

Appendix R

Department of Planning Correspondence and Meeting Minutes

From: Sally Munk [Sally.Munk@planning.nsw.gov.au]
Sent: Friday, 18 April 2008 4:20 PM
To: Pradesh Ramiah
Subject: Fraser Drive - Preferred Project Report - MP06_0243

Attachments: MP06_0243 - Council Comments on PPR.pdf; MP06_0243 - DoP Comments on PPR.pdf;
MP06_0243 Summary of Agency Comments on PPR.pdf
Pradesh

Comments from Council and the Department are attached for your consideration prior to our meeting on Wednesday 23 April 2008.

As you will see, there are still a range of outstanding issues and requests for additional information from both the Department and Council. I would suggest that you arrange to meet with the relevant officers at Council as soon as possible to discuss their issues.

I have not yet received a response from DWE regarding groundwater and ASS (now DECC) or the Traffic Advisory Committee re traffic issues. The relevant officers from DECC and DWE are back in the office next week. The Traffic Advisory Committee met yesterday, so Rowena will forward me the minutes early next week as well. All other agencies have responded.

I have attached a summary of the issues raised by the agencies and whether or not their concerns have been addressed.

The PPR will not be placed on the Department's website until the PPR has been amended and the additional information has been provided for assessment.

Sally

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lease Quote
Council Ref: DA07/0589

45515

Your Ref No:

For Enquiries
Please Contact: Rowena Michel

Telephone Direct (02) 6670 2468

DAFurtherl

17 April 2008

NSW Department of Planning
Coastal Assessments
Att: Sally Laing
GPO Box 39
Sydney NSW 2001

Dear Sir/Madam,

Preferred Project Application - MP06-0243 (DA07/0589) for 152 freehold residential subdivision (providing for attached and detached dwellings) and future development lot at Lot 9 DP 1039569, Fraser Drive Tweed Heads South

I refer to the Preferred Project Application received in response to the abovementioned subdivision at Fraser Drive, Tweed Heads South.

Please be advised that Council Officers have reviewed the documentation and consider that the Preferred Project Proposal does not adequately address issues raised by Council. Particular issues of concern are summarised below and relevant Officers comments attached.

Geotechnical Issues

- No geotechnical investigations or recommendations have been carried out on the flat, low land which contains compressible clay material as requested.

Roads, Public Transport and Connections

- Issues associated with the right of carriageways have not been adequately addressed, particularly in relation to on-street car parking, access to public roads or parks and manoeuvrability for garbage trucks.
- Sight distance issues associated with the intersection of Ocean Avenue and Road no. 3 have not been adequately addressed.

Stormwater Issues

- Detail required to address stormwater issues have not been provided and the response is inadequate.

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Flooding

- Flooding issues have not been adequately addressed, particularly in relation to provision of failsafe surcharge flowpath from Fraser Drive to the SEPP 14 wetland.

Open Space

- Provision of functional open space is insufficient. Further concerns are raised in relation to landscaped areas. Discussions have not occurred with Council staff regarding the design and function of the open spaces.

Bushfire

- The Preferred Project does not justify why Asset Protection Zones should be in public land other than to say for environmental reasons. This is inadequate. Further justification is required.
- Concerns in relation to bushfire and general management of the interface area between the steep slopes proposed to be dedicated to Council and dwellings on Hillcrest Ave and Ridgeway Crescent have not been addressed.
- Regeneration and weed control management plans have not been provided.

Environmental Health Considerations

- The applicant has not confirmed that the reported soil test lab results (soil contamination) have been adjusted for the use of the composite sampling method. This is required under the provision of SEPP 55 and the response in relation to this issue is inadequate.

SEPP 14 and Buffer Issues

- The Preferred Project has altered little with regard to ecological aspects and many of the previous key issues have been poorly addressed and remain significant concerns.

Planning and Urban Design

- Insufficient justification has been provided in support of the reduced lot sizes. Justification for dwelling lots less than 450m² and dual occupancy sites less than 900m² is inadequate. The applicant argues that the small lots will provide for affordable housing and are acceptable given on-site environmental constraints.

Whilst a variety of lot sizes is proposed, it is not considered that small lots necessarily equate to affordable housing. Further, it is not considered that the

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occurrence of on-site constraints provide sufficient justification for the small lots, especially when the plan proposes lots over constrained land.

It is noted that the applicant indicates that Council Officers have not raised concerns with lot sizes in meetings held between October and November 2007. These meetings were organised to discuss engineering concerns. The applicant was aware of Council's concerns with lot sizes as they were included in the Department's 'Summary of Submissions'. The applicant has not requested further discussions with regard to lot sizes.

- Insufficient response is provided in relation to the corner shop referenced in Section B3 of Council's DCP - Banora Point West. The 10 metre wide buffer for future road expansion and slope of land does not limit the ability for identification of a possible future shop site.
- Dwelling design criteria were not submitted (nor were dwelling concepts) for future dwellings proposed on small lots, demonstrating quality streetscape and variation.
- The Preferred Project Proposal is inadequate as it does not appear to provide owners consent nor include Lot 2 on DP1000385 on the application form.
- The Preferred Project does not provide an adequate response in relation to the request for cross sections through Fraser Drive to depict level differences between the site and the road. This detail should be available at a conceptual level at this stage.

Please refer to full comments on each point above (attached).

In summary, in considering the following, the proposal is an over-development of the site and does not represent a preferred outcome:

- The above-mentioned deficiencies,
- Non-compliant lot sizes,
- Site constraints; and
- Design of roads / right of carriageway only achieves minimum compliance with Section A5 of Council's DCP (Subdivision Manual),

Council is generally unsupportive of the proposal in its current form.

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If you have any queries in respect to this matter please contact Rowena Michel of Council's Development Assessment Unit who will be processing the application.

Yours faithfully

Lindsay McGavin
Acting Manager Development Assessment

Attachment – Council Officers Comments

Open Space / Parks (Graham Burton)

The developer has not satisfactorily addressed the key issues raised by Council in our previous assessment (July 2007), and the latest landscape plans do not appear to have changed. Accordingly, the same concerns are raised again. There has been no discussion with Council staff regarding the design and function of the open space beyond the formal submission, and I would welcome this discussion.

General comments

Most comments below relate to broad issues such as size and slope of the land. In most landscaped areas, two additional specific concerns are noted:

- Distance to residences and roads: Park shelters and playground/activity areas are commonly shown well within the 20 meter buffer to private residences, and in one case adjacent to a road.
- Trees consistently overhang private land. This is not desirable.

Open Space Contributions

The developer's response indicates the park at the end of Road 4 (adjacent to Fraser Drive) is not to be considered as part of their open space contribution. My previous advice that their contributions were sufficient included this park's 3,755m². If this is not to be considered, the actual amount of functional, compliant open space proposed (meeting Council's criteria) is insufficient – see table below.

Additionally, if the park at the end of Road 4 is not considered, the development will not comply with subdivision guidelines specifying the distance local parks are to be from 95% of residents.

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Fraser Drive – MP06_0243**

Location	Area	Meets criteria
Park at the end of Road 4	3,755m ²	No
Park adjacent to Road 3 & private road	3,540m ²	No
Park adjacent to Road 2	2,500m ²	Yes
Wide roadside verge – Road 2	385m ²	No
Water quality/open space	17,120m ²	No
SEPP 14 Wetland & Buffer	?	No

Park at the end of Road 4 (adjacent to Fraser Drive)

The developer's response indicates this park is not to be considered as part of their open space contribution. This raises the issue of the amount and location of functional open space contributed, as previously this park was included in our considerations. The developer states this park need not meet our guidelines as it is primarily a drainage area. However, the site is presented as a park in the landscape plan, and community expectations would be to use the area as a park. The basic guidelines in Councils Subdivision Manual are intended to ensure functionality of parkland and should be met.

Slope: Slopes significantly exceed the requirements of Councils Subdivision Manual. Table A5-8.2.1 specifies 80% of the park to have slopes less than 8%.

Access: The park does not meet the requirements for public road frontage (50%). The private road extending from the end of Road no. 4 does not provide this. Frontage to Fraser Drive does not provide this as it does not provide access from within the subdivision. There is also an apparent lack of parking opportunities adjacent to the park.

Inconsistent drawings: Landscape Plans (Drawing No. 71887-D-CP-01-02 and 04-03) depicts the roundabout in road 4, and commencement of private road in a different location to other layouts, particularly the plan titled 'Proposed layout, Fraser Drive, Tweed Heads' drawing name 20934-PRO dated 8 March 2003. Clarification and corrected drawings are required.

Park adjacent to Road 3 and private road

The developer's response acknowledges the area doesn't meet open space guidelines. It also suggests maintenance costs can be addressed in a levy. I'm not aware of any potential for a levy to permanently cover maintenance of this area. The slope at this site means the minimum slope normally required for a park cannot be achieved. The area presents significant management problems, particularly maintenance of sloping land and interaction with residents west of the area. This site cannot be considered part of the developer's formal open space contribution. The area can only be accepted into Council ownership if the developer demonstrates how these issues, particularly ongoing maintenance, can be dealt with.

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Shape: Does not meet park configuration requirements (length to width ratio to be no more than 4:1)

Slope: Significantly exceeds the minimum slope requirements for a local park. Functional recreation value is minimal other than informal walking or as a lookout. The steep slope also implies significant maintenance requirements.

Access: The bulk of this park fronts private houses or a private road, while general access is restricted to one point. The bulk of the public street frontage is no more than a widened roadside verge.

Statement of landscape intent: Reference is made to plantings that will not impede views of houses behind. No such commitment can be made as Council does not prune or manage trees to provide views. Also, as this seems a very steep slope, a mix of trees, shrubs and understorey plants would be required to ensure slope stability and minimise maintenance requirements.

Park adjacent to Road 2

The general dimensions and slope of the park are acceptable, although note the park's size is the absolute minimum acceptable.

Entry Statements:

The landscape plans indicate Norfolk Pines apparently adjacent to private residences. Advice is required about actual distances to private land.

SEPP 14 wetland and buffer:

I have not commented on the open space implications of the wetland itself as this will come from Sandy Pimm. Two points regarding the buffer that must be addressed are:

- Significant concerns were previously raised about bushfire and general management of the interface between the steeply sloping land proposed to be handed to Council, and houses along Hillcrest Av and Ridgeway Crescent. This has not been addressed.
- The area appears heavily infested with weeds. Regeneration and weed control management plans must be an essential part of any approval.

Bushfire management

See above comments on the interface between the SEPP 14 buffer and residences along Hillcrest and Ridgeway Crescent.

The developer's submission states they believe part of the APZ must be on public land for environmental reasons. These reasons need to be more clearly demonstrated.

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I would be pleased to discuss any of these issues further with the developer.

Subdivision Engineer (Angie Cousens)

1) Cut & Fill / Geotechnical Assessment

The geotechnical assessment prepared by Morrison Geotechnic, dated 31 October 2007 for the proposed 157 lot residential subdivision site, gives the following overview;

“This layout developed by PMM follows advice by Coffey and Shaw Urquhart and in the view of Morrison Geotechic is satisfactory in the provision of long term stable allotments. Slopes generally less than 25% have an operating factor of safety greater than 2.0 for the majority of engineered slopes (eg Cardno Sections A-A & F-F) but still satisfactory at FOS = 1.8 for the steeper slopes in the northern part.”

Recommendations are provided within the geotechnical report for remediation works to the site to support the above overview.

The following further information request has not been addressed in the geotechnical assessment;

No geotechnical investigations or recommendations have been carried out on the flat, low land which contains compressible clay material. The further information request specified that the geotechnical assessment address the expected settlement of compressible clays on the site and provide recommendations.

2) Roads, Public Transport and Connections

a) *Right of carriageways*

It is noted that 5 right of carriageways remain on the layout plan. A number of issues associated with the proposed right of carriageways have not been addressed (which are usually accounted for within an urban subdivision when providing a local access street). These issues are;

- Two of the proposed parks are located on two of the proposed right of carriageways, with no on street car parking provided. A local access road generally allows on street car parking for visitors, residents using the park etc. The right of carriageways are a private road, therefore not allowing the general public to utilise the road or park.

