

8 December 2020

Aliro Group

Attention: Mr David Lousick

Level 53, Governor Phillip Tower

1 Farrer Place

SYDNEY NSW 2000

Dear Sir,

Re: SSD 10399 — Clunies Ross Street, Prospect
Response to Blacktown City Council & Cumberland City Council

Further to your request we are pleased to provide our response to the civil items raised by Blacktown City Council in their information request letter dated 18 September 2020 and Cumberland City Council in their information request letter dated 16 September 2020 (refer enclosed)

We provide the following response table to the engineering items in the letter noted above.

No.	Item and Response
Blacktown City Council	
3. Drainage	
	<i>Review of the following documents was undertaken:</i> <i>Letter from Blacktown City Council to NSW Department of Planning, Industry and Environment reference no. SSD 10399 dated 4 December 2019.</i> <i>Civil Engineering Report Incorporating Water Cycle Management Strategy by Costin Roe Consulting, project no. C013251.06, revision A dated 4 June 2020.</i> <i>Appendix B to Appendix H of the Civil Engineering Report Incorporating Water Cycle Management Strategy by Costin Roe Consulting, project no. C013251.06, revision A dated 4 June 2020.</i> <i>Engineering Plans by Costin Roe Consulting drawing nos. C013251.06-DA10(D), C013251.06-DA20(B), C013251.06-DA25(B), C013251.06-DA30(C), C013251.06-DA31(C), C013251.06-DA35(B) to C013251.06-DA37(B), C013251.06-DA40(C) to C013251.06-DA42(C), C013251.06-DA44(B), C013251.06-DA45(C), C013251.06-DA47(D), C013251.06-DA48(B), C013251.06-DA51(C), C013251.06-DA52(C), C013251.06-DA55(B), C013251.06-DA56(B), C013251.06-F01(B) and C013251.06-F02(B) dated 3 June 2020.</i>

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	5. <i>Geotechnical Investigation report by PSM reference no. PSM4010-003L dated 11 February 2020.</i> 6. <i>Environmental Assessment report by JBS&G reference 58238/130144, revision 0 dated 3 June 2020.</i> 7. <i>SEARs Report for Prospect Logistics Estate application no. SSD-10399 dated 16 December 2019.</i> <u>Response</u> Reviewed documents are noted – no comment required.
Item 1)	<i>The following items need to be addressed to meet the requirements under Council's DCP Part J 2015 and Council's Engineering Guide for Development 2005:</i> <i>General Notes:</i> <i>It is acknowledged that the subject site is situated within two separate LGAs (Blacktown City Council and Cumberland Council). The proposed stormwater quality for the overall development is split into catchments to target the water quality requirements for the particular Council. Notwithstanding, the stormwater system from the overall development is proposed to be discharged to the regional detention basin / wetland located and managed by Blacktown City Council. Therefore, the drainage design for the entire development is to be amended to meet Blacktown City Council's guidelines which include (not limited):</i> <i>i. BCC DCP 2015 including Part J — Water Sensitive Urban Design and Integrated Water Cycle Management;</i> <i>ii. DRAFT WSUD developer handbook with MUSIC modelling and design guide.</i> <i>iii. BCC WSUD Standard Drawings A(BS)175M;</i> <i>iv. BCC Engineering Guide for Development 2015; and</i> <i>v. BCC Works Specification 2005 — Civil land development.</i> <u>Response</u> The requirement for the whole of site to conform to Blacktown City Council stormwater management policy is not agreed. The parts of the site which are within Cumberland City Council are subject to the Greystanes Northern Employment Lands and within the Holroyd Council Part Q DCP. All sites within the Greystanes Northern Employment land, including the proposed development, are subject to an agreed and approved Stormwater Management Plan. The approved stormwater management plan requires sites to provide gross pollutant traps (GPT's) which target suspended solids, hydrocarbons and litter. Based on the request from Council, the requirement for all sites which drain toward Blacktown City Councils regional system should provide compliance to Blacktown Council DCP2015 Part J. If adopted this requirement could apply to up to 18 existing facilities which can be more than 1km from the Council LGA border. It is

