



Woollooware Bay Town Centre section 75W (Landscaping Amendments) – Further Response to Submissions July 2017

Comment	Proponent's Response
Response to Department of Primary Industries	
<p>The DPI Fisheries <i>Policy and guidelines for fish habitat conservation and management (2013)</i> is the most appropriate policy for determining the activities allowable within the vegetated riparian corridor for this site.</p>	<p>The <i>Policy and guidelines for fish habitat conservation and management (2013)</i> (DPI Policy) is a tool for assessment of proposals affecting fish habitats and outlines requirements for the following types of activities:</p> <ul style="list-style-type: none"> ▪ Building a jetty, pontoon or placing mooring. ▪ Placing a boat ramp or boat shed. ▪ Repairing or replacing a floodgate. ▪ Building a waterway crossing. ▪ Building or repairing a damn, weir or regulator. ▪ Planning a new subdivision. ▪ Dredging and mining activities. ▪ Stabilising a riverbank or coastal foreshore. ▪ Opening up a coastal lagoon. ▪ Reporting a fish kill. ▪ Using explosive in waterways. <p>The proposed landscape concept plan does not involve any of the above activities, which are activities that generally take place directly within a fish habitat and are high impact. The DPI Policy also contains guidelines for foreshore works and waterfront development and is generally written for activities that require a permit from NSW DPI, including activities such as dredging or construction of jetties or marinas, pontoons, slipways, boat ramps, groynes and seawalls or where there is a requirement to harm marine vegetation. The proposed landscaping modification does not include any of these activities. It is noted that where works to foreshores are proposed, the policy states it will consider exemptions to the guidelines where the works are "<i>clearly in the public interest (e.g. emergency access, state significant development or infrastructure...)</i>" and where the "<i>proposed works...are unlikely to have a significant impact.</i>" The proposed modification is considered to be clearly in the public interest and will not have any significant impact, as demonstrated in the Ecological Assessment submitted with the original Response to Submissions report.</p> <p>It is also noted that the DPI Policy recommends a 100 metre setback to TYPE 1 aquatic habitats such as Towra Point Aquatic Reserve, which was considered as part of the Concept Plan approval and determined by the PAC as not being appropriate on this site.</p> <p>Overall, it is considered that the intent of the DPI Policy is to regulate activities in or adjacent to aquatic habitat that propose a direct intervention in the habitat or are of high impact. The proposed landscaping modification seeks to provide riparian planting and recreation infrastructure alongside mangrove rehabilitation, which is not considered to be consistent with the types of activities contemplated by the policy. The proposed modification is generally consistent with the objectives of the policy, where applicable, as seeks it to provide a buffer to the aquatic reserve and the fish habitat therein.</p>

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DPI considers that condition B2, of the previously approved Concept Plan for MP10_0229 is appropriate as it is.	Noted. This matter is addressed in Section 2.1.2 of the original RfS Report. The width and composition of the buffer will enable a beneficial ecological outcome to be achieved on the site and is a significant improvement on existing conditions where no riparian buffer currently exists.
The maps and plans provided by the proponent should be amended to reflect the correct Mean High Water (MHW) mark, as determined by the Department of Industry – Lands and Forestry.	The Mean High Water Mark is mapped as per the registered survey. RMS is the authority responsible for administering all land below the Mean High Water Mark in Botany Bay, including Woolooware Bay, and approval has been granted by RMS that the northern boundary and MHWM is correct.
All proposed turfed areas, and playgrounds should be located wholly outside of the 40 metre riparian corridor.	The Landscape Concept Plan locates the majority of structures outside the inner riparian zone and has provided appropriate offset planting. This matter is address in Section 2.2.2 of the original RfS Report.
No proposed dimensions have been provided for the width of the extended access road. The pathway and access road widths should be constructed to the minimum requirement and any pathways or roadways in the 40 m riparian setback should be constructed of permeable materials.	The Indicative Drawings submitted with the second RfS provide detail of all components of the foreshore landscaping at scale, including the extended access road. All paths and access roads are provided and design in accordance with the relevant Australian Standards and will be to the satisfaction of both Ausgrid and Council. All pathways will be constructed of permeable materials and will be detailed in the future separate Development Application. In general, bicycle paths shared with Ausgrid access will be 4 metres and 3 metres, whilst the bicycle path across the bridge will be 2.5 metres.
DPI considers that battering of the banks along the drainage channel with natural materials is preferable to sheet piling. The proponent should provide detailed justification for why sheet piling is proposed over the use of natural materials.	<p>Sheet piling is proposed as part of the Stage 3 Development Application. Calibre Engineering have confirmed that work undertaken to provide a batter would risk exposing existing electrical cables and require replacement of the cables and electrical kiosk. In addition to this, work required to provide a batter would also risk exposing contaminated fill material and would necessitate further excavation in order to provide a new capping layer over the fill. These works are deemed by Calibre to create a high risk of contamination to the existing stormwater channel and the aquatic environment of Towra Point Aquatic Reserve. Providing a batter would also create maintenance issues as tidal movements would distribute debris and litter along the channel, as currently occurs in the existing stormwater channel. It is considered that this issue would be exacerbated by the large surface area that a batter requires, in contrast to the proposed sheet piling where debris is not able to accumulate. A copy of the letter prepared by Calibre and submitted to Council as part of the Stage 3 DA is provided at Attachment F of the covering Response to Submissions letter.</p> <p>A number of design options have been investigated to mitigate the visual impact of the proposed sheet piling, including incorporating planting along the top of the sheet piling that includes ground cover and other similar vegetation that will spill over the wall and stepping the sheet piling so that planting can be incorporated between each step.</p>
Any riparian offsets required due to the proposed activities of the modification should be within the project site.	Riparian offset planting is provided both within the site and on land immediately adjoining the riparian buffer to the north of the MHWM. The offset planting and rehabilitation works proposed achieve the intent of offset planting and the overall NSW Office of Water <i>Guidelines for riparian corridors on waterfront land</i> (NOW Guidelines), which is to rehabilitate native vegetation in riparian corridors. This matter is addressed in Section 2.2.2 of the originally submitted RfS and the subsequent RfS letter. In addition to this, it is noted that RMS has provided 'Permission to Lodge' on the basis that mangrove rehabilitation works will take place on their land.

