

Issue	Council Response
	eastern side of the freeway and connect it to the existing Sewage Pumping Station C15 at the southern end of Jack Grant Avenue. The developer will be required to provide the connection from the development site to this Pumping Station
c The intersection to the development from Kiar Ridge Road has been removed from the Concept Plan.	▪ The proposed road network will enable water lines to be easily located along the road network to service the development ▪ This will need to be provided within the proposed drainage reserve.

9. Construction Impacts

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a Estimated fill for the site has been identified to be 250,000m ³ . This equates to approximately 20,000 truck movements.	▪ This is anticipated to have a large impact on the residual life on both Hue Hue and Sparks Road. ▪ Contributions should be payable by the applicant for the loss of this residual life. Such contributions are to be specified in the Planning Agreement to be entered into by both Council and the Terrace Tower Group. ▪ These contributions are also to cover the upgrading of Sparks Road to its classification as a higher mass road, given it is within 10km of a State Road.
b The fill source for the development is currently unknown.	▪ Fill consisting of highly reactive clays will result in additional design and construction for road pavements. ▪ Some fill may be sourced from Council's Buttonderry Waste Management Site. This however will be limited to 25,000m³ per calendar year as Council's licence does not extend to quarrying activities. ▪ Haulage routes for fill and final levels need to be provided to properly assess the impacts associated with the proposal.

10. Section 94 Contributions and State Infrastructure Contribution (SIC)

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a It is still unclear whether the State Infrastructure Contribution is applicable to this development.	▪ Council does support the imposition of the SIC on the WEZ and employment lands in general. Economic feasibility studies conducted by Council indicate that the increased costs associated with the imposition of the SIC will significantly decrease the financial viability of the development. In order to encourage employment generation within the Shire, concessions should be made to the application of this levy.



b The applicant has requested that the development be excluded from Council's Section 94 Contribution Plan and has requested that Council enter into a Voluntary Planning Agreement (VPA).	▪ Council does not raise any objection to the development being excluded from Council's Section 94 Contribution Plan providing equivalent provisions are included in the VPA and Section 94 shortfalls are made up through direct payments to Council. ▪ No approvals by the Minister should be issued until such time that the VPA has been signed by both the applicant and Wyong Shire Council to properly resolve cost apportionment issues for the development.
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11. Additional Items

Issue	Council Response
a Conditions relating to Project and Concept Approval	▪ The opportunity for Council to review proposed conditions for the Project or Concept Approval of a Part 3A Project would be appreciated by Council. ▪ This will enable anomalies within the conditions being identified and allow rectification of resultant issues prior to the project being gazetted. ▪ In addition, this will assist Council in identifying potential administrative tasks prior to the gazettal, assisting in the smooth implementation of new provisions.
b Provision of gazetted plans to Council	▪ Council requests that when a part 3A project is gazetted, Council is forwarded (with the formal notification) in electronic format a copy of any associated gazetted plans, including maps which alter zones, heritage provisions, permissible uses etc. ▪ Such maps should be provided in both pdf and shape file formats to assist with the amendment of Council's GIS system.



Warner Industrial Park Public Exhibition (MP07_0162)

Wyong Shire Council Submission

Proposed Conditions of Consent

Prior to Project / Concept Approval:

The following conditions must be satisfied prior to Project and Concept Approval. Applicants should also familiarise themselves with conditions in subsequent sections and provide plans in accordance with any design requirements contained therein.

Draft Development Control Plan

1. The controls within the draft Development Control Plan for the proposal are to be amended, in consultation with Council. Such amendments are required which relate to the following:

Complying Development

- Incorporation of prescriptive development controls, including classifications and parameters for Complying Development;
- Clarification and inclusion of standards applicable to development within the proposal area for issues such as (but not limited to) energy efficiency and other sustainability requirements, parking and signage;
- Incorporation of appropriate prescriptive design criteria for architectural design, building heights, setbacks, landscaping, building materials floor space ratio (including tin sheds) etc;
- Inclusion of checking mechanisms to ensure industrial uses are being undertaken on site in accordance with complying development provisions;
- Consistency with Council's current Development Control Plan 2005: Chapter 86 – Complying Development; and
- Lots affected by bushfire prone vegetation should not be subject to complying development.

Site Boundaries & Interface Issues

- Inclusion of additional controls to ensure undesirable adverse visual impacts from Hue Hue Road, Sparks Road and the F3 Freeway are avoided. Such controls are to provide prescriptive criteria for (but not limited to) landscaping, setbacks, architectural design, fencing, cycleway widths, signage and building height

Design Criteria

- Increased building setbacks from Hue Hue and Sparks Roads;
- Development proposals seeking to creating small allotments (between 2,000-5,000m²) are accompanied by a site master plan detailing building siting, subdivision layout, integrated access, landscaping treatments and the like.
- The applicant demonstrates to Council that 95% of industrial zoned land within Warner Industrial Park has retained allotment sizes of 5,000m² and

greater. When this threshold has been exceeded no further small lot subdivision shall be permitted.

- Strata subdivision;
- Loading bays;
- Environmental controls (e.g. screening, Water Sensitive Urban design, landscaping etc);
- Height controls
- Building design parameters, including energy efficiency and other sustainability requirements;
- Colours;
- Access and egress to individual lots;
- Signage (including illuminated Signage);
- Waste storage and waste management plan requirements;
- 'Safer by Design' Principles;
- Landscaping species; and
- Referencing of AHD levels.

Visual Impact and Landscape Design

- Arrangement and orientation of peripheral uses to reduce demand for further clearing for commercial exposure;
- Provision of edge planting requirements which are of a scale to break down visual massing of industrial buildings
- Screening of service and storage areas by combined fencing and massed plantings which are appropriate for long term use and have low maintenance requirements; and
- Use of locally occurring species, propagated from local seeds.

Open Space

- Passive surveillance to encourage use by workers; and
 - Design of WSUD devices to form a visual focal point in addition to addressing safety and visual quality as well as water treatment.
2. Safe shared path connections are to be provided to public transport nodes and to major destinations within the development, such as food outlets;
 3. Any reserve within the development is to incorporate a shared path access from other parts of the estate. Shared paths crossing major roads are to use refuges to provide maximum safety to users.