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	unreasonable to expect this development, being adjacent to the system to have to provide stormwater management measures which differ from any of the other facilities within the Greystanes Northern Employment Area and no change to the submitted management strategy is proposed.
Item 2)	<i>Clarity is required in relation to the combined area of the site. Section 2.1 of the Civil Engineering Report by Costin Roe (project no. C013251 revision A dated 4 June 2020) has stated the combined area of the site is 18.40 hectares, the architectural plans by SBA Architects (project no. 19280 revision 0 dated 4 June 2020) has stated a site area of approximately 18.66 hectares and the Environmental Assessment report by JBS&G (reference 58238/130144 revision 0 dated 3 June 2020) has stated an area of 18.77 hectares. The correct combined area of the site is to be adopted on all reports, engineering plans and relevant modelling for the Water Cycle Management.</i> <u>Response</u> We confirm the combined area of the site is 18.66 Ha. This has been updated within the engineering report and catchment plans.
Item 3)	<i>Geotechnical Investigation report by PSM (dated 11 February) has suggested that Groundwater seepage was encountered at boreholes conducted onsite (boreholes 2020/BH09 and 2020/BH10). Results and recommendations carried out in this report must be considered (i.e. excavation methods, batter slopes and heights above the groundwater table etc) for the civil engineering designs. Since these boreholes were tested at the location of proposed building pads (i.e. Pad 7), further investigation and possibly long-term groundwater monitoring is required to ensure that the proposed development does not impact the groundwater table and groundwater flows.</i> <u>Response</u> Further groundwater testing has been undertaken by PSM during November & December 2020 (refer PSM Report PSM4010-010L dated 7 December 2020), and specific letter to address this RTS item – refer PSM letter PSM4010-008L, dated 8 December 2020. Groundwater is noted to be present adjacent to the regional basin at levels between RL 48.2m and RL 51.8m AHD. This part of the site is noted to be in an area of fill (with proposed pad level at RL 59.5m. Consideration to groundwater during construction will be required for retaining wall footings and temporary drainage. The works and designs will be completed during Construction Certificate and detail design stage with consideration to the requirements of the PSM reports noted. PSM have confirmed there is no observed groundwater within areas of proposed cut. Allowance for general minor seepage which would be expected from shale substrate will be required.

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	Overall it is not considered the proposed development would have any significant effect on groundwater. Refer further information from PSM Geotechnical Engineers: • Letter PSM4010-008L, dated 8 December 2020; and • Groundwater Report PSM4010-010L dated 7 December 2020.
Item 4)	<i>Provide electronic copies of the XP-RAFTS, DRAINS, MUSIC and flood model used to assess Water Cycle Management Strategy for the development. Ensure that the correct models are submitted and are consistent with the engineering plans.</i> <u>Response</u> Modelling has been provided to Blacktown Council Engineers (Mr Arham Soomro and Mr Tony Merrilees) on 10 September 2020 and discussed between Mr Soomro and Mark Wilson from Costin Roe Consulting.
Item 5)	<i>A dam break assessment of the existing regional detention basin with the proposed modifications is required. The engineer is to assess whether the proposed modifications to the detention basin will have risks to the population should the basin fails. Where there is any population at risk, a comprehensive risk assessment is to be undertaken. The requirements of this risk assessment are to be implemented including any remediation works. Provide details.</i> <u>Response</u> As a prescribed dam, a detailed assessment of the basin modifications will be required by the NSW Dam Safety Committee. Requirements for assessment, including risk assessment, detailed hydraulic modelling, and potentially a dam break assessment will be required as part of the detail design and approval phase of the development. These would be completed in accordance with the NSW Dam Safety Committee requirements and in consultation with Blacktown City Council. It is agreed that more detailed assessments will be required however these are considered to form part of the post approval phase of the development.
Item 6)	<i>Any flows that are discharging to Blacktown Council's drainage network including any flows from the area under Cumberland Council control are to meet all Council's water quality targets and be located on land under Blacktown Council control to ensure ongoing monitoring.</i> <u>Response</u> This is not agreed – refer Item 2 response.
Item 7)	<i>The WSUD design is to capture a minimum of 90% of the post development average annual load of Hydrocarbons and oils. Council does not accept the proposition in Section 7.4.7 of the Civil Engineering Report by Costin Roe Consulting dated 4 June 2020 which states that the proposed development is expected to produce low source loadings of hydrocarbons. This can be achieved with a number of alternatives.</i>

