing a public pedestrian connection between Merlot Court and Fraser Drive. The design of the footpath / stairway shall be submitted to the Certifying Authority for approval prior to the issue of a Construction Certificate for Stages ~~12 and 13~~ **16**.

Comment:

L19029 -100 Rev C prepared by Zone Landscape Architecture dated 24/10/2019 does not indicate a footpath between Lot 161 and 185. A footpath is shown through Lot 185 near proposed Lot 184. A footpath should be located adjacent to Lot 161 to provide direct access to the proposed bus stop. Previous approval indicated two pedestrian linkage paths at the northern and southern ends of the drainage reserve / open space area.

Roadworks Alignment Layout Plan by Michal Bale & Associates drawing number C300 rev 2 indicates a pedestrian footpath to connect from Road 3 to existing Champagne Drive. Previously a footpath was connected to Champagne Drive via a park and open space. It is recommended that this footpath / stairway be added to Condition B24 as per below:

- 3) A 1.2m wide footpath / stairway shall be constructed between proposed lots 188/189 and 190,192, 193 within a minimum 5m drainage reserve. The footpath and drainage reserve is to demonstrate that the Q100 flow is completely contained within the drainage easement. The design of the footpath / stairway shall be submitted to the Certifying Authority for approval prior to the issue of a Construction Certificate for Stage 13.

An additional pedestrian path is proposed to connect from Road 5 to Road 4. It is recommended that this footpath / stairway be added to Condition B24 as well, as per below:

- 4) A 1.2m wide footpath / stairway shall be constructed between proposed lots 181, 257, 258 and 259, 260, 261 180 within a minimum 5m drainage reserve. The footpath and drainage reserve is to demonstrate that the Q100 flow is completely contained within the drainage easement. The design of the footpath / stairway shall be submitted to the Certifying Authority for approval prior to the issue of a Construction Certificate for Stages 9B and 16.

B26 Bus Stops

In order to ensure that pedestrians have adequate access to public transport, two bus stops are to be constructed on Fraser Drive at the locations indicated on Drawing No ~~7214/29/01-DA027 dated 18 August 2008~~ **L19029 – 100 Rev C prepared by Zone Landscape Architecture dated 24/10/2019**. The type, location and operation of the structures are to be submitted to the satisfaction of Council prior to the issue of the Construction Certificate for above ground works for Stage 1 (northern bus stop) and Stage ~~9~~ **16** (southern bus stop) of the project.

Comment:

It is recommended that the bus stops be installed as part of a combined stage approach rather than relying on one stage to develop a major infrastructure. Accordingly, the proposed amendment to Condition B26 is not supported.

B30 Deleted

B30 Park Adjacent to Seaview Street

~~The Seaview Street Park being proposed Lot 142 shown on drawing titled 'Proposed Subdivision Fraser Drive' No. 179008 Rev H, dated 13 December 2013 shall be dedicated as a public reserve as part of Stage 11. The landscape plan for this park must reflect the drawing titled 'Landscape Concept Plan' no. 248 prepared by Boyds Bay Environmental Services, dated 10 September 2010."~~

Comment:

As noted in Item 5 above, the proposed use of Lot 185 for open space purposes is not considered to meet Council's requirements. Until such time that adequate

open space can be found on the subject site, the proposed removal of Lot 142 and the proposed deletion of Condition B30 is not supported.

B34 Asset Protection Zones

- 1) Asset Protection Zones (APZs) in Stages 1, 5, 6, 7, 8, 9, ~~10, 11~~, 12, 13, 14 and, 15 and 16 are to be provided in accordance with the Boskoe Report entitled Bushfire Assessment for a Proposed Residential Subdivision Fraser Drive, South Tweed, dated December 2007. Details of the APZs are to be provided to the satisfaction of the Certifying Authority prior to the release of the Construction Certificate for Stages 1, 5, 6, 7, 8, 9, ~~10, 11~~, 12, 13, 14 and, 15 and 16.
- 2) Asset Protection Zones in Stages 7, 9, 12 and ~~13~~ 16 may include Fraser Drive itself for all Stages fronting that road. Details of the APZs are to be provided to the satisfaction of the Certifying Authority prior to the release of the Construction Certificate for ~~Stages 9-13~~ that stage.