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- The plan of subdivision is to extend lot boundaries to facilitate a right of carriageway traversing through the lots.
- The proposed right of carriageways or proposed garbage collection points located at the start of the right of way does not address the manoeuvrability for a garbage truck.

b) Sight Distance

The ameliorative measures to be under taken at the intersection of Ocean Avenue and Road No. 3 to achieve adequate sight distance has not been addressed.

c) Parks

The parks have not been amended and do not comply with Council's subdivision manual as advised in Council's previous further information request. (Council's open space officer Grahame Burton to provide further comment on the parks)

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Stormwater and Flooding Engineer (Danny Rose)

In my previous memo, dated 12/7/07, engineering issues relating to stormwater management, cut and fill earthworks and flooding were discussed. The applicant was requested to submit additional information in order to address these issues. This information request was contained in a letter to the Department of Planning, dated 27/7/07.

The applicant's consultants met with Council officers on 17/10/07 to discuss these issues. Minutes were subsequently issued by the applicant's planning consultant (via email 3/11/07).

The applicant has now provided a Preferred Project Report to the Department of Planning, which has been forwarded to Council for comment. This report attempts to address all matters raised in agency and public submissions for the project, including those from Council.

These issues are tabulated below:

Issue (numbering per RFI 27/7/07)	Applicant's Response (per PPR Section 3.0)	TSC Response
CUT AND FILL		
1. Amend Cardno Figure No.DA04 "Proposed Finished Surface Contours Plan" (Drawing No. 7214/29/01-DA04), with the removal of the 1.2m high retaining wall in Part A of the subdivision, between future lots 28-47 removed, as it does not comply with Council's Development Design Specification D6 - Site Re-grading.	Council's concern with the 1.2m high retaining wall reflected a view that site was being unnecessarily flattened to provide flat building envelopes, which is not permitted. We expressed the view that it has been our intention to provide a development outcome consistent with Council's D6- Site Regrading Standard. To this end compliance was subjective due to a typing error in the Standard. Council's officer Danny Rose was to provide clarification in this regard, however, none has been forthcoming. The issue relates to Note 1 which accompanies Table D6.1 which makes a reference to a Note 1 of D6.04.4. Section D6.04.04 does not exist. It is likely that the reference relates to Note 1 of D6.05.4 which states: "A retaining wall or batter of maximum "combined height" (as defined in clause D6.05.6) of 1.2m at or adjacent to inter lot boundaries may be permitted to ease lot gradients, where lot longitudinal or cross gradient would exceed 10% in the absence of such retaining walls". In this regard the aforementioned 1.2m retaining wall complies with the D6 guideline. Appendix I also includes the relevant excerpts from the engineering plans submitted with the Environmental Assessment Report. This shows that	Typographical error acknowledged, and applicant's assumptions in this regard are correct. However, the Applicant's response seems to be referring to the proposed wall at the Stage boundary, which is not the wall in dispute. Based on Figures DA04 and DA06 the wall between lots 28-47 should be deleted, as the affected lots would have longitudinal gradients of less than 10% in the absence of the wall. CONSENT CONDITIONS TO BE PROVIDED.

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	site would exceed 10% slope in the absence of the wall.	
STORMWATER ISSUES		
27. Provide design confirmation that the 3 cell 1500mm diameter piped system is adequate to cater for ARI 100 year stormwater runoff from a future urbanised catchment east of Fraser Drive, without resulting in flooding in Fraser Drive. Preliminary design details of Q100 inlet structures shall also be provided.	This piped system has been modelled in PC Drain. Any head loss that may occur through the bends has been accounted for in this modelling. Our developer can not impose construction requirements onto another landowner. If Council want the culverts to cross Fraser Drive, then the existing landowners future access and current drive way entrance would have to be moved and the existing drainage path 900 dia culvert would have to be re-routed. It is not reasonable to impose conditions which we can not lawfully impose on another landowner. It is also unreasonable to impose the requirement for the allowance of flows from a developed upstream catchment. Given the requirement for our site to have on site detention to maintain existing peak flows, it should be the responsibility of the upstream property owners to also maintain existing peak flows from their site. Should this condition remain it would be necessary for the applicant to request stormwater headworks credits for any additional infrastructure and loss of land due to allowing for flows greater than the property currently accepts.	The open channel within a Council easement that traverses the development site currently provides the capability to discharge all flows (under current and future conditions) from the eastern catchment through the site to the SEPP 14 wetland. As the applicant is requesting that Council relinquish this service, equivalent drainage must be provided, and must be capable of catering for the potential increase in runoff from a fully urbanised eastern catchment (as the zoning currently permits). FURTHER INFORMATION REQUIRED.
28. Amend the design of the 3 cell 1500mm diameter piped system to provide a straighter alignment (eliminating 90 degree bends) between the catchment east of Fraser Drive and the bypass channel for the treatment/detention ponds in Part A of the subdivision, to maximise inlet capacity and minimise the chance of blockage. Further investigation of solutions to the potential conflict between stormwater services and the existing water main in Fraser Drive shall also be provided, to allow for the relocation of the stormwater inlet to the eastern side of Fraser Drive to eliminate the existing 900mm culvert.	This issue has been addressed in Appendix B. In summary, Council have previously requested that this site and the site across the road share a common intersection for access to Fraser Drive. The entrance to this site was placed in accordance with Council's recommendation. As the stormwater pipes are located under the roadway due to their size, it makes it impossible to align the stormwater line perpendicular to Fraser Drive without affecting opposite properties driveway access, or possible future development. Even placing pipes under Fraser Drive at a 45 degree angle to the road would require earthworks in the opposite property to change the existing overland flowpath, and re-grade it to the new culvert crossing.	Limitations on works on adjoining land are acknowledged. The proposed arrangement of the 3 cell 1500mm diameter pipes is satisfactory to Council, provided the applicant can demonstrate that there is an alternative failsafe surcharge flow path from Fraser Drive to the SEPP14 wetland. This is currently available in the form of an open channel within an easement benefitting Council, and this will not be relinquished unless a satisfactory alternative system is in place. This flow path is necessary to prevent flooding impacts in Fraser Drive and adjoining low lying properties. FURTHER INFORMATION REQUIRED.
29. Identify the location of and provide preliminary design for drainage services, including interallotment drainage and ARI 100 year overland flow paths, to collect and convey runoff from external stormwater catchments to the west	Inter allotment drainage is better considered in the detailed design phase. We request that Council address this issue as a condition of consent.	Agree to address via conditions, but applicant must acknowledge that these services will need to be adequately sized (to incorporate a factor of safety and freeboard requirements to the satisfaction of Council) and must

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of the site (Hillcrest Avenue, Ridgeway St, Ocean Avenue and Seaview Street) through the subdivision to a lawful point of discharge.		be contained within easements burdening the new allotments. This may constrain the future development capability of some of these sites. CONSENT CONDITIONS TO BE PROVIDED.
30. Provide an assessment of impacts on downstream properties and public infrastructure south of the subdivision site (Shiraz Place, Merlot Court) due to increased urban stormwater runoff.	No increased runoff is attributed to the external downstream properties as the catchment is modified to ensure nil increase in runoff. Refer to Cardno Stormwater Management Plan dated 8 December 2006 (page 3 first paragraph) provided in Appendix B. The portion of impervious area of the catchment has increased, but the overall area has decreased, creating no net increase in runoff. Further to the meeting of 17 October 2008, Council were to provide further clarification on this matter. To date we have not received a response from Council.	Require supporting calculations to demonstrate the no net increase argument. Also need to consider spatial changes in the discharge points from the urbanised catchment and the related impacts on receiving infrastructure. ADDITIONAL INFORMATION REQUIRED.
31. Provide justification that the existing culverts under Fraser Drive and receiving downstream private land represent a lawful point of stormwater discharge for the eastern catchment of Part B of the subdivision, as defined by Council's Subdivision Manual (Section A5 of the Tweed Shire DCP).	The existing culverts are the existing discharge point for the site. No increased runoff occurs as the detention pond on our site controls outflow. We are currently awaiting response from Council officers on this point as per the meeting of 17 October 2007.	The detention pond only mitigates the peak runoff for the design event. Downstream impacts from urbanisation of the site are still expected, to the possible detriment of the landholder. The applicant is required to demonstrate that a legal point of discharge exists as per DCP-A5. If this cannot be demonstrated, the applicant will need to obtain an easement to provide drainage connectivity from the Fraser Dr culverts to the Western Drainage Scheme to the south east. Discharge to the Western Drainage Scheme also requires the payment of drainage contributions (refer Contributions Plan No.2 Banora Point). FURTHER INFORMATION REQUIRED.
32. Provide preliminary design for outlet control measures for the on site detention pond proposed on the eastern boundary of Part B of the subdivision, including any works required at the inlets to the receiving culverts under Fraser Drive.	As per the outcomes of 17 October 2007, Council can address this issue as a condition of consent. A preliminary design sketch can be provided in accordance with normal development application documentation. Council still have final approval during construction & s68 approvals.	Agreed CONSENT CONDITIONS TO BE PROVIDED.
33. Provide an assessment of the existing cross sectional capacity of the open channel through the SEPP14 wetland, downstream of the subdivision. This assessment shall include a design and plan of works to upgrade this channel as necessary to cater for post	The existing drain, by survey, has no capacity. It grades up hill and in some places is over 0.5m lower than the outlet at James Road. Figure DA 20 which was provided as part of the supporting engineering diagrams to the Environmental Assessment Report, is included in Appendix B as	Council requires the provision of a formal drainage channel through to James Rd, with a cross section that can be maintained in perpetuity, in order to protect the subdivision and adjoining properties from flooding.

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development flows from the subdivision.	supplementary information. This drawing shows levels. The regime is to maintain existing flows into the channel and wetland by detention control. The channel should remain unchanged to maintain ecological balance. Section 2.2 of the Ecological Buffer Analysis discusses the nature of the open channel and its use. From this assessment it would appear that the conclusions drawn in response to the stormwater management issues are valid.	ADDITIONAL INFORMATION REQUIRED.
34. Provide a plan of management for the SEPP14 wetland and buffer zone for the concurrence of Council, the Department of Planning and other relevant government agencies. The plan of management must identify the required channel design to adequately cater for the post development flows from the subdivision, and protocols for Council to carry out maintenance works to maintain an adequate cross section in the open channel, without compromising the ecology of the wetland. These maintenance works must be able to be carried out by Council using conventional equipment, and the plan of management must address maintenance access into the wetland.	Please refer to the comments provided above. In addition the SEPP14 Wetland and buffer are not currently managed. The Wetland does not appear to be suffering from a lack of management regime. In accordance with the recommendations of the Ecological Buffer Analysis the use of the buffer is to be limited to rehabilitation and planting. Rehabilitation/Planting Plans can be detailed as a condition of consent. Appendix B also includes the details of the s88B instrument that applies to the existing drainage easement through the site. An excerpt from the <i>Conveyancing Act 1919</i> is provided which demonstrate that Council have the right of access to maintain the drain. Council do not currently maintain the drainage way and further to the conclusions drawn by the stormwater assessment in the Ecological Buffer Assessment we consider that leaving the drain as is would provide for the better ecological outcome.	Maintenance of the drainage path from the subdivision outlet to the James Rd culvert is required in order to protect the subdivision and adjoining properties from future flooding. While this channel will be contained within an easement benefitting Council, which provides access rights under the Conveyancing Act, the Act does not provide the certainty that works can be undertaken within the easement due to SEPP14 and flora and fauna restrictions that are likely to be involved on the subject site, and that require Council to obtain further permits and approvals. The Plan of management is therefore still required. ADDITIONAL INFORMATION REQUIRED.
35. Provide preliminary design for outlet control measures for the on site detention pond proposed for Part A of the subdivision, to maintain a hydraulic regime compatible with the receiving SEPP14 wetland.	The outlets will be designed at detailed design phase. Council still have final approval during construction & s68 approvals. Refer to Appendix B, attached Sketch SK-016 for typical details.	Generally agreed CONSENT CONDITIONS TO BE PROVIDED
36. Provide an engineering assessment as to the compatibility of the pond in Part A of the subdivision as a combined water treatment and on site detention device. Required volumes for on site detention must account for standing water levels necessary for water quality control in constructed wetlands. The assessment must consider how the combined device can cater for ARI 100 year storm detention, and water quality measures up to the ARI 3 month storm, without the remobilisation of pollutants under larger flows.	This is a query relating to detailed design. Council still have final approval during construction and S68 approvals. Similar wetlands that incorporate water quality treatment and detention have been approved and constructed in the Terranora Azure development, located approximately 5 km from the Fraser Drive site. The wetland is designed so the water level remains constant during dry periods, but rises during rainfall events to attenuate the flows leaving the site. Additional storage volume is allowed for in the design of the wetland. See attached pictures of similar wetland located in Terranora.	Generally agreed CONSENT CONDITIONS TO BE PROVIDED
37. Amend stormwater drawings to	All flows from the northern portion of	Generally agreed