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	i. GPTs can be provided prior to discharge from the site including all areas located in BCC. GPTs are to have an oil baffle able to trap and contain oil or hydrocarbons and sized to treat a minimum 2EY flow considered as 75% of the 1EY flow. The GPTs are to be located in an area that can be easily accessed by truck for maintenance. Or ii. a Stormfilter Cartridge system is proposed to manage the water quality, provide an oil baffle within the Stormfilter chamber to trap and contain oil or hydrocarbons. The oil baffle is to be 250 mm upstream of the Stormfilter weir and extend 400 mm below the weir level for a 690 cartridge. The minimum length of the Stormfilter weir (L) is to be increased to provide a maximum velocity of 0.4 m/s under the baffle during peak flow (i.e. $L > Q_{20} / (0.4 \times 0.25)$, or $L > 10 \times Q_{20}$ in m, where Q_{20} is in m³/s). Provide calculations. <u>Response</u> The provided strategy proposed to capture 90% of hydrocarbons. This is proposed for both Blacktown City Council LGA and for the parts of the site which are within Cumberland LGA and the Greystanes Northern Employment Land DCP area. The comment in our report regarding low sources loads is correct, however as confirmed it is proposed to ensure 90% reduction of hydrocarbons have been met.
Music Modelling	
Item 8)	The Blacktown water quality targets are to apply to all parts of the site that drain to the Blacktown drainage network even where such water originates from the Cumberland Council area. Locate all treatment devices within the Blacktown boundaries. <u>Response</u> This is not agreed – refer Item 2 response.
Item 9)	Provide two separate and additional MUSIC models (pre and post) to demonstrate that the Stream Erosion Index (SEI) is less than 3.5. The pre development is to consider a vacant pervious block. Provide all calculations used to determine $Q_{critical}$. <u>Response</u> Flows within from the site all discharge to the regional basin to the north. As per Blacktown City Council Part J DCP, any site which discharges to a regional basin is exempt from an SEI calculation requirements. The receiving waters (i.e. Girraween Creek downstream of the Regional Detention Basin) are noted to be dependant on the hydraulic controls provided by the basin discharge system. It has been confirmed that the pre and post development flows, and duration of flows are consistent, hence there is no change to SEI within the receiving waters.

No.	Item and Response
	We do not consider the confirmation of SEI via a model is warranted based on the existing catchment and regional control basin, and the requirements of Councils Part J DCP2015.
Item 10)	<i>The proposed rainwater tanks for the site are to amended to comply with Blacktown City Council guidelines. Ensure that all rainwater tanks provide the minimum 80% non-potable water reuse. Allow for a 10% loss in rainwater tank size volume in MUSIC to that shown on the design plans below the overflow invert to allow for anaerobic zones and mains water top up levels (i.e. where a 100 kL tank is specified on the drainage plan, it is to be modelled as 90 kL in MUSIC).</i> <u>Response</u> Rainwater tanks have been sized based on the noted above. Refer to Section 7.5 of our report for detailed specification and modelling input.
Item 11)	<i>For watering landscaped areas only (excluding turf areas) allow 0.4 kL/year/m2 as PET-Rain.</i> <u>Response</u> Rainwater tanks have been sized based on the noted above. Refer to Section 7.5 of our report for detailed specification and modelling input.
Item 12)	<i>For industrial developments allow for internal rainwater reuse of 0.1 KL/day per toilet/urinal. However, where the site is occupied say 5 days per week the daily usage rate is to be reduced by 5 / 7.</i> <u>Response</u> Rainwater tanks have been sized based on the noted above. The application is proposing up to 7 day use of facilities. All tanks have been sized conservatively based on 7 day occupation. Refer to Section 7.5 of our report for detailed specification and modelling input.
Item 13)	<i>Ensure that the areas draining to surface inlet pits with OceanGuards match the engineering plans.</i> <u>Response</u> Modelling and design which defines areas to specific surface inlet pits with OceanGuards would form part of future Operational Stormwater Management Plans for individual buildings. These would be completed in accordance with council recommendations as necessary.
Item 14)	<i>Ensure that Blacktown Council's specific MUSIC modes are used for the total development area draining to the devices.</i> <u>Response</u>