Comment:

The Mod 5 documentation does not incorporate a revised Bushfire Assessment. The Modification Report makes reference to the original Bushfire report, noting that “...the bushfire mapping identified in this report and that currently adopted remain the same”.

It is not considered appropriate that Stage 11 be removed, noting that the applicant has stated that “...the amended subdivision layout has not resulted in any additional broad areas” and that “...the APZ identified for these areas will continue to be applied”.

It is also noted that Council's bushfire prone land mapping identifies the area to the south (ie Stage 11) as bushfire prone.

Without a revised Bushfire Report to support the removal of Stage 11 from APZ requirements, the proposed amendment of Condition B34 is not supported.

B35 Bushfire Management Plan

A Bushfire Management Plan shall be prepared to address the potential fire management issues at the interface between the stage 9 13 wetland buffer area and private land located to the west and south. The plan is to make recommendations for management actions required to allow Council to maintain this interface. The plan will be prepared in association with, and be consistent with, the regeneration requirements of the Vegetation Management Plan to be prepared for this area.

Comment:

The existing Stage 9 and proposed Stage 13 are in different locations. The proposed amendment in terms of staging is not supported without further clarification / justification as to why the amendment of Condition B35 is appropriate.

PART C — PRIOR TO COMMENCEMENT OF WORKS FOR STAGES 1-~~15~~ 16

PART D—DURING CONSTRUCTION OF STAGES 1-~~15~~ 16

Comment:

No objections are raised in regards to the proposed amendments to the above headings, in terms of staging.

E3 Landslip Remediation

Relevant remediation works shall be completed prior to the issue of a subdivision certificate for affected stages (based on the Homestead Estate Construction Certificate Application B - Early Works Engineering Drawings prepared by VKL Consulting and approved by Tweed Shire Council under CC12/0342, dated November 2012 as follows:

- i. Slip remediation area 1 - prior to Stages 10 – ~~13~~ 12 & 16.
- ii. Slip remediation area 2 - prior to Stages 6, 8 & 9.
- iii. Slip remediation area 3 - prior to Stages 5, 6 & 8.
- iv. Slip remediation area 4 - prior to Stages 5 & 14.
- v. Slip remediation area 5 - prior to Stages 1 & 14.

Comment:

No objections are raised in regards to the proposed amendment of Condition E3, in terms of staging.

E7A Acoustic Noise Wall

Prior to the issue of a Subdivision Certificate for Stages 2, 3, 7, ~~9 and 13~~ 9B, 12 & 16 of the Project, a 2m high noise barrier shall be constructed generally in accordance with:

- 1) The recommendations contained in the Environmental Noise Impact Report prepared by CRG Pty Ltd dated 17 February 2010 as amended by the Acoustic Report prepared by CRG Pty Ltd dated 19 November 2012;
- 2) Sketch No.2 contained in Appendix A of the Environmental Noise Impact Report prepared by CRG Pty Ltd dated 17 February 2010 as amended by the Acoustic Report prepared by CRG Pty Ltd dated 19 November 2012; and
- ~~3) Survey Drawing 17900-B Revision H prepared by B&P Surveys dated 13 December 2013.~~
- 3) Subdivision Plan Drawing No L19029 – 100 Rev C prepared by Zone Landscape Architecture dated 24/10/2019.

Or as varied by Council at issue of Construction Certificate

Comment:

As noted in Item 7, additional information is required with regard to noise impact. As such, until the applicant has adequately addressed the outstanding matters and a satisfactory subdivision layout is known, the proposed modification of Condition E7A is not supported.