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include proprietary treatment devices on all minor road drainage systems that do not discharge to the water quality wetland in Part A of the subdivision. Flows from external catchments do not require treatment.	the site go into the wetland except for the medium density site which has a GPT. The medium density site catchment has been included in the sizing of the wetland as requested by Danny Rose via email (28th August 2006). It is proposed to install Ecosol RSF100 or similar stormwater treatment devices into the Gully pits connecting into the 3x1500dia line before discharging into SEPP14 wetland as opposed to an additional dedicated drainage line for these pits.	CONSENT CONDITIONS TO BE PROVIDED
38. Provide an assessment of all stormwater management facilities in public open space in accordance with the criteria set out in Table A5-8.6 of Section A5 of the Tweed Shire DCP, in order for these areas to be credited towards open space obligations for the subdivision.	This comment refers to the two open space areas that also accommodate drainage features such as the artificial wetland and the park adjacent to Fraser Drive which provides for intermittent detention. Table A5-8.6 states that drainage open space will be considered for a credit towards provision of open space category b1 Local Parks if the drainage open space under consideration complies with standards and criteria set out in Table A5-8 b2 for that category. Table A5-8 b2 refers to Standard A5.8.2.2: Neighbourhood Parks... The assessment concludes that the parks used for drainage purposes only partially conform to the performance criteria specified in Council's DCP. We have not considered these parks to form part of the credit in the provision of open space, but it should be noted that the provision of these areas greatly enhance visual amenity and provide a significant benefit in addressing existing stormwater management drainage issues. We request that Council view the contribution in light of the merits of the proposal.	Clarification that drainage areas have not been considered as part of the open space provisions should be checked against other open space issues to be addressed by Grahame Burton.
FLOODING		
39. Amend Cardno Figure No.DA04 "Proposed Finished Surface Contours Plan" (Drawing No. 7214/29/01-DA04) to extend the flood evacuation route along "Road No.1" to the medium density allotment at the northern extent of the subdivision. This evacuation route should be constructed at no less than the adopted design flood level of RL 2.6m AHD. Stormwater management in this area should be amended as necessary to cater for any increase in road levels to comply with the evacuation route requirements.	Noted	While the applicant has apparently accepted the need to extend the high road access to the medium density site, the potential conflicts with stormwater management in this area have not been addressed. This is particularly relevant to the provision of a failsafe surcharge flow path from Fraser Drive to the SEPP14 wetland as per Item 28 above. ADDITIONAL INFORMATION REQUIRED.

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Environmental Health Officer

Acid Sulfate Soils (ASS):

A revised ASS Management Plan has been provided by Gilbert and Sutherland, and consideration of the revised Management Plan together with discussions with Mr Nathan Zurig of Gilbert and Sutherland on 11.4.08 has largely resolved the previous concerns to the extent that the issue can be conditioned as follows;

Suggested condition:

Acid Sulfate Soils shall be investigated and managed in accordance with the provisions of the Revised Acid Sulfate Soils Management Plan Fraser Drive Tweed Heads South prepared by Gilbert and Sutherland dated September 2007 Document GJ0596-1.ASSMP.REH2, with the exception that all waters discharged from the site shall if discharged to marine waters have a pH range of not greater than 0.2 unit change of the receiving waters.

Construction Environmental Management Plan:

The applicant's response to this issue is that when the Construction Environmental Management Plan, it will reflect Council's operating hour requirement of 7.00am to 7.00pm Monday to Saturday and no works occurring on Sundays or Public Holidays.

Suggested Condition:

Construction site work including the entering and leaving of vehicles is limited to the following hours, unless otherwise permitted by Council:-

Monday to Saturday from 7.00am to 7.00pm.

No work to be carried out on Sundays or Public Holidays

The proponent is responsible to instruct and control subcontractors regarding hours of work.

Acoustic Assessment:

Previous comments identified that the site was not affected by the 2020 ANEF for Coolangatta Airport, therefore traffic noise impacts are likely to be the main consideration.

No detailed Acoustic Assessment has been provided with the information from the applicant. It is considered that the impact of traffic noise on the proposed development should be investigated in accordance with the provisions of the EPA(DECC) Guideline "Environmental Criteria for Road Traffic Noise"

Suggested Condition:

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An Acoustic Assessment carried out by an appropriately qualified acoustic engineer shall be undertaken to establish the impact of traffic noise on the proposed development. The assessment shall be carried out in accordance with the provisions of the NSW EPA (DECC) Environmental Criteria for Road Traffic Noise. Such investigation shall be carried out prior to the issue of the Construction Certificate and a report submitted for consideration and approval. All Recommendations of the Acoustic Assessment report shall be carried out in respect to the development.

Groundwater Assessment:

Previous comments with respect to groundwater management reflected the need to incorporate the recommendations as contained within Section 3.8 of the Groundwater Management Plan into conditions of consent.

Suggested Condition:

All recommendations as contained within section 3.8 of the Groundwater Management Plan shall be implemented in respect to the development.

Soil Contamination:

Our previous comments suggested that any imported fill material should be tested to ensure that the material was not contaminated so as to provide a degree of certainty with respect to the information submitted from various third parties.

The applicant has advised that they have assured themselves that the fill material is not contaminated via an investigation.

Previous comments also requested confirmation that the reported soil test lab results have been adjusted for the use of the composite sampling methodology employed.

This information has not been supplied and remains outstanding; confirmation is required under the provisions of SEPP55.

Cattle Tick Dip Site:

The consent authority should assess the impact of the operations of the dip site on the development.

The following condition is also suggested.

Suggested Condition:

The development shall be carried out so that no adverse impact to the adjacent cattle dip site located on Fraser Drive (Dry Dock Dip) occur that result in any contaminated soils from the dip being transported for the dip site.

Power Lines:

**Attachment – Council Officers Comments
Fraser Drive – MP06_0243**

Previous comments noted that above ground power lines transverse the site and Council would normally require investigation into any Electromagnetic Radiation and associated risk to human health.

The applicant has responded that the power lines would not pose any more of a health hazard to residents than those posed by the exiting low voltage power lines in the area, however if Council is of the opinion that a serious risk is likely then an appropriate condition to require such an assessment to be carried out prior to the issue of the Construction Certificate can be placed on the consent.

Whether or not a serious risk is likely will depend on the results of an appropriate assessment, in the past Country Energy has assessed this risk as it is their infrastructure. It is considered that this issue still be assessed and therefore the following condition is suggested.

Suggested Condition:

Prior to the issue of the Construction Certificate an assessment of any likely health risk associated with Electromagnetic Radiation Effects resulting from the above ground powerlines on the site to any future residents shall be carried out by an appropriately qualified consultant or authority and a report submitted for consideration and approval. Any recommendations contained in the report shall be carried out in respect to the development.

RECOMMENDATION

Confirmation that the lab test results in respect to soil contamination sampling have been adjusted for the use of composite sampling shall be supplied.

Note comment in respect to Dry Dock Cattle Dip.

**Attachment – Council Officers Comments
Fraser Drive – MP06_0243**

Specialist Planner - Ecologist

I have read various sections of the Preferred Project Report including the Ecological Assessment; Ecological Buffer Analysis; Stormwater Issues response; Preliminary Notes for Groundwater Assessment and the Response to Submissions. I make the following comments:

General

I was not available to make detailed comment on the Environmental Assessment component of this project and thus some issues below may not have been specifically raised in earlier correspondence; however, most of the issues have been included in previous correspondence from other government departments. In general, it appears that the Preferred Project Report has altered little with regard to ecological aspects from the previously submitted Environmental Assessment and many of the previous issues raised by others have been poorly (or not) addressed, thus they remain as significant issues.

1. The significance of the wetland has been underestimated

In addition to being mapped as SEPP 14 wetland, the publication *Wetlands of High Conservation Value and their Threats in the Tweed Catchment* (funded and coordinated by the NSW Department of Planning as part of the NSW Comprehensive Coastal Assessment (CCA) in 2006), ranks the wetland on the site (combined with the adjoining area immediately to the north) **as 5th out of 463** wetlands (comprising 12,890 ha) in the Tweed Catchment.

This is shown in their Table 3: "Top-ranked wetlands for conservation value in the Tweed Catchment ordered by overall ranking". Rank was gained from a combined score encompassing values for representativeness, threatened species, species richness, wetland-dependent birds, key habitat and corridors, wetland-dependent frogs, species richness and abundance of flora, and data quality. Thus the site is recognised at a state level as being a wetland of a very high conservation value, ranked 5th in the Tweed. It has been established that the wetland contains three Endangered Ecological Communities as well as significant aquatic habitat and is located adjacent to, and connected to, the Terranora Broadwater, an important area for oyster-growing, fish habitat and wader-bird habitat.

The Ecological Buffer Analysis discusses the value of the wetland as being degraded by environmental weeds and past clearing practices. In this regard significant recruitment within the saltmarsh area is noted since cattle have been removed from the site and such degradation is almost certainly due to surrounding development and associated inappropriate landscape plant selections which have escaped, or been dumped, into the wetland area, as well as inappropriate access into the wetland. These type of impacts are likely to be exacerbated by this proposed development and any Management Plan must detail restoration efforts as well as restriction of access.

**Attachment – Council Officers Comments
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2. The mapped SEPP 14 wetland does not describe the extent of wetland communities and should not dictate the inner edge from which the buffer is measured.

The SEPP 14 boundary does not describe the full extent of wetland existing at the site. Draft guidelines written by Dept Planning (forwarded by Craig Bellamy) show the clear intent that interpretation of the true SEPP 14 boundary should be based upon field recognition criteria including vegetation type, position on slope, micro-relief, inundation history and soil type. The guidelines further state that SEPP 14 boundaries can be interpreted as moving either inwards or outwards. In this case, the boundary using these criteria is clearly further out, as evidenced by all the above field recognition criteria.

Using the ecological buffer from the mapped SEPP 14 boundary (as proposed by Cardno) does not even encompass all the significant vegetation (Endangered Ecological Communities) on the site.

3. The suggested ecological buffer is insufficient and ill-defined

The originally mapped SEPP 14 boundary does not encompass the full extent of wetland EEC's, thus the wetland EEC boundary at the minimum should be used as the line from which to measure any buffer. As most government department submissions appear to accept a minimum 50m buffer, this should commence at the edge of the mapped wetland vegetation communities.

As a compromise position, it is my opinion that a reasonable buffer may be measured from the 1m AHD contour level for a distance of 50m. Contours have been accurately mapped by Council in 2007 and thus reflect the currently filled levels. Using the 1m contour would appear to encompass most of the wetland vegetation and would be a method which employs the field recognition criteria recognised by the Department of Planning using vegetation type, position on slope and micro-relief. An aerial photograph with suggested buffer is shown in Figure 1 below. The red hatching indicates the extent of the proposed buffer from the 1m contour, whilst the black line indicates a rectification in the northern and southern extents to reflect vegetation extent. It is considered that a reduction in width may occur where constructed wetland treatment areas are proposed. A comparison with the 50m buffer from the SEPP 14 area is shown in Figure 2. Average additional buffer width (if straightened) is 15-20m.