No.	Item and Response
	Blacktowns specific MUSIC nodes have been utilized in the modelling of the development. Refer Item 2 response in relation to treatment objectives for the development.
Item 15)	<i>The minimum Stormfilter chamber area is to be No. of Cartridges x 0.177 m2/cartridge excluding the area of the weir.</i> <u>Response</u> Refer to updated drawing Co13251.06-DA45 which confirms details of the stormfilter chamber and typical details including baffles, weirs, chamber area, false floor and other typical information for the chamber.
Item 16)	<i>Ocean Protect has advised that the maximum storage permitted below the Stormfilter weir to ensure effective operation of the filter cartridges is limited to an equivalent volume derived from 2.0 mm of rainfall (20 m3/Ha) without losses, falling over the site area that drains to the Stormfilter chamber (ignoring any bypass area).</i> <u>Response</u> Refer to updated drawing Co13251.06-DA45 which confirms details of the stormfilter chamber and typical details including baffles, weirs, chamber area, false floor and other typical information for the chamber.
Item 17)	<i>It is acknowledged that there is no development proposed within the Aboriginal Heritage area located south east of the site and this area has not been included in the provided MUSIC model. However, this area appears to drain directly into the proposed development and affect the proposed stormwater system. The options below are to be considered to ensure this area is managed:</i> <i>i. Where levels permit, relocate the proposed retaining walls further away from the Aboriginal Heritage area and provide a catch drain with a series of pits and pipes at the top of the wall just clear of the heritage zone to capture the 5% AEP flows and discharge these flows independently to the wetland area.</i> <i>ii. Where the retaining walls are not relocated or it is too difficult to discharge an area independently to the wetland, then this area will need to be included in the MUSIC model as a "Forest" node.</i> <u>Response</u> The aboriginal heritage area falls within Cumberland Council and Greystanes Northern Employment Lands where a specific DCP applies (Refer Item 2 response). Treatment of this catchment will be provided through site GPT's prior to discharge from the site, then further treated within the wetland area. Capture of drainage will remain consistent with existing site runoff collection. No MUSIC modelling is required for this portion of the site.
Item 18)	<i>Amend the MUSIC model accordingly. Provide an electronic copy of the model with MUSIC Link report that matches the MUSIC model and drainage plans.</i>

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	<u>Response</u> Refer updated MUSIC model <i>Co13251.06_BCC_Rev2</i>. The changes mainly relate to clarification regarding the stormfilter concept design, within the BCC LGA. Note, we have included a second MUSIC model for areas within CCC LGA pertaining to rainwater tank sizing only.
Item 19)	<i>Provide a MUSIC catchment plan that shows both the land use and the areas contributing to each specific device. To make this more understandable it may be easier in many cases to split these into two separate plans.</i> <u>Response</u> Overall catchments are shown on drawing Co13251.06-DA40. A separate MUSIC catchment drawing (Co13251.06-DA43) has been prepared for the BCC LGA zone.
Drains Modelling	
Item 20)	<i>The DRAINS model provided seems to be incorrect. The surface areas of the regional detention basin in the model do not match with Tables 6.1 and 6.5 of the Civil Engineering Report and the engineering plans. Furthermore, the high flow overflow routes levels do not match the levels within the detention basin. Ensure that the correct DRAINS models are provided.</i> <u>Response</u> We confirm consistency within the DRAINS model for Table 6.1 and 6.5 which pertain to the predevelopment and post development staged surface areas respectively. Minor inconsistencies in levels of overflow routes have been adjusted in the report, noting no changes to the levels within the model have been made. Hence, previously reported results remain consistent. Refer updated plan and report which confirms minor inconsistencies in areas and overflow route levels.
Item 21)	<i>Council is unable to run the DRAINS models provided. Ensure that the model provided can be opened in a version of DRAINS that does not require the use of Storage Network Routing (i.e. XP-RAFTS).</i> <u>Response</u> Modelling of hydrology through the run-off routing/ RAFTS module in DRAINS is considered the most suitable hydrological assessment for the catchment. If the DRAINS model were formulated without the RAFTS module this would provide inaccurate modelling output. We understand through previous approvals with Blacktown Council that they have the ability to run the DRAINS model with the RAFTS module and request this option is utilized by them.
Specific Notes	