E8 Traffic Calming Devices

In order to ensure that vehicles exit/enter the site in a safe manner, the following works must be installed prior to the release of a subdivision certificate for Stages ~~8, 9 and 10~~ **8A and 15**:

- 1) A left in / left out type treatment with traffic islands at the intersection a Hillcrest Avenue and proposed Road No. 3 to a prevent a right turn.
- 2) ~~A stop sign and traffic calming devices on Ocean Avenue at the intersection of Ocean Avenue and Seaview Avenue.~~

In order to ensure that vehicles exit/enter the site in a safe manner, the following works must be installed prior to the release of a subdivision certificate for Stage 10:

- 1) A stop sign and traffic calming devices on Ocean Avenue at the intersection of Ocean Avenue and Seaview Avenue.

Comment:

As noted in Item 3, additional information is required with regard to traffic calming devices. As such, until the applicant has adequately addressed the outstanding matters, the proposed modification of Condition E8 is not supported.

E10 Bus Stops

In order to ensure that pedestrians have adequate access to public transport two bus stops are to be constructed on Fraser Drive at the locations indicated on Drawing No. ~~20934-5 Rev. 0 dated 1 October 2008~~ **L19029 -100 Rev C prepared by Zone Landscape Architecture dated 24/10/2019** prior to the issue of the Subdivision Certificate for Stage 1 (northern bus stop) and Stages ~~9, 10 and 13~~ **16** (southern bus stop) of the project.

Comment:

As noted in Item 3, additional information is required with regard to the bus stop. It is recommended that the bus stops be installed as part of a combined stage approach rather than relying on one stage to develop a major infrastructure. Accordingly, the proposed amendment to Condition E10 is not supported.

E13 Registration of Easements / Restrictions to use / Right of carriageway

- 1) The creation of easements for services, rights of carriageway and restrictions as to user are applicable under Section 88B of the Conveyancing Act 1919, including (but not limited to) the following:
 - a) Easements for sewer, water supply and drainage over all public services/infrastructure on private property.
 - b) Drainage Easements are to be placed over all subsurface drains and interallotment drainage, benefiting and burdening the property owners. Maintenance of the subsurface drains is to be included in the 888 instrument.
 - c) Right of carriageways are to benefit and burden the property owners. Maintenance of the right of carriageways is to be shared between the property owners. Provision is also to be included in the 888 to provide public access to the proposed parks, nominating Council as the benefiting authority.
 - d) Use of site regrading on sloping residential subdivision sites to manufacture flat earth platforms is not permitted. Future dwellings on these sites are to use building techniques suitable to sloping sites.
 - e) Restrictions on use burdening prospective owners of lots affected by the 20-25 Australian Noise Exposure Forecast contour for the Gold Coast Airport.
- 2) Pursuant to Section 88BA of the Conveyancing Act (as amended) the Instrument creating the right of carriageway/easement to drain water shall make provision for maintenance of the right of carriageway/easement by the owners from time to time of the land benefited and burdened and are to share costs equally or proportionally on an equitable basis.
- 3) Any Section 88B Instrument creating restrictions as to user, rights of carriageway or easements which benefit Council shall contain a provision enabling such restrictions, easements or rights of way to be revoked, varied or modified only with the consent of Council.
- 4) Privately owned infrastructure on community land may be subject to the creation of statutory restrictions, easements etc in accordance with the Community Land Development Act 1989, Strata Schemes Management Act 1996, Conveyancing Act 1919, or other applicable legislation.
- 5) In addition to the above certification, the following is to be included in the Section 88B Instrument to accompany the final plan of subdivision.
 - a) A restriction to user for each lot that has the benefit of a retaining wall that prevents any cut or fill greater than 0.3m in vertical height within a zone adjacent to the wall that is equal to the height of the wall.