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Figure 1: Proposed buffer based upon a 50m distance from the existing 1m contour level.



Figure 2: Extent of buffer based on the 1m contour (red hatching) compared with buffer based upon the mapped SEPP 14 wetland (yellow hatching).

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Treatment of the buffer has not been defined with various “motherhood” statements about a plan of management, weed control, transfer to public ownership and replanting yet no definitive response to all these issues has been provided. The buffer must include planting with locally occurring suitable species (recognising that the ground level sharply changes at the edge of fill) to take the brunt of development impacts and avoid damage to significant vegetation. The treatment proposed by the CMA of dense and tall species adjacent the existing edge grading into spaced and shorter species closer to the proposed development is considered acceptable to Council. Any road or asset protection zones must be entirely outside of the ecological buffer.

4. The protection, treatment and management of the wetland area is uncertain

A Management Plan for the SEPP14 wetland, EECs and buffer areas is required and should be contained within the Statement of Commitments. Such a plan must consider all external potential development impacts and address them within the plan so that a holistic approach to management of the wetland during and post construction is ensured. The management plan must be submitted and approved by Council prior to consent and must include:

- a. An environmental restoration plan component prepared by person(s) qualified in Bushland Regeneration or Ecological Restoration and with knowledge and experience in local wetlands detailing:
 - an appraisal of the present condition of remnant vegetation;
 - a plan overlaying an aerial photograph of the site which divides the area into zones for regeneration and zones for planting, including connections between existing vegetation where appropriate;
 - a management strategy for each of the zones, including the approach, methods and techniques to be used for vegetation restoration;
 - a schedule of local native plant species to be used for planting;
 - a program of works to be undertaken to remove invasive weed species;
 - a schedule of timing of proposed works (given that such works can commence immediately for the majority of the site) and
 - a maintenance, monitoring and reporting schedule for a period not less than 5 years.
 - A clear indication of personnel responsible for each component of the plan.
- b. An erosion and sediment control component detailing measures to avoid sedimentation within the wetland area during construction.
- c. A stormwater and groundwater management component detailing measures to prevent impacts from scouring, sedimentation, contamination or alteration to the water table level or quality.
- d. An Acid Sulfate Soil and Dewatering management component detailing measures to avoid impacts from surface or groundwater interactions and alterations. This is relevant because the constructed wetland system will

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involve excavating into fill and then into Class 2 ASS and dewatering to lower the groundwater table, with the bottom of the deep water zone permanently intercepting groundwater.

- e. A Fire Management/ Asset Protection Zone management component to ensure that measures undertaken for fire protection purposes do not conflict with ecological intent, require clearing of significant vegetation or compromise the integrity of the buffer.
- f. A tidal flushing regime component which considers the various ecological requirements of the flora and fauna components of the wetland system, as well as reducing as far as possible mosquito and midge breeding.

The installation of an acceptable tidal floodgate is integral to the management of tidal regime and tidal flushing within the wetland area, and affects the development directly in relation to mosquito and biting midge control. As the existing floodgate is outside of the development area it is possible for the developer to pay for the cost of floodgate replacement as part of the management while experienced Council officers carry out the actual installation in consultation with DPI Fisheries. This should be included within the management plan.

Council has established precedents at major coastal developments that specify developer responsibility for a minimum of 5 years for restoration, monitoring, maintenance and reporting prior to dedication to Council. This period will be expected in this case to ensure the area is restored to a sufficient standard for Council to maintain without a significant ongoing injection of funds.

In the longer term, the wetland and EEC vegetation should be rezoned to environmental protection and this should be included as an action within the management plan to ensure long-term protection of the area.

The Ecological Buffer Analysis states that transfer of ownership to Council is a critical step to achieving an appropriate long-term management regime with regard to invasion and establishment of exotic flora within the wetland. Whilst it is important that long-term management rest with Council, a management plan must be developed which clearly details weed control methods, scheduling, monitoring and reporting and places responsibility for restoration and weed control works for the first five years on the developer. Council will not accept dedication of weed-infested lands. Fencing, signage and potentially limited and controlled access is supported.

The wetland has already suffered impacts from other sides due to existing development and further significant impact could mean its loss. The buffer report discusses the value of the wetland as being degraded by environmental weeds. Such degradation is almost certainly due to surrounding development and associated inappropriate landscape plant selections which have escaped, or been dumped, into the wetland area. These types of impacts are likely to be exacerbated by this

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proposed development without a strong and definitive management plan committed to by the developer.

5. The Champagne Drive road reserve and vegetation to the south has not been fully assessed

The development relies upon closure of this road reserve and clearing of this area and a fragmented portion of the lot to the south, yet the existing vegetation (which links to vegetation to the west) does not appear to have been separately assessed. The Ecological Assessment report refers to 'Figure 3 Vegetation Communities' yet no figures have been included. Even if it is assumed the area is primarily Camphor Laurel Forest, such areas can contain significant and threatened species, and part of this area in the east is mapped in the Tweed Vegetation Management Strategy as "sedgeland and rushland". Whether this small area may be considered as the Freshwater Wetland EEC has not been addressed.

6. Various components of the report conflict or are uncertain in their approach

The Ecological Buffer Analysis shows that part of the EEC vegetation occurs outside of the proposed 50m buffer to the currently mapped SEPP 14 wetland, yet the Ecological Assessment states otherwise.

The Ecological Buffer Analysis states in the Introduction that after an on-site meeting "it was agreed that the buffer(s) required between development and the adjacent SEPP Wetlands and associated ECC need not be a minimum of 50 metres in width provided that any proposed alternative arrangements would appropriately protect the values of the environmentally significant areas". This is not the case. At that on-site meeting it was clearly stated that 50m is the generally accepted minimum buffer width and that significant justification would be required for any deviation from this accepted minimum. Such justification has not been provided to an acceptable level. It should also be made clear that at that meeting we were discussing a buffer to the wetland in total, not specifically to the mapped SEPP 14 area (i.e. including wetland EEC areas).

The same report in the Stormwater Management Strategy section states "A key aspect of the SWMP is the proposed Constructed Wetland system that has been designed and would be constructed in such a manner that ensures there will be no increase in runoff for all storm events up to and including the local catchment 100 year ARI event, without compromising the water quality of the site." Presumably, the applicant means that water quality running into the wetland will not be compromised up and including the local 100 year ARI event, where the statement reads differently.

Although it is accepted that the Ecological Buffer Analysis was written by consultants for a client, Recommendations in general are not appropriate within a Preferred Project Report. Recommendations must be agreed upon and committed to actions within the report and where appropriate contained within the Statement of Commitments.

**Attachment – Council Officers Comments
Fraser Drive – MP06_0243**

The Notes for Groundwater Assessment states “Groundwater monitoring throughout construction and for a period of operation could be undertaken to confirm if contaminated groundwater leaves the treatment pond”. This is not acceptable as it would be too late and likely adverse impacts would arise. Certainty in regard to avoiding pollution of groundwater is required prior to commencement.

7. The Statement of Commitments in general consists of broad motherhood statements that commit the developer to little.

Vegetation Management, for example, commits only to a plan for areas outside of EEC's which is a small and insignificant component of what is required for restoration.

Conclusion

In my opinion, the potential for a significant impact to the SEPP 14 wetland and surrounding Endangered Ecological Communities is still too high to be acceptable unless the development is tightly regulated in terms of all the matters listed in point 4 above to be included within a SEPP 14 & EEC Management Plan. Previous advice appears to have been ignored or inadequately addressed. As the applicant appears unable or unwilling to shift their position and address significant issues to the satisfaction of Council and State Agencies, consideration should be given to refusing the application based on an unknown and potentially significant impact to EEC's or, at least, to requiring the detail requested in a Management Plan to be contained in the Statement of Commitments.

PREFERRED PROJECT REPORT – RESIDENTIAL SUBDIVISION AT FRASER DRIVE, SOUTH TWEED – MP06_0243

KEY ISSUES UNRESOLVED

Housing Density / Type

- Justification for variations to development standards has not been provided, nor has Council's views been sought. The Department cannot make an assessment of variations to the existing controls against planning provisions and policies without detailed justification provided by the proponent. It is not up to the Department to create an argument on the proponent's behalf.
- The minimum lot size across the site is 450sqm in accordance with the Tweed LEP. Five (5) proposed lots have a lot size < 450sqm in Stage 3A, which is a prohibition.
- **The Minister cannot determine a project in a sensitive coastal location that is partly prohibited (refer Clause 8N of the EP&A Regulation). These lots sizes must be amended.**
- *Section B3 – Banora Point West – Tweed Heads South* in the *Tweed Shire Council Development Control Plan* sets out provisions for development in this area. The DCP identifies the site as predominantly 'Residential A', part Open Space and part Hazard Zone – Land Affected by Slip. The predominant housing type in 'Residential A' is conventional detached housing although dual occupancies may be permitted within this land use category in accordance with Section A12 of this DCP.
- The following non-compliances with the Tweed DCP have been identified:
 - Section A12 of the DCP states that lots identified for dual occupancies must be of a minimum site area of 900sqm or an area not less than 500sqm if the land is within 300m distance of a business centre listed under Schedule 8 of Tweed LEP. The site is not within 300m of a business centre and yet the proposed size of the dual occupancy lots within the development ranges is as small as 600sqm.
 - **The Minister cannot determine a project in a sensitive coastal location that is partly prohibited (refer Clause 8N of the EP&A Regulation). These lots sizes must be amended.**
 - The DCP states that integrated housing is not noted as a permissible housing type within the 'Residential A' area. It is noted that a superlot has been identified for integrated housing. A variation to the housing type and density has not been provided.
- Page 41 of the PPR states that the integrated housing component has been excised from the proposal and will be subject to a separate approval process. Please confirm, however, that the use of this integrated housing 'superlot' is still part of this project application.
- What do the blue dotted lines represent on Drawing No.06072 CON05a dated 12 March 2008.

Subdivision Design

- The Department does not support the revised road layout of Road No.4 and Merlot Court. Road No.3 needs to be connected to Road No.4 and Merlot Court to provide connectivity throughout the development.
- The Department does not support dual frontage lots on these roads.
- Road No.4 now ends in a cul-de-sac which is in excess of 300m in length. This design does not comply with requirements set out in Council's DCP (max length of 100m), the requirements of *Planning for Bushfire Protection 2006* (max length 200m) and the design principles in the *NSW Coastal Design Guidelines* in terms of permeability and interconnected streets?
- Council's DCP states: *Maximum cul-de-sac length should be 100 m and serve no more than 12 dwellings. Where constrained by landform alteration limits, the maximum length of cul-de-sacs may be increased to 200m and 24 dwellings and consideration may be given to modification of road connectivity requirements, if this leads to better urban design outcomes."*
- How does the revised road layout lead to better urban design outcomes?
- The intersection at Merlot Court needs to be upgraded to cater for the increased traffic generated by the development.
- It is not acceptable to assume that Council will accept dedication of all roads, parks, open space and road reserves. Council must agree to this in writing now. The Minister cannot determine the proposal without knowledge of who will be responsible for managing / maintaining these assets. This is particularly important as not all roads and parks have been designed to meet Council standards.
- In relation to the proposed sound attenuation structures in the Fraser Drive road reserve - is the proponent implying that it will be up to Council to build the structure? The question asked is whether the placement of the structure will reduce the

available space for the proposed future expansion of the road and whether Council is satisfied with the proposed extent / size of the attenuation structure.

- Is Council happy for noise wall to be on the road reserve? It is proposed to take up between 4-6 metres of the 10 metre wide dedication area.