Integrated Water Cycle Management

4. The Proponent is required to provide the Stormwater Discharge Pipeline (or contribute and amount towards, as agreed with Council) to dispose of treated stormwater from the development site to the disposal site at Wyong River.
5. This pipeline is to be of a size which will accommodate the projected stormwater flows from the Wyong Employment Zone, Warnervale Town Centre and surrounding catchments.
6. Should funding for the provision of the Link Road become available prior to the construction of the pipeline along the F3 Freeway route, consideration is to be given to providing the Stormwater Discharge Pipeline at this location.
7. Additional controls are to be included (to the satisfaction of Council) within the relevant Development Control Plan and permissible uses schedule of the SEPP which enable management of contamination events on site and the prevention of these events resulting in pollution of stormwater entering the Stormwater Discharge Pipeline.
8. Such controls are to include onsite detention, bunding of chemical storage areas, structural isolation of potential risks, prohibition of high risk developments, generator back ups, telemetry systems, diversion systems to sewer, multiple barriers, sluice gates, cut off etc).

Odour Management

9. Prior to Project or Concept Approval, an odour study is to be undertaken to the satisfaction of Council which identifies odour issues and management actions to alleviate these impacts, arising from the adjoining Buttonderry Waste Disposal Facility.

Prior to Release of Construction Certificate:

The following conditions must be satisfied prior to the release of the Construction Certificate. Conditions may require the submission of additional information with the Construction Certificate Application.

Certificates / Engineering Details

10. A Construction Certificate is to be issued by the Certifying Authority prior to commencement of any works. The application for this Certificate is to satisfy all of the requirements of the Environmental Planning and Assessment Regulation 2000. Works are to be designed and constructed in accordance with Council's Development Control Plan 2005, Chapter 67 – *Engineering Requirements for Development*.
11. A dilapidation report must be submitted to Council prior to issue of a Construction Certificate. The report must document and provide photographs that clearly depict any existing damage to the road pavement, kerb, gutter, footpath, driveways, street trees, street signs or any other Council assets in the vicinity of the development and haulage route.

Erosion and Sediment Control

12. The control of soil erosion on the site and the prevention of silt discharge into drainage systems and waterways in accordance with the NSW Landcom *Managing Urban Stormwater Soils and Construction*, 2004 and Development Control Plan 2005, Chapter 67 – Engineering Requirements for Development. The design plans must include the following requirements:
 - Sediment Retention Basins supporting the construction stages. Note: Calculations supporting capture rates, settling capacity and sediment storage shall be included within the plans.
 - Swales, diversion channels, pollutant traps, check dams and other structures shall be detailed and sized.
 - Collection and diversion of clean water through the construction zones.
 - Staging and sequence of works and controls within the site.
 - Maintenance schedules of all soil and water management systems.
 - Structural Engineer's Certification of all constructed basins stating structural stability for all storm events up to and including the 100year ARI storm event.
 - The design plans, supporting calculations and details shall be approved by Council prior to issue of the Construction Certificate.

Filling and Haulage

13. The submission to and approval by Council of details for the disposal of any spoil gained from the site and / or details of the source of fill, heavy construction materials and proposed routes to and from the site. Documentation regarding haulage routes, spoil destination, and fill source shall be submitted to Council/RTA prior to the commencement of works within the site. A Geotechnical analysis of all imported filling materials shall be submitted to Council for assessment and approval prior to the commencement of site works. The fill material shall be Class 1 (VENM- Virgin excavated natural material) as certified by a practising Geotechnical Engineer prior to haulage to site. The certification documentation shall be submitted to Council throughout the construction phase of the subdivision works.
14. The approved haulage route road pavements shall be tested by a practising Geotechnical Engineering Consultant in accordance with Development Control Plan 2005, Chapter 67 – Engineering Requirements for Development and Austroads Guidelines. The testing results shall be presented in a Geotechnical Engineering Report including the following requirements:
 - Dilapidation Report of effected pavements.
 - Comprehensive rehabilitation program for all effected haulage route pavements.
 - Estimate of costs for rehabilitation works. Note: A Bank Guarantee/Bond lodged with the Council will be necessary for 125% of estimated costs as agreed by Council of the rehabilitations works prior to the issue of any Construction Certificate.

Roads

15. Separate approval from Council as the Roads Authority must be obtained under Section 138 of the Roads Act 1993 prior to the issue of any Construction Certificate

which includes any works within a Council road reserve. For any such works, design plans must be submitted to and approved by Council prior to issue of the Construction Certificate.

16. The provision of a plan of management for any works for the development that impact on any public roads and public land for the construction phase of the development, prior to issue of the Construction Certificate. This plan must be certified by a suitably qualified person prior to issue of the Construction Certificate. All works must be conducted in accordance with this plan. The plan is to include a Traffic Management Plan and/or a Work Method Statement for any works or deliveries that impact the normal travel paths of vehicles, pedestrians or cyclists or where any materials are lifted over public areas.
17. Access to Hue Hue Road and Sparks Road, with the exception of the two intersections shown on the Concept Plan, EA01, Revision F, is denied.
18. No direct access shall be allowed for any allotment fronting Sparks Road or Hue Hue Road.
19. Construction of the intersections shown on the Concept Plan, EA01, Revision F on Sparks Road and Hue Hue Road are to be at full cost to the developer.
20. The construction, location and design of the Sparks Road/Road No.1 Roundabout intersection and approaches in accordance with the following requirements:
 - The design shall be supported by a SIDRA model analysis of the Freeway/Sparks ramp intersection using post-development traffic volumes.
 - Any impacts as identified by the RTA shall be mitigated by the provision of any RTA requested works.
 - The submission of a Road Safety Audit with any recommendations to be carried out subject to the approval of Council.
 - The provision of a steel fibre reinforced concrete (SFRC) rigid pavement of sufficient capacity to accommodate expected loads including an allowance for reactive subgrade materials.
 - The roundabout geometry shall accommodate all vehicles up to and including B-triples maintaining lane/direction discipline.
 - Signage, linemarking and traffic facilities shall be provided in accordance with Councils/RTA requirements. Note: Traffic Committee approval of these works will be required.
 - Service utility relocation and adjustment shall be undertaken to the relevant authority's requirements.
 - Street lighting in accordance AS. 1158.
 - Roadside Landscaping. Note: Estate Advertising/Direction signage requires separate Development Application approval.
 - Pavement design axle loading is to be 3×10^7 with provision for HML for all vehicles up to and including B- Triples.
 - The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design

plans must be approved by Council prior to the issue of a Construction Certificate.