- b) Each lot burdened and or benefited by a Type 1 wall as defined in AS4678-2002 Earth Retaining Structures, shall contain a restriction as to user advising the landowner of the need to maintain the wall in accordance with that standard.
- c) A restriction as to user burdening all lots in Stages 8—15 and Lot 88 in Stage 7 to prevent the landowner from further subdividing these **this** lots.
- d) A restriction as to user on all lots within the subdivision that restricts the use of reflective material for any future dwellings on the site such that those materials used do not cause any visual or reflectivity issues for pilots of aircrafts using the Coolangatta Airport.
- e) A restriction as to user for Lots 89-91 that restricts future dwellings to the building locational envelope identified on Drawing No. ~~17900B Rev H dated 13 December 2013~~ **L19029 -100 Rev C prepared by Zone Landscape Architecture dated 24/10/2019.**
- f) A restriction as to user burdening all lots that prevents use of site regrading on sloping (natural slope >10%) residential subdivision sites to manufacture flat earth platforms suitable for construction of concrete slab-on-ground dwellings. Dwellings on these sites are to use building techniques suitable to sloping sites such as piled or piered foundations.
- g) A restriction as to user burdening Lots 22-25, 33-37, 83, 88, **150-154, 156-161, 182-184 & 256-258** ~~109, 110, 111, 150-154, 156-161 & 166~~ requiring that all dwellings (if constructed) shall achieve the 'maximum' internal noise levels prescribed in AS/NZS 2107: 1987 "Acoustics - Recommended Design Sound Level and Reverberation Times for Building Interiors". To allow future occupants to close windows and doors and still have a supply of fresh air, provision of air conditioning or sealed mechanical ventilation to noise affected habitable rooms is required.
- h) A Restriction as to User allowing for the creation and maintenance of a 20 metre wide Bushfire Asset Protection Zone (APZ) on Lot 89, the water quality open space area in Stage 1 and the integrated housing allotment. The width of the restriction within the boundary of Lot 89 and the integrated housing allotment must ensure that a 20m APZ is provided between the outer edge of the 40m wide ecological buffer and any dwelling. The Restriction as to User shall advise the landowner of the need to maintain this area as an Asset Protection Zone.
- i) The integrated housing allotment shall contain a restriction as to user advising the landowner(s) of the need to maintain a 20 metre Asset Protection Zone from the outer edge of the ecological buffer, as defined by the approved Vegetation Management Plan. No dwellings are to be constructed in this area. This area may contain roads, communal open space, backyards and pools. The Restriction as to User shall advise the landowner(s) of the need to maintain this area as an Asset Protection Zone.

j) ~~A Restriction as to user for Lots 94 – 97, 114 – 119, 121 – 125, 130 – 137 and 149 that restricts the lots burdened to the following access arrangement:-~~

- ~~• Unless otherwise approved by Tweed Shire Council under Section 138 of the Roads Act 1993, there must be no access to a Lot burdened other than from the roadway (in case of Lots 119, 121 – 125, 130 – 137 and 149) or from the Right of Carriageway (in the case of Lots 114 – 118, and 94 – 97) that is adjacent to that boundary of the Lot Burdened that has the higher level.~~
- ~~• There must be no access to a Lot Burdened from the roadway adjacent to that boundary of the Lot Burdened that has the lower level.~~
- ~~• This restriction shall not apply if Tweed Shire Council has authorised access to a Lot Burdened from the roadway that is adjacent to that boundary of the Lot Burdened that has the lower level.~~
- ~~• Tweed Shire Council will be the authority benefited.~~

6) The restriction is to be clearly marked on the plan of subdivision and Council is to be nominated as the sole party to vary, modify and/or extinguish the restriction.

Comment:

- The proposed amendment of item 5(c) restriction is not supported. Given the topography of the site it is recommended that the item 5(c) restriction be amended such that reference is made to restricting the further subdivide for all Lots (Stages 8 -16), in terms of Torrens Title subdivision. This would allow for any potential strata subdivision associated with a dual occupancy proposal on allotments greater than 900m², subject to merit assessment. Topography constraints of the site would likely require dual occupancy proposals to consider a shared driveway access;
- In principle, no objection is raised with regards to the proposed amendment of the item 5(e) restriction, subject to all outstanding matters being suitably addressed and final design being approved, which would result in a revised revision number of the plan;
- In principle, no objection is raised with regard to the proposed amendments of lot numbers in item 5(g) restriction. However, it is considered appropriate that Lot 181 also be included, given its proximity to Fraser Drive. It should be noted that an additional restriction may need to be applied to allotments further west of Fraser Drive, depending on the recommendations of the revised Acoustic Report referred to in Item 7 above;
- No objection is raised with regard to the deletion of the item 5(j) restriction, noting that there are no longer any allotments with dual frontages; and
- It is recommended that an additional restriction be imposed, with regard to a right of carriageway being provided for the shared battle-axe Lots 242, 244 and 250, 252.