Ecological Buffer

- The Executive Summary of the PPR is written in an unprofessional manner as it makes statements about the Department's internal processes which Conics is aware are incorrect.
- The Executive Summary does not accurately reflect the process that has been undertaken by the Department to date. A detailed field inspection has been undertaken by the Department's specialist consultant, Geoff Sainty, on 25 October 2007 and on a number of occasions by the responsible planning officer, Sally Munk. It is incorrect to say that the Department's position is based on a desktop analysis only and based on an in principle position.
- The Department's independent position regarding the buffer adjacent to the EECs is based on independent advice received from our technical specialist and is not based on the agency's submissions or a desktop analysis.
- This section of the PPR must be deleted or re-written to reflect the process undertaken to date.
- The PPR does not address the issues raised by the Department or in agency submissions regarding the ecological buffer. Comments have already been provided on Cardno's *Ecological Buffer Analysis (January 2008)* on 5 March 2008 by the Department (including its technical specialist's comments) and the agencies. An inadequate response to this letter has been provided. This issue has not been addressed.
- The ecological assessment provided at Appendix F is the same report provided in the EA. This does not respond to the issues raised in submissions.
- Adequate justification for a reduction in the standard 50m buffer from the edge of the EECs has not been provided.
- The issue of weed management can be incorporated into the proposed Management Plan for the SEPP14 wetland, EECs and buffer areas. It will be critical that the Management Plan specifies who is responsible for ongoing management/maintenance of these areas. Council may agree that it would be appropriate for the proponent to be responsible for these areas for a set period of time (Council to specify) to ensure that any rehabilitation/revegetation works are well established prior to dedicating these areas to Council.

Stormwater

- MUSIC modelling has not been undertaken to demonstrate the effectiveness of the proposed stormwater wetland and other treatment measures in terms of stormwater quality or quantity.
- The integrated housing allotment does not drain to the stormwater treatment pond. How will stormwater from this lot be managed to ensure protection of the SEPP14 wetland and EECs. The provision of a single GPT is unlikely to achieve the required stormwater treatment quality objectives.
- Figure No.DA20 dated 8 December 2006 has not been updated to reflect the revised subdivision road layout. It also includes a stormwater detention pond in the open space area adjacent to Fraser Drive. Is this still the case?

Bushfire Hazard Assessment

- Council has not agreed for the proponent to use the Fraser Drive road reserve or the ecological buffer as an APZ.
- Section 4.7 of the Bushfire Report refers to the site not containing any Aboriginal Cultural Heritage. Confirm that the APZs along the Fraser Drive road reserve are not affected by the findings of the Everick Report.
- The Boskae Report recommends underground electrical transmission lines for the proposed subdivision (p19). Is this what is being proposed?
- The Statement of Commitments has not been amended to include a requirement for all houses to be built to Level 3 construction as outlined in AS 3959-1999 (p38).
- Proposed length of Merlot Court does not meet the 200m maximum length for cul-de-sacs in *Planning for Bushfire Protection 2006*.

ADDITIONAL INFORMATION AND COMMENTS

Geotechnical

- The Morrison Geotechnics Report MUST be provided in colour.
- Drawing No.7214/29/01-DA04 dated 8 December 2006 has not been updated to reflect the revised layout.
- Drawing No.7214/29/01-DA04 shows cross sections A-A to G-G. These cross-sections have not been provided.
- The Statement of Commitments has not been updated to include a commitment about preparing a Design Guideline for proposed houses on the site. The following statement should be included, or it will be placed as a recommended condition of approval:

A Future Residential Character & Built Form Report must be prepared for the subdivision to demonstrate consistency of character of existing development in terms of the locality, street frontage, scale, building envelopes and built form controls, aesthetics and energy and water efficiency. The report must be prepared in consultation with Tweed Shire Council and demonstrate consistency with design controls within the Tweed Development Control Plan – Section A14 – Cut and Fill on Residential Land.

Aboriginal Cultural Heritage

- The Everick Aboriginal Cultural Heritage Report (page 15) states that the midden is in Lot 135 of the subdivision. On page 44 of the report, it is stated that the midden is not within the boundary of the development. Is it in Lot 135 or in the proposed road reserve to be dedicated to Council??
- The Everick Report states that adjustments to the boundary of Lot 135 of the proposed subdivision will be made to ensure that the midden and protection zone around the midden are located within Tweed Shire Council land. The amended subdivision layout does not reflect this.
- Put in Statement of Commitments or condition of approval re Cultural Heritage Management Plan to be prepared by proponent in consultation with Traditional Owners.
- As at the printing of the Everick Report, the LALC had not confirmed its support for the report as a quorum of the Committee was not available (on 7 March 2008). Has their support now been given in writing?
- The Everick Report states (p52) that the location of the midden should be inserted into all future drawing, maps and engineering plans connected with development of the subdivision. This has not been undertaken.
- While it appears that the location of the midden has been surveyed and illustrated in Drawing No.15975D Revision A dated 22/5/07 renamed as "Midden Site Revised – 30/01/2008", it is not clear how the location of the midden relates to the proposed subdivision layout. The full known extent of the midden should be shown on the proposed subdivision plan layout submitted for assessment. This is critical to ensure that the Certifying Authority is clear on the extent and location of the midden.
- Drawing No.16104 B dated 18-7-07 is marked as "Preliminary Only 25/7/07". Is this still a preliminary plan or is this what is now being assessed?
- Drawing No. 20934-5H dated 5 March 2008 does not show the location of the midden site.

Socio Economic Assessment

- Dept of Housing has provided comment. They are not satisfied with the response.
- Conditions of approval proposed.

Flooding

- The flood impact study undertaken for the consent issued in 2002 needs to be revisited and the model re-run to assess the impacts of the Probable Maximum Flood event for the site. This does not require any reliance on Council's flood study. This should be undertaken in accordance with the NSW Floodplain Development Manual.
- In any case, Map 1 of Council's DCP does show the extent of the PMF and Council's Flood Study 2005 does provide predicted levels for the "Extreme Event".
- The PMF is the largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation, and where applicable, snow melt, coupled with the worst flood producing catchment conditions. It is acknowledged that it is generally not physically or economically possible to provide complete protection against this event. The PMF defines the extent of flood prone land, that is, the floodplain. The extent, nature and potential consequences of flooding associated with a range of events rarer than the flood used for designing mitigation works and controlling development, up to and including the PMF event should be addressed in a flood study and the impacts understood.

Flora and Fauna

- The comments from the Commonwealth Department of Environment, Water and Heritage are required to confirm that they are satisfied with the assessment and recommendations for the single species of *Macadamia tetraphylla*.

Statement of Commitments

- The Statement of Commitments has not been amended to include the dedication of the Fraser Drive road reserve to Council.
- The Statement of Commitments does not contain any commitments to dedicate parks or roads to Council. This should be amended and it should be clear at which stage of the development each asset will be dedicated to Council. This should be agreed with Council as necessary.
- A design control that restricts the use of reflective material for any future dwellings on the site has not been included within the Statement of Commitments.
- A commitment to address the requirements of part A1 of Council's DCP in future applications for the site has not been included within the Statement of Commitments.

General

- Has Tweed Shire Council given land owners's consent (refer p1)? What part of the site do they own?
- It is assumed that the development proposal also incorporates the construction of all associated infrastructure (stormwater, sewerage, etc) (refer p1). Please confirm and amend proposal description as necessary.
- Matters regarding open space dedication / contributions needs to be negotiated with Council now. If there is insufficient open space to be dedicated, then the proposed contribution should be stated for Council to consider. The PPR is supposed to provide sufficient information for the Department to complete its assessment of the proposal.
- The description of Project Amendments refers to amendment of Lot 169 (p4). This should be Lot 168.

Sally Munk
Senior Environmental Planner
Coastal Assessments – North Coast
18 April 2008

SUMMARY OF SUBMISSIONS

Residential Subdivision at Fraser Drive, South Tweed MP06_0243

Summary of all Agency Submissions Received for this Application

Agency	Agency comment	Satisfied?	Comments
Tweed Shire Council	- Cut and fill	NO	Refer attached notes from Council.
	- Geotechnical engineering	NO	
	- Roads, public transport and connections	NO	
	- Stormwater management	NO	
	- Flood evacuation route	NO	
	- Provision of functional open space	NO	
	- Bushfire management and provision of asset protection zones	NO	
	- Water supply	YES	
	- Sewer reticulation details	YES	
	- Environmental health considerations, including acid sulfate soils, acoustic assessment and groundwater	YES	
	- Soil contamination	NO	
	- Planning and urban design	NO	
Department of Housing	<u>Socio-economic Impact Assessment</u> - no socio-economic impact assessment (SEIA); - the SEIA should address how the increase in population will impact on services and social infrastructure in Tweed and whether there is adequate existing capacity to meet any demand likely to be generated by the development.	YES	<u>Socio-economic Impact Assessment</u> - An SEIA was submitted with the PPR - The SEIA does not examine the likely demand for or existing supply of services and facilities - Propose conditions to address the issue of affordable housing and housing diversity

Department of Water and Energy	<u>Acid Sulfate Soil Management Plan</u> - the ASSMP would be acceptable if supported by documentation of the data upon which it is based. DWE required that the data from the previous reports prepared in 2000 and 2002 be incorporated into the ASSMP. <u>Groundwater Impact Assessment</u> - further clarification on proposed detention basin levels, groundwater levels and the proposed method / standard of lining for the proposed detention basin; - further information on areas required to be dewatered including impacts on acid sulfate soils and ground water dependent ecosystems with any subsequent acid sulfate soils management plans and/or dewatering management plans	NOT SURE (groundwater)	<u>Acid Sulfate Soil Management Plan</u> - data from previous reports has been included in the ASSMP - DECC has not confirmed its acceptance (Glenn Atkinson, DECC – 0458 463 744) <u>Groundwater Impact Assessment</u> - detention storage volume for the northern catchment will be provided above the standing water level of the proposed wetland and not within a dry detention basin - standing water level will be at approximately 1.0m AHD, to depths of 1.5m for the deep water zone to 0.7m for the macrophyte zone. - Excavations will therefore be down to -0.5m AHD and 0.3m AHD - Groundwater levels in the north end of the site vary seasonally from RL0.2m AHD to RL0.9m AHD, therefore it is not expected that there will be any “blowout” of the internal walls of the wetland due to water pressuring the walls of the basin. - However, as it will be necessary to excavate down into the groundwater table to form the proposed wetland, a licence will be required under Part 5 of the Water Act 1912. - A dewatering management plan has not been provided. - A condition of approval should require clay lining of the stormwater treatment pond to prevent exchange of untreated stormwater runoff with groundwater. - DWE have not confirmed its acceptance (Richard Greene, back Monday)
Department of Environment & Climate Change	<u>Aboriginal Cultural Heritage</u> - the information submitted was insufficient to assess the management proposals;	NO (wetland buffer)	<u>Aboriginal Cultural Heritage</u> - the PPR satisfactorily addresses the issues raised and sets out positive recommendations for the protection