21. The construction of the Hue Hue Road/Road No.5 intersection and approaches in accordance with the following requirements:

- The design shall be a full "Seagull" treatment channelized CH intersection with left turn provision.
- The submission of a Road Safety Audit with any recommendations to be carried out subject to the approval of Council.
- The intersection shall accommodate all vehicles up to and including B-triples maintaining lane/direction discipline and provide for "Safe Intersection Sight Distance" (SISD).
- Signage, linemarking and traffic facilities shall be provided in accordance with Councils/RTA requirements. Note: Traffic Committee approval of these works will be required.
- Service utility relocation and adjustment shall be undertaken to the relevant authority's requirements.
- Street lighting in accordance AS. 1158.
- Roadside landscaping. Note: Estate Advertising/Direction signage requires separate Development Application approval.
- Pavement design axle loading is to be 3×10^7 with provision for HML (Higher Mass Limit) for all vehicles up to and including B- Triples.
- Internal roundabout to be SFRC.
- The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council prior to the issue of a Construction Certificate.

22. Safety barriers shall be provided along Hue Hue Road/Road No. 5 and Kiar Ridge Road adjacent all excavated batter slopes and where hazards generate warrants for safety barriers.

23. Road No. 5 is to be designed to reduce approach grades from Hue Hue Road and any other roads to a maximum of 3% into and through the roundabout.

24. The construction of Roads Nos 1, 4 & 5 in accordance with the following design requirements:

- Road Reserve width 24.0 metres with a 14.0 m minimum width carriageway and a shared 2.5m wide footpath cycleway to one side. Note: The shared footway shall connect to Hue Hue and Sparks Road and be extended along Sparks Road to Burnett Road.
- B-Double/Triple uncoupling and temporary storage suitable for a minimum of two trucks are to be provided at the southern end of Road No.1 and within Road No.5 in close proximity to the intersection of Roads Nos 1 & 4.

- The intersection of Roads Nos 1, 4 & 5 shall be designed as a roundabout with sufficient area to accommodate B-Doubles/Triples movements. The roundabout is to have a SFRC pavement.
 - Pavement designed to accommodate 3×10^7 ESA with provision for HML for all vehicles up to and including B- Triples.
 - Signage, linemarking and traffic facilities shall be provided in accordance with Councils requirements.
 - The Road No.1 Bridge shall be designed with a minimum 30.0 clear span in accordance with AS.5100. Note: Design & Construction Certification shall be undertaken by a suitably qualified Structural Engineer in accordance with AS. 5100 having regard to expected loads from B- Triples with HML provision including the appropriate safety factor. The design shall also include adequate provision for pedestrians and cyclists.
 - Street lighting in accordance AS. 1158.
 - Roadside landscaping.
 - The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council prior to the issue of a Construction Certificate.
25. The construction of Roads Nos 2, 3 & 6 in accordance with the following design requirements:
- Road No.2 & 6 shall have a road reserve width of 21.0 m, a 13.0 m minimum width carriageway and a 1.2m wide footpath to one side. Note: The Road No. 2 cul-dec-sac shall have a minimum 30.0 m kerb line diameter.
 - Pavement design axle loading is to be 3×10^7 with provision for HML for all vehicles up to and including B- Triples.
 - Road No. 3 shall have a road reserve width of 23.0 m, a 14.0 m minimum carriageway and a 1.2 m footway to one side.
 - Street lighting in accordance AS. 1158.
 - Roadside landscaping.
 - The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council/RTA prior to the issue of a Construction Certificate.
26. The provision at no cost to Council of concrete footpaving (one side only) to all roads within the subdivision in accordance with Council's Development Control Plan 2005 Chapter No 66 – Subdivision and Chapter No. 67 - *Engineering Requirements for Development*. The design plans must be approved by Council prior to issue of the Construction Certificate.
27. All intersections and roads are to cater for B-Doubles and B-Triples with the vehicles maintaining land/direction discipline, i.e. not crossing the centre line. This is to be with vehicles parked adjacent to the kerb.

28. Road widening is to be provided to allow for the maintenance of land discipline on all curves in accordance with the provisions of Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development* and Chapter No. 66 – Subdivision.
29. Unless specified elsewhere in these conditions, road and verge widths and location of accesses are to be provided in accordance with Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development* and Chapter No. 66 – Subdivision.
30. The provision of additional civil works necessary to ensure satisfactory transitions to existing work as a result of work conditioned for the development, at no cost to Council. Design plans are to be approved by Council prior to issue of the Construction Certificate.
31. All roads within the subdivision are to be a rigid concrete pavement due to the high traffic loads, high torsional loads and highly reactive subgrade conditions. The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council prior to the issue of a Construction Certificate
32. Unless specified elsewhere in these conditions, all roads and intersections are to be consistent with the recommendations contained in the traffic studies completed and approved by Council as part of the Wyong Employment Zone Project (see Draft Wyong Employment Zone Development Control Plan for detailed requirements).
33. All lots are to provide sufficient on-site space for the manoeuvring of delivery vehicles to ensure that they enter and depart the property in a forward manner without conflicting with pedestrian movements and other vehicles parking.
34. Land is to be dedicated to permit a legal and proper access road connection to the adjoining properties to the east (Lot 9 DP 239704 and Lot 5 DP 259531). If the roads within the development are not public roads then a legal Right of Way (ROW) to Lot 9 DP 239704 and Lot 5 DP 259531 is to be provided.