No.	Item and Response
Item 22)	<i>Civil Engineering Report Incorporating Water Cycle Management Strategy by Costin Roe Consulting, project no. C013251.06, revision A dated 4 June 2020.</i> i. <i>Delete reference to Penrith Council in Section 5.1.</i> ii. <i>The Erosion and Sediment Control must be prepared in accordance with Blacktown City Council guidelines and not Penrith City Council as stated in Table 5.1 under the "Reference" column and Section 9.1 of the report.</i> iii. <i>Delete reference to "2hr duration" under Table 6.9 title. The table includes 2, 6 and 9 hour durations.</i> iv. <i>Insufficient information is provided in relation to the flood assessment. A comprehensive flood assessment is required for the development in conjunction with the BCC guidelines and SEAR's. All information must be provided including which software was used for the assessment, methodology, calibration of the flood model to ensure consistency of the flood behaviour documented by Council, rainfall data, catchments, hazard and flood difference maps, flow velocities, hydraulic categories, assumptions, etc</i> v. <i>The flood planning level mentioned in Section 8.4 seems to be incorrect. The minimum FPL should be the 1% AEP flood level with climate change + 0.5 m freeboard. Furthermore, the section suggests that the lowest proposed building level on the site is RL 60.0 m AND when drawing C013251.06 of the engineering plans shows Warehouse 1 FLL = 57.50 +/- 500 mm</i> vi. <i>Section 5.1 (Page 23) of the report states that the existing regional detention basin caters for catchment with an area of approximately 167 hectares while Section 6.2 states that the area is 173.55 hectares. Clarity is required.</i> vii. <i>Section 6.3 (Assessment of Existing Detention System) — values in the discussion section on Page 36 do not match the tabulated results. For example, the water level stated in the discussion for the existing detention basin is RL 55.01 m AHD in the 1% AEP and RL 56.43 in PMF. Results of the assessment in Tables 6.2 and 6.3 depict RL 55.20 m AHD in the 1% AEP and RL 57.15 in PMF respectively.</i> viii. <i>Section 6.4 (Assessment of Modified Detention System) — similar to the above, values in the discussion on Page 39 do not align with the results in Tables 6.6 — 6.9.</i> ix. <i>Section 5.5 (Climate Change) — the section states an assessment was undertaken for the effect of climate change on the development with a 10% increase in rainfall intensity for the 1% AEP and reference to Table 6.9 to compare the flows. However, no such results are shown in this table respectively. Also, rainfall intensities for the 1% AEP are to be increased to 15% for a conservative estimate on climate change and to meet Council guidelines.</i> x. <i>Recheck all results, values and grammar in the report. Ensure consistency in/between the models and the report.</i> <u>Response</u> i. <i>Incorrect reference to Penrith has been removed – refer report Revision B.</i> ii. <i>Incorrect reference to Penrith has been removed – refer report Revision B.</i>