	- an investigation survey should be completed using an appropriately qualified archaeologist to enable determination of the extent and value of the registered midden site. <u>SEPP14 Wetland Buffer</u> - the proposed development provided a 50 metre buffer to the mapped SEPP14 wetland boundary, and not the actual wetland communities or the endangered ecological communities. <u>Bushland Management Maintenance</u> - further information on the bushland management maintenance program timeframes, objectives, methodologies and area where the work will occur; - rehabilitation work should include all of the open space areas especially the buffer area to the SEPP14 wetland.		and management of the midden <u>SEPP14 Wetland Buffer</u> - recommend that the buffer be applied from the edge of the EECs - a reduction of the 50m buffer would be acceptable where the buffer adjoins the water quality / open space area (the current buffer is acceptable) - may be an opportunity to reduce the buffer where it adjoins Lot 168, however, any reduction should be appropriately compensated for by rehabilitation or management commitments elsewhere - the 50m buffer should not be reduced where it adjoins the integrated housing area - the buffer area should consist of native vegetation and should not incorporate other infrastructure <u>Bushland Management Maintenance</u> - no comment
Roads & Traffic Authority	<u>Traffic & Access</u> - the Development Traffic Advisory Group requested that: - A further detailed traffic analysis be undertaken for the ultimate major internal road connection with Fraser Drive; - Consideration be given to proposed Lot 1 having a longer frontage to enable a driveway to be constructed further away from the major intersection; and, - The layout should be integrated with the Tweed Shire Bicycle Plan.	NO	<u>Traffic and Access</u> - no further analysis has been undertaken - no response on Lot 1 having a longer frontage - no confirmation that the layout is integrated with the Tweed Shire Bicycle Plan
Department of Primary Industries	<u>SEPP14 Wetland Buffer</u> - noted that the wetland communities extend beyond the mapped SEPP14 boundary and therefore the 50 metre buffer provided from the mapped SEPP14 wetland is insufficient. - concern was raised that the 50 metre setback to the wetland is to be recreated as an asset protection zone (APZ) for bushfire	NO (wetland buffer)	<u>SEPP14 Wetland Buffer</u> - Not satisfied with the proposed buffer - SEPP62 requires consideration of impacts on priority oyster growing areas such as those to the north of the site in the Terranora Broadwater - Incorporation of effective habitat buffers into the layout

	management; - the EA does not contain any indication of how the buffer zone is to be managed to maintain habitat and ecological values of the mapped SEPP14 wetland; - the EA also does not justify why the APZ cannot commence from the edge of the 50 metre ecological buffer, negating the need to clear existing wetland vegetation. <u>Floodgate management</u> - requested that a condition of approval requiring the proponent to work with Council to improve management of the floodgate. <u>Ad-hoc planning</u> - concerned about the cumulative impact of developments, especially when aspects such as filling and various stages are assessed separately. <u>Sea level rise / climate change</u> - concerned regarding the ability of the wetland communities to adapt to projected changes in sea level as a result of filling of areas to the edge of the wetland and its buffer. <u>State Environmental Planning Policy No.62 – Sustainable Aquaculture</u> - recent modifications to this SEPP require consideration of impacts on priority oyster growing areas within the vicinity of the proposed development to be considered in the assessment.		of the subdivision will contribute to achieving water quality objectives of SEPP62 <u>Floodgate Management</u> - A calibrated tidal mechanism similar to that used in a number of sites throughout the Tweed would permit some fish passage, flushing of waters behind the gate and by shutting down at a predetermined tide height would continue to sustain both saltmarsh and freshwater wetland species. - A condition of approval requiring the tidal floodgates to be upgraded will satisfy DPI's concerns. <u>Sea Level Rise</u> - Addressed in PPR <u>SEPP62</u> - See comments under SEPP14 wetland buffer above - A condition of approval will ensure control of sediment and erosion during construction - Stormwater management measures will control stormwater quality during operation
Northern Rivers Catchment Management Authority	<u>SEPP14 Wetland Buffer</u> - the 50 metre buffer surrounding the SEPP14 wetland had been measured from the mapped SEPP14 wetland boundary and not the actual extent of the wetland communities; - the CMA is not satisfied that the wetland will be adequately protected and recommends that a buffer be extended around the wetland as a whole to protect the wetland system with its vegetation communities that be interpreted as 'outside' of the SEPP14 boundary.	NO	<u>SEPP14 Wetland Buffer</u> - not satisfied that the wetland will be adequately protected by the Cardno proposal and recommends a full 50m buffer be extended around the wetland and EECs - the recommended variable buffer width is insufficient - establishing a vegetated buffer is an improvement over the existing perimeter of the wetland and EEC and therefore a suitable justification for variation of a 100m buffer - would be satisfied to see a minimum 50m vegetated

			buffer incorporating a number of zones of reducing vegetation height, consisting of appropriate tall native species, graduating to native hedge and the to native grasses - the water quality control pond is an appropriate feature of the buffer zone and the vegetation buffer could therefore be reduced around this feature - further justification for variation of the standard 100m buffer may include a commitment to the following
Rural Fire Service	<u>Bushfire Management</u> - suitable Asset Protection Zones (APZ); suitable water, electricity and gas; public road access and property access roads should comply with <i>Planning for Bushfire Protection 2006</i>.	NO	<u>Bushfire Management</u> - the proposal provides adequate APZs - the extension of Merlot Court results in a cul-de-sac exceeding 300m in length. PBP 2006 states that cul-de-sacs should not exceed 200m in length and incorporate a minimum 12 m outer radius turning circle - APZs proposed on public land (ecological buffer & Fraser Drive), Council have not agreed to take on responsibility.

Summary of Department of Planning Comments 18 April 2008 and subsequent response.

Further Comments by DoP (Sally Munk)
30 April 2008

1.0 Housing Density/Type

1.1 Comment

Justification for variations to development standards has not been provided, nor has Council's views been sought.

Main issues:

- 450 sq metre blocks;
- Duplex Lots:
- Integrated Housing Lot

Response

Section 1.6 and 3.9 of the Preferred Project Report addressed the non-compliances to the relevant development standards. Can the Department please clarify if the justification provided is not of sufficient detail or does not accept the arguments provided.

Notwithstanding, Further to the Department's advice of 21 April 2008, we will amend the plan to comply with the 450 sq metre lot standard.

Further, in light of Council's advice we are seeking an additional meeting with Council to determine the acceptance of the 600 metre duplex lot and the integrated housing superlot.

Nonetheless we understand that DCP does not determine whether a development is prohibited. Can the Department please clarify their comments with regard to the duplex lots being prohibited development.

- The subdivision layout must be amended to comply with the 450sqm minimum lot size standard.
- The Department does not support the 600sqm duplex lots. The minimum lot size is not a prohibition, however, it is a significant variation from the DCP development standard and will set an undesirable precedent for future development in the Tweed.

1.2 Comment

Confirm the use of the superlot is still part of the application

Response

A description of the proposal is provided in the "Project Amendments Project Description" page 2 of the Preferred Project Report. We confirm that the proposal requests the approval of a 2.46 hectare lot that will provide for a future integrated housing development. Please clarify if this description requires more detail?

- No further description re the integrated housing lot is required.
- However, it is assumed that the release of subdivision stages will occur in numerical order. Please confirm.

1.3 Comment

What do the blue dotted lines represent on Drawig No.06072 CON05a dated 12 March 2008.

Response

Footpaths.

- Noted

Subdivision Design

2.1 Comment

The Department does not support the revised road layout of Road No.4 and Merlot Court. Road No.3 needs to be connected to Road No.4 and Merlot Court to provide connectivity throughout the development.

Response

We refer to the submission from Council, dot point 16, Traffic Restriction. In undertaking further investigation it was determined that we could not limit Traffic use of the Road No.4 to ensure that only 25 Lots access Merlot Court.

It should be noted that this limitation is a consequence of the current construction width of the existing Merlot Court. In order to provide connectivity we would need to upgrade the whole of Merlot Court to accommodate the increase in traffic. Please refer to section 3.2.5 of the Eppel Olsen Report, provided as Appendix J of the Preferred Project Report.

We not the concerns regarding connectivity. Our response to Council's dot point 19 addresses how we have responded to pedestrian connectivity by upgrading pedestrian links to the site and provide an additional public transport stop.

- Council has confirmed that the width of Merlot Court is not a restriction on the traffic capacity of Merlot Court. This road was designed to be connected to the Fraser Drive site and can therefore be connected to Road No.4 and/or Road No.3. The subdivision layout should be amended accordingly as this will improve the overall subdivision design and traffic connectivity.

2.2 Comment

The Department does not support dual frontage lots on these roads.

Response

Please refer to section 3.10 of the Preferred Project Report. We have noted that there are no lots with dual frontage of the south west slope section of the proposal.

- Noted.

2.3 Comment

Road No.4 now ends in a cul-de-sac which is in excess of 300m in length. The design does not comply with requires set out in Council's DCP, Planning for Bushfire Guidelines, and Coastal Design Guidelines. How does this improve urban design.

Response

We will liaise further with Patrick Knight, Tweed Shire Council and provide further detail in our response.

- Refer comment at 2.1 above.

2.4 Comment

The intersection of Merlot Court needs to be upgraded to cater for the increased traffic generated by the development.

Response

Please refer to our response to 2.1. Nonetheless we will liaise with Council.

- Refer comment at 2.1 above.

2.5 Comment

It is not acceptable to assume Council will accept dedication of all roads, parks, open space and road reserves. Council must agree to this in writing now.,,,This is particularly important as not all roads and parks have been designed to meet Council's standards.

Response

We are drafting to Council seeking their written acceptance of all items mentioned. We provide a copy of this letter to the Department.

- Noted. Copy of letter to be provided.

2.6 Comment

In relation to the proposed sound attenuation structure in the Fraser Drive Road reserve – is the proponent implying that it will be up to Council to build the structure. The question asked is whether the placement of the structure will reduce available space for the proposed future expansion of the road and whether Council is satisfied with the proposed extent/size of the attenuation structure.

Is Council happy for noise wall to be on the road reserve?

Response

Please refer to our project description, the noise attenuation wall does not form part of this application.

We note the recommendations of the Acoustical Assessment submitted as appendix 7 of the Environmental Assessment Report. Council have reviewed this and we have noted Council's comments as attached in your email of 18 April 2008.

We note Council have not raised the provision of the acoustic barrier within the Fraser Drive reserve. Further we do not believe that the 10m buffer will accommodate the width of the future extension. It is likely that the adjacent Pioneer Park will need to provide additional land.

Nonetheless we will raise this specific issue with Tweed Shire Council in the above mentioned correspondence.

- The relevant section of the noise attenuation structure must be constructed prior to the release of a subdivision certificate for each stage of the development. This will be required as a condition of any approval granted.
- Council does not support the 4-6m wide mound in the 10m wide road reserve being dedicated to Council. It is understood that preliminary design plans have been provided to Conics to determine finished centreline road levels.
- Further acoustic assessment is required to determine the actual height of the proposed sound attenuation structure, based on Council's preliminary designs.
- The plans should be amended to show the noise attenuation structure and mound within the site boundary, and not on the land to be dedicated to Council.

Ecological Buffer

3.1 Comment

As per the Department's correspondence 18 April 2008.

Response

We note the Department's comments and will revise the nominated section. Please note however the Ecological Buffer Report does reference the attendance of the Department at an on-site meeting.

We would appreciate if the Department could provide a written overview of the methodology utilise in responding to the Ecological Buffer Report . This response will then be reflected in our assessment. Please note we understand that the Department's position was only informed by the verbal comments of Geoff Sainty and the internal comments of the Department's ecologist. We have not received any indication that Geoff Sainty has provided a written response to the Ecological Assessment.

We note that comments we have received to date on this matter is the unnamed written response from the Department and a collection of other State Agencies correspondence. It was not clear that those who attended the site inspection has contributed to the final written position.

- The Department will not provide a written overview. The process is followed was clearly explained to Conics.
- The Department engaged an independent wetland specialist, Geoff Sainty, to review the Cardno report and inspect the site. Geoff provided a detailed report to the Department that supports our position of a 40m vegetated buffer with a 20m APZ outside of the ecological buffer. It was never intended that this independent report would be provided to the proponent.

- A detailed Vegetation Management Plan will be required as a condition of any approval granted. This will be prepared to the satisfaction of the Department, in consultation with Council. This will include management of matters such as weeds, rehabilitation/revegetation, bushfire management and ongoing maintenance.
- A condition of approval will require the proponent to be responsible for these areas for a period of 5 years before handing over to Council.

Stormwater

4.1 Comment

MUSIC Modelling has not been undertaken to demonstrate the effectiveness of the proposed stormwater wetland and other treatment measures in terms of stormwater quality or quantity.

Response

Please refer to Appendix A, page 3 of correspondence dated 27 September 2007,

“...The effectiveness of the constructed wetland cannot be determined through MUSIC modelling,

Further Appendix B, correspondence dated 27th September 2007, provides further evidence of the effectiveness of the constructed wetland as it is built in accordance with the deemed to comply criteria of Tweed Shire Council.