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<p>Due to the existence of the project site adjacent to the Towra Point Aquatic Reserve, the Department of Primary Industries (DPI) considers that the DPI Water (formerly NSW Office of Water) <i>Guidelines for Riparian Corridors on Waterfront Land (2012)</i> are not the appropriate guidelines for determining the makeup of the vegetated riparian corridor. The DPI Fisheries <i>Policy and guidelines for fish habitat conservation and management (2013)</i> is the appropriate document in this case and should be applied in conjunction with the previously approved Concept Plan.</p>	<p>This matter is addressed above and notes that the DPI Policy is generally not applicable to the proposed landscape concept plan.</p>
<p>DPI considers that condition B2, of the previously approved Concept Plan for MP10_0229 should be maintained as it is, and that application of this condition in accordance with Fisheries policy requires the minimum setbacks of 40 metres and 35 metres to consist of uninterrupted riparian vegetation.</p>	<p>This matter was addressed at Section 2.1.2 of the originally submitted Response to Submissions report. The width and composition of the buffer will enable a beneficial ecological outcome to be achieved on the site and is a significant improvement on existing conditions where no riparian buffer currently exists.</p>
<p>DPI considers that the primary objective of the riparian plantings adjacent to Towra Point Aquatic Reserve is to return saltmarsh to the site and therefore enhance the productivity of the Aquatic Reserve. Additional mangrove planting should not occur if this activity requires removal of sediment to achieve an appropriate tidal height for mangrove growth. Instead areas designated in the current application for mangrove planting should be used for additional saltmarsh planting if these areas are currently above the actual MHW mark and at the optimal level for saltmarsh survival. Existing saltmarsh must not be harmed.</p>	<p>It is agreed that the primary objective of riparian planting is to return saltmarsh to the site, however due to the difference between the current high tide level and registered Mean High Water Mark, saltmarsh planting is proposed only above the registered Mean High Water Mark in anticipation of restoring this natural level. If saltmarsh planting were to be provided in the area that is currently above the high tide level (where mangrove rehabilitation planting is proposed), there is a risk that this saltmarsh would not survive once the registered Mean High Water Mark is restored. Existing saltmarsh will not be harmed.</p>
<p>There should be a commitment to plant saltmarsh on this development site as a priority over any other riparian plantings and to formally determine designated saltmarsh areas, including what is required to obtain the optimal levels for saltmarsh survival. Currently the vast majority of saltmarsh planting is proposed offsite on public land and the proportion of saltmarsh planting to the total area of riparian plantings is small.</p>	<p>Where possible, the foreshore levels will be designed and constructed to transition from the existing mangroves to RL 1.2 metres to enable successful establishment of the maximum amount of saltmarsh within the available space. Saltmarsh planting has been provided in all possible locations that are optimal for the survival of the species, comprising 1,090m² or 9% of all riparian planting.</p>
<p>DPI reiterates that the saltmarsh areas are not to be considered a buffer for the mangroves to improve water quality. The runoff into the saltmarsh areas should already be treated.</p>	<p>Saltmarsh planting is not designed to be part of the water quality management system. Stormwater entering the saltmarsh from the development site will have been treated by the bio retention swale for treatment of site runoff from the residential stages. Stormwater discharge that overflows the bio-retention swale will discharge to the stormwater channel via a pipe through the proposed sheet piling. Any site litter would be collected by a gross pollutant trap prior to discharge to the stormwater channel. Detail relating to stormwater management of the site has been provided as part of the Stage 1, Stage 2 and Stage 3 Development Applications.</p>