E33 Section 94 Monetary Contributions***E34 Section 64 Monetary Contributions***Comment:

Once the applicant has satisfactorily addressed the outstanding matters raised in Items 1 – 6 above and the final lot numbers are determined for each stage, Council will be in a position to provide updated / amended figures for the developer contributions associated with conditions E33 and E34.

It should also be noted that reference to “Section 94” in Condition 33 should be updated to reflect “Section 7.11” contributions.

Statement of CommitmentsWater Quality

- Subject to all outstanding stormwater matters being satisfactorily addressed (which may result in a revised plan number), no objection is raised to the proposed separation of actions for Stages 8-11, 13, 15-16;
- However, it is considered appropriate that the two drainage and treatment device dot points (applicable to the initial staging) be applied to the proposed new staging; and
- Whilst the statement regarding the Stage 2 Integrated Housing Lot has no relevance to Mod 5, it is noted that this action has been deleted from a later section of the document.

Public Areas

- No objection is raised with regard to the proposed amendment to the responsibility from Principle Certifier to Principle Certifying Authority.

Access

- No objection is raised with regard to the proposed amendment to the timing (PSC) for the access actions.

Bushfire Management

- No objection is raised with regard to the proposed amendments to the bushfire management actions and the timing (PSC), with the exception of the two actions being proposed to be deleted. Further explanation as to why these two actions are proposed for deletion is requested.

Landscaping

- Subject to all outstanding landscaping matters being satisfactorily addressed, no objection is raised to the proposed separation of actions for Stages 8-11, 13, 15-16.

Flooding

- No objection is raised with regard to the proposed amendments to the flooding evacuation pathway action and the timing (PSC).

Stormwater

- No objection is raised to the proposed deletion of the statement regarding the Stage 2 Integrated Housing Lot, noting that this action has been moved forward to the Water Quality section of the document.

Acoustic Management

- In principle, no objection is raised with regard to the proposed amendments of lot numbers. However, it is considered appropriate that Lot 181 also be included, given its proximity to Fraser Drive.

Conservation & Vegetation Management

- No objection is raised with regard to the proposed amendment to the timing (PSC) for the management actions.

Residential Amenity

- No objection is raised with regard to the proposed amendment to the timing (PCC) for the CMP action.

Landslip & Hazards

- No objection is raised with regard to the proposed amendment to the timing (During Construction) for the landslip / hazard actions.

Cultural Heritage

- No objection is raised with regard to the proposed amendment to the timing (PCW and During Construction) for the Cultural Heritage actions.

Water Quality & Sediment Control

- No objection is raised with regard to the proposed amendment to the timing (PCW / During Construction) for the management actions; and
- In principle, no objection is raised with regard to the proposed amendment of the action for contaminated surface runoff, subject to all outstanding stormwater quality matters being suitably addressed and final design being approved, which would result in a revised revision number of the plan.

Dust Control

- No objection is raised with regard to the proposed amendment to the timing (During Construction) for the on-site water cart action.

Infrastructure & Public Transport

- No objection is raised with regard to the proposed amendment to the responsibility from Principle Certifier to Principle Certifying Authority.

Future Dwellings

- No objection is raised with regard to the proposed amendments to the actions / timing, noting that the subdivision plan is likely to require updating in order to satisfactorily address Council's outstanding matters noted above.

9. Summary

As demonstrated by the detailed comments above, there are a substantial number of outstanding matters relating to the proposed Mod 5. Accordingly, please be advised that Council formally objects to the proposed development in its current format.

Council officers will be happy to liaise further with the Department / applicant to work through the issues raised for this particularly difficult site and provide further feedback should a revised proposal with supporting documentation be submitted.

For further information regarding this matter please contact Colleen Forbes on (02) 6670 2596.

Yours faithfully

Lindsay McGavin
Manager Development Assessment and Compliance