Public Transport

35. Bus servicing needs to be provided in accordance with the local bus company and Ministry of Transport (MOT) requirements. Adequate and proper bus service facilities, including "U" turn provisions are to be provided.
36. The applicant is to submit a plan to Council of proposed bus stop locations in accordance with the final agreed bus route for approval by the Local Traffic Committee. Bus shelters are also required at these locations at full cost to the developer.

Subdivision Works

37. This consent does not provide for staging of the development. Any staging will require a separate approval or an amendment to this approval by the Minister of Planning.
38. The design and construction of all subdivision works in accordance with Council's Development Control Plan 2005 Chapter No 67 - *Engineering Requirements for Development*, which are prescribed at the time of commencement of engineering works. The design plans, including an overlay of the vegetation plan identifying trees to be retained as per the approved development plans, and any trees to be removed must be approved by Council prior to issue of the construction certificate.

Flood Design & Drainage

39. The submission of detailed designs and the preparation and submission of a revised flood model and analysis of the flood stormwater drainage for the total development site for all watercourses.
40. Precinct based storage shall be comprised of channel forming retardation storage and active storage.
41. The channel forming retardation storage may allowed to drain over a longer period , however this storage shall not be used to store water that will be pumped to Wyong River.
42. Additional channel retardation forming storage is to be provided in accordance with Ecological Engineering's table 5.10 – Retardation storage Design for Wyong Employment Zone Catchments.
43. Constructed wetland systems shall be sized at 4% of the catchment area as a preliminary estimate however the required inlet zone shall be in addition to this area.

Buttenderry Creek Flood Plain including B1 South

44. The submission of detailed designs and the preparation and submission of a revised flood model and analysis of the main watercourse. The model shall determine the post subdivision development flood way for all storm events up to and including the 100 year ARI event. The model shall include the following design parameters:
 - Stabilising of the existing natural low flow zone to accommodate the 1.5 year ARI storm event.
 - Road No.1 Bridge Crossing to have a minimum 30.0 metre clear span with consideration of bridge pylons and abutments to the back water and scour effects and appropriate mitigating treatments. A minimum free board of 0.50m to the underside of the superstructure during the 100year ARI storm event.
 - The augmentation of the existing culvert crossings to accommodate the 100 year ARI storm event under Hue Hue and Sparks Road.
 - The provision of scour protection in accordance with Austroads Waterway Design "A guide to the Hydraulic Design of Bridges, Culverts and Floodways" for all elements of the bridge structure.
 - Blockage factor 50% to culverts under F3 (Freeway) or as otherwise agreed and approved by the RTA.
 - There is no increase in flood levels or impacts on adjoining upstream or downstream properties.
 - Inclusion of Constructed Wetlands (Retention/Detention Basins) within the flood plain.
 - Design and modelling details to be submitted to Council/RTA for approval prior to issue of the Construction Certificate.
45. The natural wetting and drying cycles within the Porters Creek wetland are to be preserved and maintain groundwater recharge. A design/management strategy is to be prepared in accordance with: Water Sensitive Urban Design Solutions for Catchments above Wetlands, May 2007, Hunter & Central Coast Regional Environmental Management Strategy and Development Control Plan No.2005 Chapter 67 –

Engineering Requirements for Development prior to issue of the Construction Certificate.

F2 Channel

46. The submission of detail designs and the preparation and submission of a flood model and analysis of a proposed channel. The model shall determine the post subdivision development flow for all storms up to and including the 100 year ARI storm event. The analysis shall include the following design parameters:

- The channel shall be designed as a natural channel generally in accordance with the Brisbane City Council Guidelines for "Natural Channel Design".
- A mannings roughness co-efficient "n" value of 0.08 for the central low flow zone and an "n" value of 0.12 for the remaining channel section.
- Blockage factor 50% to culverts under F3 (Freeway) or as otherwise agreed and approved by the RTA.
- Collection and discharge of all stormwater flows discharging from Kiar Ridge Road into the main channel.
- The channel shall be designed to facilitate low maintenance of all aquatic and vegetative systems within the channel base and riparian zones.
- The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council/RTA prior to the issue of a Construction Certificate.

B2 Channel

47. The submission of detail designs and the preparation and submission of a drainage analysis of a proposed channel. The analysis shall determine the post subdivision development flow for all storms up to and including the 100 year ARI storm event. The analysis shall include the following design parameters:

- Collection, conveyance and discharge of all generate upstream stormwater flows from the two upstream catchments crossing (Hue Hue Road & Sparks Road).
- The proposed system is to be designed so Sparks Road is not overtopped in a 1% ARI event and to suit the requirements of the future upgrade of the Hue Hue Road and Sparks Road intersection.
- Connection of this catchment via open channel / pipelines into the Buttonderry Creek flood plain via Roads No.1 and No.2.
- The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council/RTA prior to the issue of a Construction Certificate.

Stormwater

48. The submission to and approval by Council of stormwater drainage details in accordance with the following requirements:

- The construction of a minor system 20 year ARI design capacity piped stormwater drainage within the internal road network to service the subdivision.