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The area surrounding the drainage channel requires a vegetated riparian corridor itself, this area is not appropriate to be considered for offset planting. The section of the drainage channel below MHW is part of Towra Point Aquatic Reserve. In addition, as part of a development application that includes flood mitigation works within the drainage channel, DPI has not yet received updated flood plans for this area which could potentially significantly change what is proposed for the drainage channel.	Throughout the approvals process of Woollooware Bay Town Centre, the drainage channel has been defined as a Strahler Order 2 waterway. As a result, a 20 metre setback is required from the channel and this has been approved as part of the Concept Plan. Due to existing structures on the stadium side of the channel, a setback cannot be provided in this location – however, a Statement of Commitment has been included that any future redevelopment of the stadium would incorporate a 20 metre setback. Throughout the approvals process, the area surrounding the channel has not been subject to the NOW Guidelines. It is noted that the NOW Guidelines were released 20 months after the Concept Plan was lodged and as a result there was not an adequate opportunity to incorporate the guidelines into the concept design. The applicant has now taken the opportunity to incorporate the objectives of the NOW Guidelines into the concept design, however is limited in some ways by the building envelopes approved under the Concept Plan and the need to provide appropriate infrastructure to allow access into the site. Flood mitigation works are being resolved as part of the Stage 3 Development Application to Sutherland Shire Council and are unlikely to impact the proposed design of the landscape concept plan.
The proposal seeks to provide riparian offsets outside the development site on land owned by RMS, this is not consistent with DPI policy. Any offset planting required should occur within the project site.	In order to achieve a balanced ecological outcome consistent with the NOW Guidelines, offset planting is located in areas connected to the riparian corridor. Whilst some offset planting is not directly connected to the riparian corridor, it is located in close proximity to achieve an outcome that is consistent with the objectives of the NOW Guidelines to maintain and rehabilitate riparian corridors. It is emphasised that previously <u>no</u> riparian corridor was provided on the site (i.e. it was a bitumen car park and turfed playing fields) and the proposal represents a significant improvement on existing conditions. RMS has granted permission to lodge to the proposed landscape concept plan, and as a result it is considered acceptable that these works are undertaken on RMS land as they will facilitate the objectives of the NOW Guidelines.
Response to Office of Environment and Heritage	
Contrary to the assertion that 'Family Hill' area <i>'was never intended to be included within the considerations of a (riparian) buffer'</i> , the Concept stage determination does not exclude this area. The Planning Assessment Commission made no mention of this matter in its Determination Report but was of the view that <i>'any departure from the 40m buffer...must be minimised. Consequently, the Commission...specified that the 40m buffer may be reduced by no more than 5m for no more than the 70 metre length of the loading dock, on the retail portion of the site'</i> . The total area of the riparian corridor is there 20,490m ² , which includes the 3,065m ² Family Hill area.	Due to the established use of Family Hill as part of the Cronulla Sutherland Leagues Club stadium, the Family Hill area has never been considered as comprising part of the foreshore landscaping. This is discussed in Section 4.1 of the originally submitted RfS Report.
Contrary to the NOW Riparian Guidelines, the inner 50 per cent of the riparian buffer (or vegetated riparian zone [VRZ]) is not proposed to be fully vegetated with native endemic plants. OEH calculates the VRZ is 10,245m ² . While the proponent is proposing to revegetate 9,000m ² of the VRZ (7,910m ² [inner zone planting] + 1,090m ² [inner zone salt marsh planting]), which is 284m ² more than proposed in the first RTS, it is still not meeting the requirement	The inner riparian zone is comprised of salt marsh, riparian planting and pathways. The pathways are necessary to provide access to the Ausgrid easement, as well as to connect the existing foreshore path and boardwalk around the established Family Hill. Section 4.1 of the originally submitted Response to Submissions report discussed the application of the NOW Guidelines and notes that this encroachment into the inner riparian zone is unavoidable. Offset planting is provided to account for these encroachments, consistent with the NOW Guidelines. Whilst the NOW Guidelines envisage encroachments only into the outer riparian zone, Capital Bluestone has sought to achieve an outcome that is generally consistent with the NOW Guidelines by providing offset planting to account for structures within the inner riparian zone.