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	iii. Reference to duration has been adjusted – refer report Revision B iv. Flooding has been included in Section 8 of the report. As discussed in the report, flood behaviour is defined by the water level within the regional basin as confirmed through the modelling and assessments completed within Section 6. The flood assessment and regional detention system assessment hence have cross over with each other and need to be read in conjunction with each other. We have provided additional flood information within the report Section 8, to clarify details of the completed flood assessment and to make the assessment between the two section of the report more approachable. v. Council policy requires flood planning level of the 1% AEP + 0.3m freeboard. The NSW Floodplain Development Manual recommends the 1% AEP + 0.5m freeboard. Neither of the two relevant documents require additional freeboard for climate change. This being said, of climate change were added to the flood planning level noted above, all proposed buildings are noted to be significantly above both the flood planning level and the flood planning level with climate change. It is also confirmed that the minimum floor level reference of RL 60.0m (Building 7) has been adjusted to clarify this is the minimum floor level for parts of the site upstream of the regional basin weir where flooding is required to be considered in detail. The building (Building 1) which is proposed at RL 57.5m is downstream of the regional basin weir, meaning it is not subject to the same flood planning level as Building 7. We note that, per the Blacktown Council Flood Letter, the flood planning level for Building 1 (based on 1% AEP level of 48.33m) is RL 48.83m AHD (so 8.67m below the proposed building level). vi. The existing catchment is confirmed with an area of 173.4Ha, refer updated report/ plans. vii. The 1% AEP and PMF flood levels are confirmed and amended. Refer updated report/ plans. viii. Refer updated report/ plans for confirmed levels. ix. Refer updated report which confirms commentary regarding climate change assessments. Per the SEAR's, modelling of the 0.5% and 0.2% AEP events has been completed as proxies for climate change. It is noted that no tidally or sea level influenced water bodies affect the waterway hence sea level rise is not required to be considered in the assessment. x. Refer updated report and modelling which confirms consistency between modelling and reporting.
Item 23)	<i>Engineering Plans by Costin Roe Consulting dated 3 June 2020:</i> i. <i>Considering that the stormwater system for the entire development will be discharged to the regional devices managed Blacktown City Council, the engineering plans for the total development are to be amended to comply with meet Blacktown City Council's guidelines which include (not limited to):</i> <i>BCC DCP 2015 including Part J — Water Sensitive Urban Design and Integrated Water Cycle Management</i>

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	<i>BCC DRAFT WSUD developer handbook with MUSIC modelling and design guide 2020</i> <i>BCC WSUD Standard Drawings A(BS)175M;</i> <i>BCC Engineering Guide for Development 2015; and</i> <i>BCC Works Specification 2005 — Civil land development.</i> ii. <i>The internal pipe network is to be designed in accordance with the Council's Engineering Guide for Development 2005 to carry the 5% AEP (20 year ARI) storm flows.</i> iii. <i>The 1% AEP flows from the site are to be directed to the OSD. Demonstrate how the surface flows in excess of the pipe capacity are directed to the OSD basin.</i> iv. <i>Consider the tailwater conditions in the regional detention basin when discharging the stormwater system. High backwater levels can reduce the effectiveness of the stormwater system. For example, to reduce impact of tailwater levels, set the false floor level within the Stormfilter Cartridge chamber and also the outlet from the CDS GPT units above the 1 EY water level immediately downstream of the basin.</i> v. <i>Provide step irons at 300 cts for pits deeper than 1.2 m.</i> vi. <i>Show how the roof water gets to the rainwater tanks. Provide a separate system for roof water and surface drainage. Pits between the roof lines (i.e. charged pipes) are to be sealed.</i> vii. <i>Charge line cleanout pits are to be provided at the low point of all charge line systems for the rainwater tanks to facilitate cleaning of the system.</i> viii. <i>Provide pit numbers/identifications on all plans.</i> ix. <i>Review the pit size as 600 * 600 mm pits are limited to 600 mm maximum depth and 600 * 900 mm pits are limited to 900 mm depth. Pits greater than 900 mm depth are all to be minimum 900 * 900 mm. All pits within the proposed development must comply with these requirements</i> x. <i>On drawing Co13251.0-DA44, show the impervious area in % adopted for each catchment in the hydrology model.</i> xi. <i>Provide details of the proposed CDS GPT units (where used) including sections, levels, calculations of treatable flow rates.</i> xii. <i>As noted above any flows that are discharging to Blacktown Council's drainage network including any flows from the area under Cumberland Council control are to meet all Council's water quality targets and be located on land under Blacktown Council control to ensure ongoing monitoring.</i> xiii. <i>OceanGuards should treat a maximum of 1000 m² of non-roof areas and 1500m² of roof areas. All OceanGuards are to be clearly notated as "200 micron OceanGuards.</i> xiv. <i>OceanGuards treating only surface flows require a minimum clear depth of 500 mm below the grate to any inlet or outlet pipe obvert. OceanGuards treating surface flows and upstream pipe flows require a minimum clear depth of 500 mm from the invert of the upstream pipes to be treated, to the</i>