- The construction of an interallotment stormwater drainage system to accommodate the 20 year ARI storm event to service each lot in the subdivision.
 - The construction of reinforced concrete box culverts or approved equivalent road crossings for the two (Road No.6 crossings of) the F2 channel to accommodate a 100 year ARI storm event.
 - The rehabilitation of the existing triple cell headwall, trash screen, stream bank protection and energy dissipater at the Hue Hue Road Buttonderry Creek crossing.
 - The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council/RTA prior to the issue of a Construction Certificate.
49. The provision of a complete planting schedule for all water quality and quantity management structures, prepared by a suitably qualified and experienced practitioner. Plants to be used shall be generally endemic to the Buttonderry Creek catchment and appropriate for the proposed application. Design plans are to be submitted to and approved by Council prior to the issue of a Construction Certificate and all works, completed, inspected and approved by Council prior to the issue of a Subdivision Certificate.
50. The design and construction of additional stormwater drainage works consisting of stabilised capture and conveyance structures within Kiar Ridge Road to accommodate a 100 year ARI storm event. The works shall include connection of the drainage works into the F2 open drainage channel within the site. A control structure and energy dissipater outlet shall also be provided within the F2 channel connection point. The design and construction shall be undertaken in accordance with Council's Development Control Plan 2005, Chapter 67 – *Engineering Requirements for Development* prior to the issue of the Construction Certificate.
51. The submission of MUSIC & flood storage modelling requirements to Council and the RTA in accordance with the Council approved detail design of the development to demonstrate compliance with the pollutant removal targets as a minimum of:
- a. 90% reduction in gross pollutants >5mm
 - b. 85% reduction in the average annual total suspended solids load
 - c. 65% reduction in the average annual total phosphorus load
 - d. 45% reduction in the average annual total nitrogen load
 - e. No visible oils and greases for the 1.5 yr ARI event and
- The provision of:
- a. culvert inlet structure/s treatment/s to ensure that the Freeway (F3) is not overtopped in the 500 yr ARI event.
 - b. flood storage is to demonstrate storage capabilities with reference to groundwater levels identified in the geotechnical investigation.
 - c. cut/fill compensatory storage with regards to the ultimate development.
 - d. Impacts of the 5 yr, 20yr and 50Yr together with the 100 yr and greater on the existing culvert systems under the freeway (F3).

- e. The proponent is to consult with the RTA regarding the impact of the peak flood 100 year flood levels. Such levels are to remain 500mm below the top of the F3 embankment. Confirmation of the compensatory flood storage behind the F3 batter is also required to be submitted to the RTA and Council.

The design plans must be submitted to and approved by Council and the RTA (where impacts on their assets) prior to the issue of a Construction Certificate.

52. The submission of stormwater commentary providing calculations and design documentation regarding impacts of climate change, specifically tailwater level increase and increased rainfall intensity. The commentary shall identify where best practice safety, evacuation or other standard criteria are exceeded and proposed mitigation measures and costs to limit or remove such impacts or justification where it is considered that such impacts may be acceptable without mitigation. Design details of any works necessary now must be approved by Council prior to the issue of a Construction Certificate and be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*.
53. The provision of Flood Warning signage to all approaches to flood areas within the development site. Design details shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council prior to the issue of a Construction Certificate.
54. The construction of stormwater drainage system consisting of a piped system to capture and convey the 20 yr ARI with an overland flow path for the 100 yr ARI event in the vicinity of propose lot 23 from the existing system under Hue Hue Road including the provision of any berms and easement/s to cater for the 1% flow. The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council prior to the issue of a Construction Certificate.
55. Should the development occur prior to the Regional IWCM Strategy being in place the provision of an interim IWCM Strategy will be required. This system will generally consist of the following:
- Storage ponds, pumps with pump rates as identified for the ultimate scheme.
 - The limiting of the number of lots to be released to provide a release area a maximum equivalent to 50% of the NDA of the total development to allow for spray irrigation until the commissioning and operation of the ultimate scheme.
 - Temporary spray irrigation system to disperse of the interim harvested rainwater to limit the discharge from the site is to be removed and the
 - Details demonstrating that the wetting and drying cycles are achieved in accordance with condition No. 57.

Filling & Lot Regrading

56. The proposed lots shall be filled and regraded to ensure that they are flood free for all storms and including the 100 year ARI storm event. The finished surface level of the lots shall include the following:
- A minimum freeboard of 300mm above the 100 year ARI flood level shall be applied to each developable lot.

- A minimum freeboard of 500mm above the 100 year ARI flood level shall be applied to each lot adjacent to the F3 (freeway) corridor.

Landscaping

57. The provision and maintenance of landscaping in accordance with Council's Policy Number L1 - Landscape for Category 3 development including the engagement of an approved landscape consultant and contractor to undertake the design and construction of the landscaping. All landscaping design works are to be approved completed prior to issue of the Construction Certificate. The following matters must be addressed to the satisfaction of Council:

- Demonstration how a 50 metre wide wildlife dispersal corridor will be provided which will simultaneously provide landscape screening and stormwater discharge functions on the portion of the development which adjoins the Sydney-Newcastle Expressway;
- The proposed list of plant species (trees, shrubs and ground covers) to be used, details of their height and spread at maturity and maturity at time of planting;
- The provision details of the extent of irrigation and the water supply source for proposed landscaping works;
- The position of any mounding or earthworks;
- The position of any external drainage materials;
- The location of any external signposting and lighting;
- Details of how planting shall used as an integral part of the overall design of the estate and in the development of each allotment including:
 - Use of trees to provide shade to buildings, outdoor recreation areas and carparking areas, trees shall also be used to line streets so that a continuous canopy at mature spread is created on each side of the estate roads.
 - Use of shrubs to restrict views into and from the allotments and to enhance tree-planting schemes and ground covers are to be used to tie the soil together in areas not grassed or paved.
- The use of visually unobtrusive security fencing, in terms of colour, size and design, and located behind the landscape setback area. No barbed wire will be permitted.
- No display areas shall be located between landscape setbacks and buildings in any location which faces the F3 – Expressway, Sparks Road, and Hue Hue Road. Major entries shall be designed with clear directory signage.
- The provision of setbacks of a minimum 20 metres wide and fully embellished with landscaping fronting Sparks Road, Hue Hue Road and the Sydney-Newcastle Expressway prior to being transferred into Council ownership at the owners' expense, unless specified differently in this document. If 15 metre setbacks are proposed, landscaping will need to provided at an appropriate density to the satisfaction of Council.
- Selection of trees for mature scale and habit to break up the visual mass of large buildings.

- Prohibition of access from Sparks Road to allotments over proposed landscape setbacks.
 - All landscape works shall be in accordance with the measures identified in the Sparks Road Urban Design Framework Report (once completed and adopted by Council).
 - Proposed landscape works are to maintain necessary sight distances for roads and intersections.
58. All road verges are to be wide enough to accommodate the structural plate of a large tree and service requirements.

Environment

59. An Ecological Management Plan must be provided by the Proponent and approved by Council. This is to provide detail to assist in the coordination of land management actions of conservation areas and site clearing. Equivalent provisions are to be implemented to those outlined in the WEZ Plan of Management.