- **Noted.**

4.2 Comment

The Integrated Housing allotment does not drain to the stormwater treatment pond. How will stormwater from this lot be managed to ensure protection of the SEPP 14 Wetland and EECs. The provision of a single GPT is unlikely to achieve the required stormwater treatment quality objectives.

Response

As stated in the Preferred Project Report, the development of the integrated housing lot will be the subject of a future application to Council. Issues regarding the effectiveness of the stormwater management can be addressed as part of that application.

- A condition of any approval given will require that stormwater treatment for this area be designed in accordance with Council's Subdivision Design Manual and Stormwater Quality Specifications.

4.3 Comment

Figure DA20 dated 8 December 2006 has not been updated to reflect the revised layout. Are the detention basin and open space area adjacent to Fraser Drive still relevant?

Response

Please note that in our Environmental Assessment Report, the detention basin adjacent to Fraser Drive is a dry detention basin and is not a Local Park. However to improve visual amenity we have landscaped the area to appear as a park.

The Plan will be updated.

- **Noted. Plan to be amended.**

Bushfire Assessment

5.1 Comment

Council has not agreed for the proponent to use the Fraser Drive road reserve or the ecological buffer as an APZ.

Response

We note Council's response that further justification is required. We will liaise with Council on this matter and amend our report accordingly.

- **Noted. Proponent to liaise with Council and amend report.**

5.2 Comment

The Boskae Report does not refer to the midden.

Response

We will amend the report accordingly.

- **Noted. Report to be amended.**

5.3 Comment

The Boskae Report recommends underground transmission lines. Is this proposed?

Response

Our statement of commitment includes a commitment to implement the recommendations of the Bushfire Report. Recommendations are provided for below and above ground transmissions. We are yet to determine the how electricity will be serviced.

- **It is proposed to place a condition of approval on any approval granted that requires electricity transmission lines in Stages 3B and 2B to be underground for Lots 112-135.**

5.4 Comment

Proposed Length of Merlot Court does not meet the 200m maximum length for cul de sacs in Planning for Bushfire Protection.

Response

Noted, we shall review and amend accordingly.

- Refer comment at 2.1 above.

Geotechnical**6.1 Comment**

As per Department's comments dated 18 April 2008.

Response

Noted, Our response will be updated.

- Noted. Plans and Statement of Commitments to be amended accordingly.

Aboriginal Cultural Heritage**7.1 Comment**

Is the Midden in Lot 135 or in the Fraser Drive Buffer.

Response

Upon the midden's discovery it was located in Lot 135. Subsequent to the discovery, the midden area was excised from Lot 135.

- Noted

7.2 Comment

The amended layout has not been amended to reflect the location of the midden.

Response

Please refer to the above response to comment 7.1, The scale of the proposed layout and the size of the midden, do not make any change discernible. We will provide more detailed drawing to demonstrate this.

- Noted. Plans to be amended.

7.3 Comment

Amend Statement of Commitments to include preparation of Cultural Heritage Management Plan

Response

Please refer to p88 of the Preferred Project Report. The SoC does include this.

- Noted

Comment

- Support of LALC still to be confirmed. Report to be amended.

7.4 Comment

The Everick Report requires that all future drawings, maps and engineering plans reflect the location of the midden. This has not been done.

Response

This recommendation follows approval of the subdivision, and reflects the detailed engineering works that will be undertaken in the future. Nonetheless we will amend all plans.

- **Noted. Plans to be amended.**

7.5 Comment

The location of the midden should be reflected in the subdivision plan.

Response

Noted. This was an oversight, The plan will be amended,

- **Noted. Plans to be amended.**

7.5 Comment

Drawing No. 16104 B dated 18-07-07 is marked as preliminary.

Response

We will remark the drawing for clarification.

- **Noted. Plans to be amended.**

Socio Economic Report

8.1 Comment

DoH not satisfied with SEIA. Conditions of consent are proposed.

Response

We prepared the SEIA in accordance with the Department's comments. Could the Department please advise if DoH is not satisfied with the criteria used to prepare the report. If so is there particular criteria that we need to respond to.

We would request that any conditions imposed in this regard be informed by the Department's legal branch so as to determine if such conditions are "reasonable and relevant".

- **DoP to consider if any conditions are necessary.**

Flooding

9.1 Comment

As per the Department's comments dated 18 April 2008

Response

The Preferred Project Report will be amended to address the Department's comments.

- Council have advised that the modelled PMF level will not be available for another 2-3 months. As the best available information is the "Extreme Event" modelled by Council in the 2005 Flood Study, please consider this in the amended Preferred Project Report in terms of evacuation for residents.

Flora and Fauna

10.1 Comment

The commonwealth Department of Environment, Water and Heritage are required.

Response

We will seek the comments of the DEWH and include the Preferred Project Report.

- **Noted. Report to be amended.**

Statement of Commitments

11.1 Comment

As per the Department's comments dated 18 April 2008

Response

Noted. The Preferred Project Report will be amended accordingly.

- **Noted. Report to be amended.**

General

12.1 Comment

Has Council given landholders consent, what part of the site do they own.

Response.

Please refer to Appendix M, Council correspondence dated 2nd May 2007.

- **Noted.**

12.2 Comment

Amend Project description to incorporate construction of associated infrastructure.

Response

Noted. We amend the project description.

- **Noted. Report to be amended.**

Pradesh Ramiah

From: Sally Munk [Sally.Munk@planning.nsw.gov.au]
Sent: Thursday, 8 May 2008 5:24 PM
To: Pradesh Ramiah
Subject: Fraser - Draft Conditions
Attachments: MP06_0243 Part 3A_Schedule 2.pdf

Pradesh

I have reviewed the way in which I have presented the staging for Fraser Drive in the draft conditions. I think this is clearer in terms of Part A and Part B.

Any word on a timeframe yet?

Sally

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SCHEDULE 2

RECOMMENDED CONDITIONS OF APPROVAL

MAJOR PROJECT NO. 06_0243

PART A—ADMINISTRATIVE CONDITIONS

A1 *Project Description*

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

- 1) Boundary adjustment of Lot 2 in DP 1000385 and Lot 9 in DP 1039569
- 2) Subdivision of Lot 9 in DP 1039569 into two master lots (Part A and Part B of the subdivision);
- 3) Subdivision of Master Lot Part A into 77 residential lots in 3 stages;
- 4) Subdivision of Master Lot Part B into 73 residential lots in 3 stages;
- 5) Creation of a super lot for a future integrated housing development;
- 6) Creation of an open space lot that contains an artificial wetland for the purposes of stormwater management;
- 7) Creation of an open space lot for the retention of the SEPP 14 Wetland and buffer area;
- 8) Dedication of a 10m wide buffer for the future upgrade of Fraser Drive;
- 9) Site rehabilitation works to stabilise current land slip hazards; and,
- 10) Construction of roads, revetment structures and drainage infrastructure.

A2 *Staging*

The project is to be constructed in seven (7) stages, generally as follows:

- (1) Stage 1 comprises:

- (a) Boundary adjustment of Lot 2 in DP1000385 and Lot 9 in DP 1039569, Fraser Drive, South Tweed; and,
- (b) Subdivision of Lot 9 in DP 1039569 into two master lots (Master Lot Part A and Master Lot Part B).

Master Lot Part A is to be subdivided in three (3) stages:

- (2) Stage 1A has an area of 3.008 hectares comprising:

- (a) 1 integrated housing superlot;
- (b) 4 low density residential allotments;
- (c) 6 duplex allotments;
- (d) 1.712ha of water quality open space;
- (e) 5.74 hectares of SEPP14 wetland open space conservation area;
- (f) 190m of 18m wide road (Road No.1 & Road No.2); and
- (g) 130m of 15m wide road (Road No.1 & Road No.2).

- (3) Stage 2A has an area of 2.591 hectares comprising:

- (a) 31 low density residential allotments;
 - (b) 1 duplex allotment; and,
 - (c) 323m of 15m wide road (Road No.1).
- (4) Stage 3A has an area of 3.116 hectares comprising::
- (a) 27 low density residential allotments;
 - (b) 8 duplex allotments;
 - (c) 0.25 hectares of park and recreation (functional) open space;
 - (d) 0.0385 hectares of common property open space;
 - (e) 359m of 15m wide road (Road No.2);
 - (f) 191m of 6.5m wide road (Laneway No. 1 & Laneway No. 2); and
 - (g) A four-way signalised control intersection at the northern development access to the Fraser Drive, including a 20m left turn lane and right turn lane on Fraser Drive.

Master Lot Part B is to be subdivided in three (3 stages):

- (5) Stage 1B has an area of 5.698 hectares comprising:
- (a) 20 low density residential allotments;
 - (b) 334m of 13m wide road (Road No.3); and,
 - (c) Right of way access to Lots 159-160.
- (6) Stage 2B has an area of 10.495 hectares comprising:
- (a) 26 low density residential allotments;
 - (b) 0.375 hectares of water quality open space;
 - (c) 0.0915 hectares of park and recreation (functional) open space;
 - (d) 399m of 13m wide road (Road No.3);
 - (e) Right of way access to Lots 112-115; and,
 - (f) Right of way access to Lots 154-156.
- (7) Stage 3B has an area of 5.519 hectares comprising:
- (a) 27 low density residential allotments;
 - (b) 0.2726 hectares of park and recreation (functional) open space;
 - (c) 535m of 15m wide road (Road No.4 & extension of Merlot Court); and,
 - (d) Right of way access to Lots 141-145.

It is noted that staging may vary in timing according to market forces.

A3 Project in Accordance with Plans

The project will be undertaken in accordance with the Environmental Assessment and the following drawings:

Architectural (or Design) Drawings prepared by <i>Conics (Brisbane) Pty Ltd</i>			
Drawing No.	Revision	Name of Plan	Date
20934-5H		Proposed Layout Fraser Drive Tweed Heads	5 March 2008

06072 CON05a		Proposed Layout Fraser Drive Tweed Heads	12 March 2008
Engineering Drawings prepared by Cardno (Qld) Pty Ltd			
Drawing No.	Revision	Name of Plan	Date
7214/29/01-DA01	-	Site Plan	8 December 2006
7214/29/01-DA02	-	Existing Features and Constraints Plan	8 December 2006
7214/29/01-DA03	-	Lot Layout and Staging Plan	8 December 2006
7214/29/01-DA04	-	Proposed Finished Surface Contours Plan	8 December 2006
7214/29/01-DA05	-	Site Sections – Sheet 1	8 December 2006
7214/29/01-DA06	-	Site Sections – Sheet 2	8 December 2006
7214/29/01-DA07	-	Site Sections – Sheet 3	8 December 2006
7214/29/01-DA08A	Rev A	Slope Analysis Layout Plan	17 December 2007
7214/29/01-DA09	-	Cut and Fill Depth Contours Layout Plan	8 December 2006
7214/29/01-DA10	-	Erosion and Sediment Control Plan	8 December 2006
7214/29/01-DA11	-	Road Layout Plan	8 December 2006
7214/29/01-DA12	-	Longitudinal Section Road No.1	8 December 2006
7214/29/01-DA13	-	Longitudinal Section Road No.2 and Laneway No.1	8 December 2006
7214/29/01-DA14	-	Longitudinal Section Road No.2 and Merlot Court	8 December 2006
7214/29/01-DA15	-	Longsection Section Road No.3	8 December 2006
7214/29/01-DA16	-	Longsection Section Road No.3	8 December 2006
7214/29/01-DA17	-	Longsection Section Road No.4	8 December 2006
7214/29/01-DA18A	-	Typical Road Cross Sections	17 December 2007
7214/29/01-DA19	-	Pre Development Stormwater Network	8 December 2006
7214/29/01-DA20	-	Post Development Stormwater Network	8 December 2006
7214/29/01-DA21	-	Proposed Stormwater Drainage Network	8 December 2006
7214/29/01-DA22	-	Proposed Sewer Reticulation Network	8 December 2006
7214/29/01-DA23	-	Proposed Water Reticulation Network	8 December 2006
7214/29/01-DA24	-	Combined Services Plan	8 December 2006
7214/29/01-DA25A	Rev A	Water Treatment and Detention Basin Details	19 December 2007
7214/29/01-DA028	-	Proposed Traffic Calming for Road 3	8 December 2006
7214/29-01	Rev A	Wet Basins Typical Sections and	18 December 2007