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	<i>obvert of the outlet pipe. Where these pits are treating upstream pipe flows the inverts of all pipes in and out of the pit are to be shown</i> xv. <i>Where OceanGuards (Enviropods) are designed to treat upstream pipe flows, the invert levels on all pipes discharging to and from the pit are to be clearly shown. Provide a minimum clear depth of 500 mm from the invert of the upstream pipes to be treated to the outlet pipe obvert.</i> xvi. <i>All proposed Stormfilter Cartridge Systems are to be designed in accordance with BCC guidelines. Provide all details of the proposed Stormfilter Cartridge system including plan view, sectional view, levels, cartridges, calculations etc.</i> <u>Response</u> i. Not agreed – refer Item 1 response. ii. Preliminary sizing of internal pipework has been shown which is based on a 5% AEP (1 in 20 year ARI) design storm. Final sizing of drainage, based on Council design documents will be completed as part of detail design stage. iii. Refer updated plans which show general flow paths for 1 in 100 year flows. It is noted that all site levels are generally graded toward the regional detention system. iv. The anticipated invert level of the filtration tank is approximately RL 52.92m AHD. The 1EY water level in the basin is noted to be RL 51.97m. This is 0.95m below the filtration unit invert and will have negligible impact on tailwater. Further assessment on tailwater effect will be completed during detail design phase of the development. v. Refer drainage Note 16 on drawing Co13251.06-DA10 which requires step irons for pits deeper than 1000mm. vi. Indicative connection to rainwater tanks has been included and updated on drawings. vii. Cleanouts to charged lines would be included in detail design drawings. Not relevant for concept drainage layouts. viii. Pit naming not required at concept stage. Naming and pit schedules will be provided in detail design phase. ix. Minimum pit sizes will be provided in accordance with Australian Standards and Council requirements. It is anticipated that most pits will be 900mm square or larger. Pit sizing and schedule would form part of detail design phase. x. % impervious has been added to the drawing – refer updated DA44. xi. Sizing of GPT's has been added to the drawings – refer updated DA41 and DA42. xii. Not agreed – refer Item 2 responses. xiii. Noted – this would be confirmed during detail design phase for individual buildings (within Blacktown Council LGA only). xiv. Noted – this would be confirmed during detail design phase for individual buildings. xv. Noted – this would be confirmed during detail design phase for individual buildings.

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	xvi. Noted – additional sections and details on the stormfilter system have been included in updated drawings.
Cumberland City Council	
Planning - Excavation – Bulk Earthworks	
Item 1c)	<i>In accordance with Clause 3.5, Control C12, development shall minimise cut and fill to protect existing drainage patterns and maintain integrity of the groundwater system.</i> <i>In this regard, the proposed development is designed to require significant bulk earthworks with cut and fill in the order of 8m and 14m respectively, as identified on Page 11 of the Geotechnical Investigation (GI), which is considered excessive.</i> <u>Response</u> Further groundwater testing has been undertaken by PSM during November & December 2020 (refer PSM Report PSM4010-010L dated 7 December 2020), and specific letter to address this RTS item – refer PSM letter PSM4010-008L, dated 8 December 2020. Groundwater is noted to be present adjacent to the regional basin at levels between RL 48.2m and RL 51.8m AHD. This part of the site is noted to be in an area of fill (with proposed pad level at RL 59.5m. Consideration to groundwater during construction will be required for retaining wall footings and temporary drainage. The works and designs will be completed during Construction Certificate and detail design stage with consideration to the requirements of the PSM reports noted. PSM have confirmed there is no observed groundwater within areas of proposed cut. Allowance for general minor seepage which would be expected from shale substrate will be required. Overall it is not considered the proposed development would have any significant effect on groundwater. Refer further information from PSM Geotechnical Engineers: • Letter PSM4010-008L, dated 8 December 2020; and • Groundwater Report PSM4010-010L dated 7 December 2020.
Engineering	
Flooding	
Item 3)	<i>The site is located within the Flood Risk precinct. In this regard, a Flood Advice Letter should be obtained from Council.</i> <u>Response</u>