Council approval will be required prior to site works commencing.

60. Placement and construction of drainage, constructed wetlands and other IWCM infrastructure is to be sensitively located, designed and landscaped to enhance habitat values for threatened amphibians and mitigate identified Key Threatening Processes (e.g. *Gambusia* and frog chytrid).
61. A survey report prepared by a registered surveyor for services such as water and sewer shall be submitted to Council for approval prior to issue of the Construction Certificate. The survey report shall be accompanied by an Ecological Report that identifies protected or known habitat features/species demonstrating the proposed route as being the most appropriate having regard for the ecological features of the site (e.g. hollow bearing trees, dams, drainage lines etc).
62. All road crossings that traverse conservation land shall be designed in consultation with a qualified Ecologist. The design shall incorporate features to assist with fauna movement and to reduce mortality (e.g. underpasses, landscaping, lighting issues, speed suppression, glide poles – as appropriate).
63. All necessary fire protection measures (asset protection zones fuel free and fuel reduced zones) are to be contained within industrial zoned land. No measures shall encroach upon conservation areas.

Trees

64. In relation to tree and vegetation protection, the following requirements are necessary:
- a Trees and vegetation within the retained naturally vegetated buffers and conservation areas are to be protected by the erection of a minimum two strand stock fence with parawebbing as per the consulting Arborist and Ecologist's direction, and maintained in good working order for the duration of the works. The consultants are to provide certification to Council that all temporary fencing is in place prior to the issue of a Construction Certificate.
 - b All fenced tree protection areas are to be clearly marked as "No Go Area" on all final approved engineering plans. The location of threatened species habitat and Endangered Ecological Communities are also to be marked on all plans.

- c All fenced tree protection areas are to be clearly marked as "No Go Area" on the fencing itself.
 - d No clearing of vegetation or storage of vehicles, fill or material or access is to occur within the "No Go Areas".
 - e The consultant Arborist/Ecologist may require other habitat and/or trees to be protected via fencing from time to time. This fencing is to be erected at the appropriate root zone protection limits (as determined by the consultant Arborist/Ecologist), prior to works being carried out around that particular habitat of tree.
 - f The management protocols and requirements within these conditions relating to tree and vegetation retention, protection are to be included in all contract documentation, plans and specifications used by each civil contractor and sub-contractors.
 - g Ecologist on site during tree felling to check for habitat for relocation, sectional dismantling of trees etc.
 - h The consultant Ecologist and Arborist are to provide appropriate inductions to all on-site staff in relation to these ecological protocols.
 - i Timber from the site is to be reused on site where practical by way of milling, wood chipping or similar
65. The applicant is to engage a suitably qualified and experienced consulting ecologist, arborist and soil erosion consultant to supervise the construction of each stage of the development and to ensure and certify to Council's Development Ecologist that the trees and vegetation located within the retained naturally vegetated buffers are adequately protected during construction. Evidence of this engagement is to be forwarded to Council's Development Ecologist prior to the issue of a Construction Certificate.

The consultant ecologist and arborist are to provide reports to Council's Development Ecologist for review certifying how the proposal is meeting tree retention and protection requirements following completion of the following stages of development:

- Following erection of required tree protection fencing (and prior to the issue of a Construction Certificate)
- Following induction of each civil contractor and subcontractor
- Following initial clearing and excavation/filling of the site
- Following provision of services
- Following completion of each construction phase (and prior to the issue of a Subdivision Certificate)

Council's Development Ecologist is to be notified as soon as practicable (and not more than 24 hours after) if a breach of these ecological protection conditions occurs

Ecological

- 66. The applicant shall demonstrate how Urban Interface Area (UIA) and Edge Treatment requirements are satisfied as per Council's Development Control Plan 2005, Chapter No 66 – *Subdivision* for all industrial lots which adjoin conservation zones.
- 67. All environmental land that is to be transferred into Council ownership shall be transferred in a condition acceptable to Council and all management plan actions shall be satisfied prior to hand-over.

Mine Subsidence

68. Development shall satisfy any development and building design guidelines established by the Mine Subsidence Board.

Other Requirements

69. A Geotechnical Engineer's report shall be prepared supporting the controlled filling of all lots. The lots are to be "structural filled" to the requirements of AS 37982007. The report shall include details of the removal of all organic or unsuitable materials, depth of select fill, grades of the finished surface level and proposed filling materials, lot sizes, layer thicknesses, test locations and results. Inspection reports and certification shall be submitted to Council upon completion of each stage of works. The report must be approved by Council prior to the issue of a Certificate.

Water and Sewer

70. An application under Section 305 of the Water Management Act 2000 is to be made to Council as the Water Supply Authority. Advice will be provided under Section 306 of the Water Management Act 2000 detailing all necessary works and contributions for the development. Detail designs of the water and sewer works will be required to be submitted to and approved by Council under the Water Supply act 2000 prior to issue of the Construction Certificate. Designs to be in accordance with Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*.

Advisory Note:

The developer will be required to connect to the future 300 mm main in Sparks Rd and another connection to the future 200 mm main in Hue Hue Rd (as provided by Council)

The Proponent must construct sewerage infrastructure within the development site (i.e. sewage pumping station and associated 225 mm gravity main, rising main) and connect to Council's sewerage system on the eastern side of the freeway. The developer will receive credit for the pumping station and the associated 225 mm gravity main and the rising main as identified in the draft DSP. There will be no credit for the 150 mm sewer gravity mains within the development site.

All water supply infrastructure within the development site will be provided by the proponent.

Payment of the following contribution charges as identified in the draft DSP are:

- Water supply is \$3,550 per lot.
- Sewerage is \$4,825 per lot.

Additional contributions may be applicable depending on consumption and discharge rates.

NOTE: These rates are subject to change. Appropriate arrangements for payment of these items are to be included in a Planning Agreement which is in the process of being negotiated between the Terrace Tower Group and Wyong Shire Council.

Final requirements for the provision of water and sewer will be provided under section 306 of the Water Management Act, 2000 by Council's Water Authority.