		Details	
Traffic Design Drawings prepared by <i>Cardno</i>			
Drawing No.	Revision	Name of Plan	Date
Sketch No.13	Rev A	Service Vehicle Turn Paths	5 December 2007
Sketch No.14	Rev A	Proposed Pedestrian Linkage Footpath and Bus Stop Locations	5 December 2007
Landscape Drawings prepared by <i>Vivo Design</i>			
Drawing No.	Revision	Name of Plan	Date
71887_D_CP_01_02	-	Landscape Concept Plan	7 December 2006
71887_D_CP_02_02	-	Entry Statement Concept Plan and Elevations	7 December 2006
71887_D_CP_03_02	-	Part A – Park Concept Plan and Character Images	7 December 2006
71887_D_CP_04_02	-	Part B – Park Concept Plan and Character Images	10 December 2007
71887_D_CP_05_02	-	Streetscape Types – Typical Sections	7 December 2006
71887_D_CP_06_01	-	Noise Wall Concept Details and Character Images	10 December 2007
71887_D_CP_07_02	-	Proposed Plant Palette	7 December 2006
Survey Drawings prepared by B&P Surveys			
Drawing No.	Revision	Name of Plan	Date
15975 D	Rev A	Location Survey of Midden Site at the Intersection of Fraser Drive and Champagne Drive, Tweed Heads South	30 January 2008
16104 B	-	Proposed Subdivision of Proposed Lot 11, Fraser Drive, Tweed Heads South	18 July 2007
12512 B	Rev A	Proposed Boundary Adjustment of Lot 2 in DP 1000385 and Lot 9 in DP 1039569 Fraser Drive, Tweed Heads South	7 May 2003

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* prepared by CONICS Pty Ltd dated March 2008;
- (3) Correspondence prepared by Morrison Geotechnic Pty Ltd to MFS Diversified Group dated 31 October 2007, included as Appendix C to the proponent's Preferred Project Report.

A5 *Inconsistency between documents*

In the event of any inconsistency between conditions of this approval and the drawings/documents referred to above, the conditions of this approval prevail.

A6 *Certification & Staging*

1) Construction Certificate

A Construction Certificate must be obtained from either the Council or an accredited certifier for Stages 1A-3B of the subdivision before any subdivision work can commence for Stages 1A-3B.

2) Subdivision Certificate

A Subdivision Certificate pursuant to Section 109C(1)(d) must be obtained from the Council or an accredited certifier for each stage of the subdivision before the registration of a plan of subdivision under Division 3 of Part 23 of the *Conveyancing Act 1919* for any allotments in any stage within the subdivision.

3) Staging of the Development

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

- a) Stage 1
- b) Stage 1A
- c) Stage 1B
- d) Stage 2A
- e) Stage 2B
- f) Stage 3A
- g) Stage 3B

It is noted that staging may vary in timing according to market forces.

CONDITIONS TO BE SATISFIED FOR STAGE 1

PART B—PRIOR TO ISSUE OF SUBDIVISION CERTIFICATE FOR STAGE 1

S1B1 *Section 88B/E Instruments*

The proponent is to submit with the final plan of subdivision, copies of any instruments under section 88B or E of the *Conveyancing Act 1919* relevant to any restrictive covenants, easements or right of way created by or affected by the subdivision. Council is to be nominated on the plan of Subdivision as the sole party to modify or extinguish the restriction unless otherwise specified in conditions.

S1B2 *Part 4A Certificate*

Prior to the registration of final subdivision plan in the Office of the Registrar-General, a Part 4A certificate shall be obtained under section 109D(1)(d) of the *Environmental Planning and Assessment Act 1979* for each stage of the subdivision.

S1B3 *Registration of Easements*

Prior to the issue of the subdivision certificate, the Proponent shall provide to the PCA evidence that all easements required by this consent, approvals, and other consents have been or will be registered on the certificates of title.

S1B4 *Section 149 Certificate*

The proponent shall request Council to place a note on the Section 149 certificate for the proposed lots indicating that the land is subject to geotechnical constraints and must be developed in accordance with Council's controls.

CONDITIONS TO BE SATISFIED FOR STAGES 1A – 3B

PART B—PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE FOR STAGES 1A-3B

Remediation / Earthworks

B1 *Landslip Remediation Plan*

- 1) A detailed Landslip Remediation Plan shall be submitted to Council and the Certifying Authority for approval for the remediation of all landslips affecting Stages 1B, 2B and 3B prior to the issue of a construction certificate for any of these stages.
- 2) The Landslip Remediation Plan shall provide detail of when the remediation work will occur and shall be consistent with the recommendations in the Morrison Geotechnic Pty Ltd letter to MFS Diversified Group, dated 31 October 2007, as submitted with the proponent's Preferred Project Report.
- 3) Remediation of the landslips across the western portion of the site must be completed prior to any subdivision of Stages 1B, 2B or 3B, and from a geotechnical slope stability perspective, as soon as possible.

B2 *Cut and Fill levels*

Cut and fill levels for each stage 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.

B3 *Site Regrading*

Site regrading undertaken for all stages of the project must be undertaken in accordance with *Tweed Shire Council Development Design Specification D6 – Site Regrading*. Evidence of compliance with this specification must be provided to Council for approval prior to issue of the construction certificate for each stage of the project.

B4 *Filling of the Site*

- 1) 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 must be provided 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.
- 2) Any fill earthworks to be undertaken on the site shall be carried out in accordance with the placement and compaction of fill described in AS 3798. A practicing geotechnical engineer shall advise the standard of the filling and compaction in accordance with AS 3798 such that the work will be suitable for the intended purpose.
- 3) All lots which have been filled shall require a certification from a practicing geotechnical engineer that each lot is suitable for the intended purpose. The certification shall also provide a classification for each lot in accordance with AS 2870

From: Pradesh Ramiah
Sent: Monday, 11 August 2008 11:51 AM
To: Sally Munk; Rowena Michel
Cc: Alaister Macrae; Luke Jones; Murray Simpson; Peter Mangels; Tessa Newbold
Subject: RE: FW: Fraser Drive - Reponse to Planners Queries

Hey Sally,

Further to our meeting of the 23 April 2008, we meet with Council 29 April 2008, who advised us they supported the originally proposed through link to Merlot Court (as per our exhibited plan). Further the change, the road length from the intersection to the cul de sac, is approximately 205 metres in length, as we've measured off CAD. This is generally in accordance with Council's DCP section A5.4.10 Movement Network, dot points 8 and 9, reproduced below:

- *Where constrained by landform alteration limits, the maximum length of cul-de-sacs may be increased to 200m and 24 dwellings and consideration may be given to modification of road connectivity requirements.*

- *Where constrained by landform alteration limits, the maximum length of cul-de-sacs may be increased to 200m and 24 dwellings and consideration may be given to modification of road connectivity requirements, if this leads to better urban design outcomes*

As this was consistent with our exhibited plan, we have not amended our Bushfire Report to address this issue. However, we note, paragraph 7, page 20 of the Bushfire Assessment Report provided as Appendix E of our report dated 18 March 2008, which states,

'Roads will be through roads, however, where dead end roads are greater than 200m in length, as will be the case with the road constructed off Hillcrest Avenue, a minimum 12m radius turning circle will be incorporated. Such roads will be clearly sign posted as dead ends.'

This is in reference to the 2006 Guidelines. We believe this should satisfy all parties.

regards

Pradesh

From: Sally Munk [mailto:Sally.Munk@planning.nsw.gov.au]
Sent: Monday, 11 August 2008 11:32 AM
To: Pradesh Ramiah; Rowena Michel
Cc: Alaister Macrae; Luke Jones; Murray Simpson; Peter Mangels; Tessa Newbold
Subject: Re: FW: Fraser Drive - Reponse to Planners Queries

Thanks Pradesh

It would appear that the key concerns raised by the Department have been addressed in the final subdivision design, subject to detailed assessment of the amended PPR. However, the bushfire assessment will need to be very clear in justifying a dead end road that exceeds 200m in length (refer p21 of *Planning for Bushfire Protection 2006*). We discussed this at our meeting with Murray Simpson on 23 April 2008 and I understood that you were going to look at changing the road design in this area to meet this design requirement. Alternatively, if the 200m requirement cannot be met, the performance criteria must be achieved to the satisfaction of the RFS.

Thanks
Sally

>>> "Pradesh Ramiah" <pradesh.ramiah@conics.com.au> 11/08/2008 09:54 >>>
Hi Sally and Rowena,

attached is our layout plan for the site. This is the plan we hope to submit to the Department. Please note the amendments to the Seaview Park and layout for Stages 1A and 3A in accordance with our discussions. I've just noticed a couple of minor errors that we'll correct, however for your purposes of reviewing the stormwater measures this plan should be sufficient

As you can see we've only identified the corridor for the overflow channel. There's not much else we can do until the detailed design phase. Our landscape concept plan will give an impression what the final outcome will look like, however we will only get those plans this afternoon. We've not nominated a crossing location for the Integrated Lot, mainly because this will be influenced by the future design and layout and it is something that can be adequately conditioned.

Further, I've forwarded the email from our engineers in response to the Department's questions. I'm sorry for not sending this through earlier.

At the end of the day, the provision of the overland flow is at Council's request (a requirement not reflected in the DCP). We would prefer that our original proposal of the stand alone underground pipes be supported, however, we are attempting to resolve this issue in order to submit our amended Report. We note that the outcome proposed, while not our preferred approach, does address Council's request and at least provides us the opportunity to still maintain a satisfactory entry statement. We would encourage any further details regarding the final design be addressed as a condition of consent.

If you want cross sections for the drainage profile, please nominate the locations ASAP. We hope to have our final report submitted tomorrow afternoon.

regards

Pradesh

From: Alaister Macrae [mailto:alaister.macrae@cardno.com.au]
Sent: Thursday, 7 August 2008 1:04 PM
To: Pradesh Ramiah
Cc: 'Murray Simpson'
Subject: FW: Fraser Drive - Reponse to Planners Queries

Response as below.

Alaister Macrae

Phone:07 5539 9333

Fax:07 5538 4647

Email:alaister.macrae@cardno.com.au

Web:www.cardno.com.au

From: Carlo De Byl [mailto:carlo.debyl@cardno.com.au]
Sent: Thursday, 7 August 2008 11:08 AM
To: 'Alaister Macrae'
Cc: 'Rod Barry'
Subject: Fraser Drive - Reponse to Planners Queries

Cardno Job No. 7214/29-1

In response to the first query, it is proposed to incorporate a retaining wall structure along the northern side of the proposed emergency flood relief channel, adjacent to the proposed medium density site, in order to minimise the loss of developable area available within the medium density site. We note that it is proposed to utilise a combination of retaining walls and batters to reduce the maximum height of the retaining wall structure to 1200mm.

In regard to the second query, we refer to the following information provided in the previous correspondence.

We note that a bridge or culvert crossing will be provided over the flood relief overland flow path in order to access the proposed medium density site located within the northern part of the development. The deck level of the access road to the medium density site will be sufficiently above the 100 year ARI regional flood inundation level in order to provide the required emergency egress.

In addition to this, the proposed access road for the medium density site will connect up with the emergency access route previously indicated for the lower portion of the proposed subdivision.

Regards,

Carlo de Byl

Phone:07 5539 9333

Fax:07 5538 4647

Email:carlo.debyl@cardno.com.au

Web:http://www.cardno.com.au

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