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of 10,245m ² .	
Contrary to the NOW Riparian Guidelines, non-riparian uses proposed within the outer riparian corridor are not appropriately or adequately offset elsewhere within the development site. A total of 2,955m ² of the outer riparian zone is proposed to be vegetated. OEH calculates that of the 7,290m ² of connected vegetated offset area required outside the riparian corridor only 3,623m ² is proposed.	It is understood that OEH has calculated this requirement based on the inclusion of Family Hill. As noted above, Family Hill has never been included as part of the landscaping area due to its established use on the site. Excluding Family Hill, a full offset of all non-riparian uses is achieved.
With regards to the proposed 1,847m ² of mangrove rehabilitation, OEH considers it cannot be considered an offset area as it is outside the development site, below the mean high water mark (i.e. not 'land'), and owned by Roads and Maritime Services (i.e. not the proponent).	In order to achieve a balanced ecological outcome consistent with the <i>Guidelines for riparian corridors on waterfront land</i> , offset planting is located in areas connected to the riparian corridor, which includes land owned by RMS. RMS has provided permission to lodge for the proposed modification application, and as a result the fact that the mangrove rehabilitation planting is located on land that is owned by a different entity should not inhibit the delivery of an outcome that is generally consistent with the <i>Guidelines</i> and would provide the benefit of improving the ecological value of the site. The proposed location of the mangrove rehabilitation works is the most appropriate location given the conditions that this species is able to grow in and the relationship to the established mangroves. These rehabilitation works are proposed in an effort to improve the overall ecological value of the site and Towra Point Aquatic Reserve and as a result it is considered that the Guidelines should be applied flexibly.
Response to Sutherland Shire Council	
One of the key unresolved matters is the drainage channel and the long-term treatment of this from both flood mitigation and an ecological perspective. At a recent site meeting between Council officers and NSW Department of Primary Industries (DPI Fisheries), the issue of mean high water mark and the area of the channel affected by this, was raised. If the channel is below mean high water mark, the channel and its banks fall within the Towra Point Aquatic Reserve, regardless of the channel being a man-made structure. The proponent has been advised of this concern and has commenced new survey work to ascertain the levels within the channel.	The Mean High Water Mark remains as per the registered survey, whilst evidence indicates that current high tide level is further north into Woollooware Bay than mapped. As a result, the channel is not below the Mean High Water Mark and does not fall within the Towra Point Aquatic Reserve.
The implications for the design of the mitigation works to the channel and the associated mangrove environment are potentially significant. If the channel forms part of the Towra Point Aquatic Reserve, previous advice from both DPI Fisheries and DPI Water is likely to change, as is the means by which flood mitigation works to the channel and its surrounds are achieved.	As noted above, the channel does not form part of Towra Point Aquatic Reserve.
The Stage 3 Residential development (DA16/1068) was already on hold pending flood mitigation information from the proponent. It will	Noted.

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remain on hold until such time as the proponent has completed the survey work and submitted updated flooding information. Once the flooding information is submitted to Council, new referrals to both DPI Fisheries and DPI Water will be made.	
Given that the works to the channel and the associated landscaping works surrounding it form part of MOD 5, there is no value in Council make any further comment until the revised levels, flood management measures and aquatic reserve issues are resolved. Continuing assessment of the MOD without this information is essentially futile and would most likely lead to plans being approved that will need to subsequently be modified again.	These matters are being resolved as part of the Stage 3 Development Application and are unlikely to significantly alter the proposed landscape concept plan.
Whilst Council accepts that the proposal is still conceptual, it is not supportive of the level of detail that the proponent seeks to form the approval i.e. the Concept Landscape Plans and some of the Illustrative / indicative Plans – but not all of them. The plans sought to be excluded are those that provide details which Council would like to see incorporated as part of the approval. The omission of these plans results in a far more ambiguous approval and one with reduced certainty for Council at DA stage.	Capital Bluestone is committed to working with Council to ensuring that the detailed design of the landscaping is to the satisfaction of Council. The indicative plans are intended to provide certainty to Council about the design of a future Development Application.
Other matters which Council would like to see addressed in the Concept Landscape Plans or conditions include the following:	
<ul style="list-style-type: none"> Clarification of the proposed toilet under the lookout at the northern end of Stage 3 	These amenities were approved as part of the Stage 2 Development Application and will be constructed as part of the Stage 2 works due for completion in April 2018.
<ul style="list-style-type: none"> Shade structures over the playground and BBQ area 	Shade structures will be provided over the playground as part of the detailed DA and constructed to the satisfaction of both Council and Ausgrid.
<ul style="list-style-type: none"> The proposed means of fencing (preferably low) between the cycle path and riparian planting areas to ensure vegetation is protected (refer to the Taren Point Shorebird Reserve). 	The proposed bicycle path has been deliberately designed to a generous width of 4 metres to provide sufficient room to minimise the risk of any vegetation disturbance by users of the path. The Vegetation Management Plan for the site will ensure that any repairs and maintenance to vegetation is undertaken as necessary. Capital Bluestone is prepared to dedicate the foreshore to Council upon completion, should Council wish to take ownership of the foreshore. On this basis, Capital Bluestone is willing to work with Council to accommodate its preference for the design as part of the detailed Development Application.
<ul style="list-style-type: none"> Additional detail regarding the proposed removal or retention / protection of existing trees and mangroves. The information submitted provides insufficient detail particularly with respect to the mangroves within the channel. 	All existing mangroves will be protected as part the proposed landscaping scheme. Any vegetation removal will be limited to noxious weeds to support appropriate conditions for mangrove rehabilitation, salt marsh and other riparian planting.
<ul style="list-style-type: none"> Two viewing platforms should be provided on the 	Capital Bluestone is willing to accommodate this and request that a condition is included in the Concept Approval that requires these two viewing