Prior to Commencement and During Works:

The following conditions must be satisfied prior to the commencement of site works, including any works relating to demolition, excavation or vegetation removal.

Approved Plans

71. A copy of the stamped approved plans must be kept on site for the duration of site works and be made available upon request to either the Principal Certifying Authority or an officer of the Council.

Inspections

72. Inspections as a minimum as identified in Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development* must be undertaken and certified in accordance with Section 109 C (1) a of the Environmental Planning And Assessment Act. Should Council be appointed as the Principal Certifying Authority (PCA), the inspections must be carried out by Council, or may be carried out by an Accredited Certifier with Council's prior agreement. In these cases, a record of the results of the inspection must be forwarded to Council as soon as is practicable after the inspection and any associated Compliance Certificates must be forwarded to Council within 2 days of issue. Occupation Certificate. 48 hours prior notice must be given to Council of the required inspection.
- At the commencement of any clearing work (ie, prior to any demolition, excavation, clearing or building work): Check for compliance with Development Consent conditions, including:
 - all requirements of the approved Ecological Management Plan (EMP);
 - the installation of siltation controls, waste controls, hoardings, site fencing and other environmental protection measures.
 - Sewerage inspections: Check sewerage connections, or on-site sewage management facility, have been installed in accordance with the Construction Certificate, or on-site sewage management facility approval respectively.

Record of Inspections Carried Out

73. In accordance with clause 162B of the Environmental Planning and Assessment Regulation 2000, the certifying authority responsible for critical stage inspections must make a record of each inspection as soon as practicable after it has been carried out. Where Council is not the PCA, the PCA is to forward a copy of all records to Council.

The record must include details of:

- the development application and construction certificate number;
- the address of the property at which the inspection was carried out;
- the type of inspection;
- the date on which it was carried out;
- the name and accreditation number of the certifying authority by whom the inspection was carried out; and

- whether or not the inspection was satisfactory in the opinion of the certifying authority that carried it out.

Inspections to be arranged with Council as the Principal Certifying Authority. Notice of required inspection must be given 48 hours prior to inspection, by contacting Council's Customer Service Department on (02) 4350 5555.

Other Authorities

74. Other public authorities may have separate requirements and should be consulted in the following respects:
- Australia Post for the positioning and dimensions of mail boxes in new commercial and residential developments;
 - AGL Sydney Limited for any change or alteration to gas line infrastructure;
 - Energy Australia for any change or alteration to electricity infrastructure or encroachment within transmission line easements;
 - Telstra, Optus or other telecommunication carriers for access to their telecommunications infrastructure.

Site Requirements

75. The provision of a temporary closet on site from the time of commencement of building work to ensure that adequate sanitary provisions are provided and maintained on the building site for use by persons engaged in the building activity. The temporary closet is to be a water closet connected to the sewerage system or approved septic tank or a chemical closet supplied by a licensed contractor approved by the Council.
76. All earthworks are to be limited to the area outlined on the approved site plan.
77. The Principal Contractor (or Owner/Builder) is to erect a sign in a prominent position on the site (not attached to any tree) identifying the name, address and telephone number of the Principal Certifying Authority (PCA) for the work; the name, address and telephone number (including a number for outside of business hours) of the Principal Contractor for the work (or Owner/Builder); and stating that unauthorized entry to the site is prohibited. The sign must be maintained while the work is being carried out and is to be removed when the work is completed. Appropriate signs can be collected from Council's Customer Service Centre, where Council is the nominated PCA.
78. Construction work is only to be undertaken in accordance with the provisions of the Environmental Protection Authority's 'Environmental Noise Control Manual-Guidelines for Construction Noise' as identified below:
- Australian Eastern Standard Time (AEST): Monday to Sunday 7.00 am to 6.00 pm
- Australian Eastern Daylight Time (AEDT): Monday to Sunday 6.00 am to 8.00 pm

Trees

79. Tree protection measures and exclusion fencing must be installed in accordance with specific development consent conditions and generally in accordance with Council's Development Control Plan 2005 Chapter No 67 - Engineering Requirements for Development. Documentary evidence from a qualified Arborist / Horticulturist that suitable tree protection measures have been installed may be submitted to the Principal Certifying Authority and Council, or alternatively Council must be notified to undertake an inspection of the works.

Prior to Release of Subdivision Certificate:

The following conditions must be satisfied prior to the release of a Subdivision Certificate.

Contributions and Works in Kind

80. The payment to Council of contributions in accordance with the Voluntary Planning Agreement between the Proponent and Wyong Shire Council.
81. The carrying out of Works in Kind in lieu of the payment of contributions as outlined in the Voluntary Planning Agreement between the Proponent and Wyong Shire Council.

Aboriginal Relics

82. If Aboriginal engravings or relics are unearthed during construction, all work is to cease immediately and the National Parks and Wildlife Service must be notified. Works may only recommence following endorsement for such from the National Parks and Wildlife Service.

Certificates / Engineering Details

83. A Subdivision Certificate is to be issued by the Certifying Authority prior to the registration of the plan of subdivision. The application for this Certificate is to satisfy all of the requirements of the Environmental Planning and Assessment Regulation 2000.
84. The submission to Council of documentation to demonstrate full compliance with all consent conditions in accordance with Section 157 Clause 2 (f) of the Environmental Planning and Assessment Regulations 2000 prior to issue of the Subdivision Certificate.

Other Requirements

85. The plan of subdivision and Section 88B instrument (Conveyancing Act 1919) shall establish the following restrictions, with the Council having the benefit of these covenants and having sole authority to release, vary or modify these covenants. Wherever possible the extent of the land affected by these covenants shall be defined by bearings and distances shown on the plan of subdivision.
 - Prohibiting direct vehicular access to proposed Lots 1, 10-12 from Sparks Road.
 - Prohibiting direct vehicular access to Lot 1-5, 17 -25 from Hue Hue Road.
 - Prohibiting direct vehicular access to Lot 1 Road No.1 within 50.0 metres from Sparks Road and lot 10 to be accessed from Road No.2.
 - Prohibiting direct vehicular access to lots 19 & 20 from Road No.5.
 - The creation of "Easements for Support" over excavated batter slopes adjoining the existing or proposed road reserves to benefit the Council.
86. All necessary "Easements to Drain Water and for Services" are to be approved by Council prior to issue of the Subdivision Certificate and registered with the plan of subdivision. Note: "Easements to Drain Water" shall be created over the constructed swale drainage system.
87. The preparation and execution of a "Legal Agreement" between the applicant and Council to ensure the continued maintenance and performance of the stormwater

management system within the Buttonderry Creek flood plain and adjoining Wet Detention/Retention systems for a minimum 5 year period or 80% completed development upon the created Lots after Subdivision registration.

88. Dedication of road reserves as "Public Roads upon completion of the subdivision works at registration of the Final Plan of Subdivision.
89. Transfer of Lands for drainage purposes in Fee Simple of the constructed drainage systems in accordance with Council's procedures.

Public Transport

90. Any bus route through the development which is acceptable to the MOT and bus operator, is to be fully constructed prior to the release of the Subdivision Certificate.

Dilapidation

91. Any damage not shown in the Dilapidation Report submitted to Council before site works had commenced, will be assumed to have been caused as a result of the site works undertaken and must be rectified at the applicant's expense, prior to release of the Subdivision Certificate.

Dust Control

92. Appropriate measures must be employed during demolition, excavation and construction works to prevent the emission of dust and other impurities into the surrounding environment. All such measures are to be co-ordinated with site sedimentation controls to ensure polluted waters do not leave the site.

Erosion and Sediment Control

93. All erosion and sediment control works must be approved by Council prior to issue of the Subdivision Certificate.

Roads

94. All works requiring Council's approval as the Roads Authority under Section 138 of the Roads Act 1993 must be approved by Council prior to issue of the Subdivision Certificate. All details are to be in accordance with Council's Development Control Plan 2005 Chapter No 67 - Engineering Requirements for Development.

Subdivision Works

95. The certification by a Registered Surveyor, prior to issue of a Subdivision Certificate that all services and domestic drainage lines are wholly contained within the respective lots and easements.
96. The satisfactory completion of all subdivision works accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*.
97. The provision of Works as Executed information as identified in Council's Development Control Plan 2005 Chapter No 67 - Engineering Requirements for Development prior to issue of the Subdivision Certificate. The information is to be submitted in hard copy and in electronic format in accordance with Council's "CADCHECK" requirements. This information is to be approved by Council prior to issue of the Subdivision Certificate.
98. The provision of a maintenance bond in accordance with Council's Bonding Policy for a minimum of 6 months after the satisfactory completion of that section of work excepting the flood plain works which is to be maintained as nominated in condition No. 110.

Water and Sewer Services

99. A Section 307 Certificate of Compliance under the Water Management Act 2000 for water and sewer requirements for the development must be obtained from Wyong Shire Council as the Water Supply Authority prior to issue of the Subdivision Certificate. All works for the development must be approved by Council prior to the issue of a Certificate of Compliance.

Other Requirements

100. The constructed Water Management System within the Buttonderry Creek Flood Plain and connecting channels (F2& B2) must be completed, operational and planted out in accordance with the Landscape Plan prior to the issue of a Subdivision Certificate.
101. The completion of landscaping in accordance with Council's Policy Number L1 - Landscape for Category 3 development including the engagement of an approved landscape consultant and contractor to undertake the design and construction of the landscaping.

Protection of Conservation Areas

102. The following permanent site fencing is required to be erected prior to the issue of a Subdivision Certificate:
- the north-eastern boundary of proposed Lots 5, 6, 9 and 13 (as shown on the Concept Plan EA01 Revision F) is to be fenced with a typical 4 strand stock fence. This will permanently delineate the extent of any underscrubbing for bushfire management purposes;
 - The western boundary of proposed Lots 14 – 17 (as shown on the Concept Plan EA01 Revision F) is to be fenced with a typical 4 strand stock fence. This will permanently delineate the extent of any underscrubbing for bushfire management purposes;
 - The southern boundary of proposed Lots 61, 62, 69, 121, 120 and 101 (as shown on the Concept Plan EA01 Revision F) is to be fenced with a typical 4 strand stock fence. This will permanently delineate the extent of any underscrubbing for bushfire management purposes;
 - The eastern most boundary of proposed Lots 65 – 69 and 101 - 110 (as shown on the Concept Plan EA01 Revision F) is to be fenced with a typical 4 strand stock fence. This will permanently delineate the extent of any underscrubbing for bushfire management purposes;

This fencing does not include approved accessways.

Ongoing Operation:

The following conditions must be satisfied during use / occupation of the development.

Advertising Signs

103. No advertisement is to be erected on or in conjunction with the development without prior development consent unless the advertisement is an 'approved sign' under

Council's Advertising Signs Development Control Plan 2005 - Chapter No 50 - Advertising Signs.

104. Advertisements and Advertising structures including (but not limited to) illuminated signs, roof signs and pylon signs on lots fronting the F3 Freeway, Hue Hue Road and Sparks road shall require development consent and be consistent with the principles contained within the Visual And Landscape Management Plan.

Other Requirements

105. A qualified and experienced bush regenerator is to be engaged to undertake weed control within the Buttonderry Creek Floodplain, F2 Channel and Wet Detention/Retention Basins every 3 to 6 months for a minimum period of 5 years. Native plant regrowth is to be left undamaged. All primary weed control must be undertaken in the first year, with follow up weed control undertaken in the second and third years. Reports are to be submitted to Council twice per year detailing weed control works undertaken.
106. The maintenance of landscaping in accordance with Council's Policy Number L1 - Landscape for Category 3 development for a minimum period of 5 years.

Advice

Major open space is not to be located as a lineal edge to the development which does not have direct links to roads or shared pathways.

Major open space areas are to be located in association with proposed support developments to provide a social focal point to the development for workers and visitors.

The applicant will need to satisfy any conditions imposed by the Department of Environment and Climate Change (DECC) which are imposed as part of the biocertification of the Wyong Employment Zone.