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northern side of the shared path adjacent to Family Hill.	platforms to be provided.
<ul style="list-style-type: none"> The plans need to demonstrate how the conflict / safety issue between the cycle path and the playground entrances will be addressed. It is suggested that distinctive paving be provided along the shared path approx. 30m either side of the playground area to alert cyclists to slow down, especially as this is potentially an area where disabled and young children will be present. 	Safety management measures will be included as part of the detailed Development Application and Capital Bluestone is willing to accept a condition of the Concept Approval that requires these to be provided.
<ul style="list-style-type: none"> Only one entrance gate should be provided at the eastern end of the playground (not two as proposed) to limit the conflict points and uncertainty between cyclists and pedestrians. The opening for one entry / exit should be widened to accommodate the movement of people using the space. 	Capital Bluestone will incorporate a widened main entry to the playground as part of the Development Application and a second gate will be provided to ensure direct access to the amenities block. As the playground is an all-abilities playground, Capital Bluestone is seeking to ensure that the playground is useable and that there is easy access to the amenities from the playground. Removal of this gate would mean a significantly longer route to access the amenities from the playground.
<ul style="list-style-type: none"> Planting near the playground gate must be low to allow clear sightlines between users of the playground and cyclists. 	This design modification will be incorporated into the detailed design of the Development Application.
<ul style="list-style-type: none"> The shared pathway at 3.0m width is not supported due to the potential volume of pedestrians and cyclists using the area. A minimum of 3.5m shared path <u>throughout</u> is required. Experience from the shared pedestrian and cycling paths at Brighton and Wollongong (which are comparative in respect to context and potential pedestrian and cycling traffic) show that a minimum 3.5m wide path in the area proposed would provide greatly improved safety, separation and amenity for all user groups. 	<p>The advantage of a wider path width is acknowledged, however the following is noted:</p> <ul style="list-style-type: none"> - The Austroads Standard for a shared path width is 2.5 metres. - The adjacent Council owned shared path located in Solander Fields is 3 metres. - Further widening of the paths would impact on and likely reduce the amount of riparian planting provided. <p>Path widths will generally be between 3 – 4 metres in width, as described above.</p>
<ul style="list-style-type: none"> Narrowing of the pathway, such as at the proposed bridge over the channel, is not recommended from a safety / conflict basis and the frustration it can create between user groups. 	The bridge maintains a 2.5 metres clear width in accordance with the Austroads Standards. Signage will be erected for cyclists to dismount, which will reduce conflict between cyclists and pedestrians.
<ul style="list-style-type: none"> Bike access to the retail development should be provided as well as bike racks in the parking area and next to the sitting / water play area within the foreshore park. 	Bicycle facilities are provided within the approved retail centre adjacent to the foreshore path. A modification is currently being assessed by the Department, which includes the provision of additional bicycle parking spaces within the retail centre. Additional bicycle facilities within the foreshore area will be detailed as part of the future separate Development Application.

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<ul style="list-style-type: none"> At junctions where a pedestrian and cycling activity converges, greater path width needs to be applied to allow different user groups to negotiate the space, safely change direction and avoid conflict. 	<p>Path widths have been provided in accordance with Austroads standards and to the satisfaction of Ausgrid. Design measures will be incorporated into the detailed Development Application to minimise conflicts between different user groups.</p>