No.	Item and Response
	A formal flood advise letter has been obtained from Council and considered in the development assessment. Refer Letter EC2020/0849, dated 19 October 2020 and updated report Section 8 and Appendix J. The flood advise letter shows flood extent and levels to to the north and north west of the property, within the regional detention basin and wetland, consistent with the information previously obtained from Blacktown Council. Blacktown Council's flood letter shows the existing 1% AEP flood level is RL 55.06m AHD, and the PMF is RL 57.17m AHD within the basin. Cumberland Council's flood letter shows the existing 1% AEP flood level is RL 55.2m AHD within the basin. Cumberland Council do not provide advice on the PMF flood level. The Cumberland Council flood letter also shows overland flow within Clunies Ross Street. Comparison of survey levels with the flood information shows that the flow depths are in the range of 0.15-0.2m in depth in the vicinity of the intersection of Clunies Ross Street with Wombat Street, and 0.3m in the vicinity of Burraga Way. The overland flow shown in the Cumberland Council letter is noted to be gutter flow which is contained within the road carriageway. Generally levels within the verge are between 0.5-1.0m higher than the top of gutter level, hence there is limited opportunity for flow within the gutter and Clunies Ross Street to enter the site, or to affect the development. The situation is shown figuratively below, as sourced from QUDM2013. Diagram illustrating a cross-section of a road reserve. The road reserve is shown with a freeboard of 300 mm. The floor level is indicated. An underground pipe network is shown below the road reserve. A note states: "Major flood event contained within road reserve or lesser depth to maintain freeboard." Building above top of kerb and channel Diagram illustrating a cross-section of a road reserve. The building is shown below the top of the kerb and channel. A circular inset labeled "See detail A" is shown. Building below top of kerb and channel Diagram illustrating a cross-section of a footpath and road reserve. The footpath is shown with a 100 mm width. A 50 mm limitation above the top of the kerb (Major system) is indicated. The diagram is labeled "Detail A". Detail 'A'

No.	Item and Response
	Flood risk associated with the gutter flow in Clunies Ross Street is considered negligible, and the proposed development will not impact flooding within Clunies Ross Street. We do not consider any additional flood assessments are warranted based on the information contained within the Cumberland Council Flood Advice.
Item 4)	<i>The subject development shall comply with the Flood Advice Letter, and should be designed in accordance with Part A, Section 8.0 - Stormwater Management of the HDCP.</i> <u>Response</u> A formal flood advise letter has been obtained from Council and considered in the development assessment. Refer Letter EC2020/0849, dated 19 October 2020 and updated report Section 8 and Appendix J. Refer Item 2 response and noted sections of the report.
Stormwater	
Item 5)	<i>Stormwater runoff from Catchment 3 does not discharge to the regional detention basin. In this regard, On-site Stormwater Detention (OSD) should be provided for Catchment 3.</i> <u>Response</u> <i>Catchment 3</i> (shown on drawing Co13251.06-DA40) is noted to drain to Council trunk drainage within Foundation Place. The Foundation Place drainage is noted to be conveyed to Girraween Creek to the north of the subject land. Girraween Creek then drains to the wetland and then into the regional basin. Although <i>Catchment 3</i> does not have a direct drainage connection to the regional wetland basin from within the site, it does so via existing drainage infrastructure within the precinct. The catchment is noted to form part of the regional systems, and the Greystanes Northern Employment Lands catchment and stormwater management system. We have figuratively shown the layout of the trunk drainage which leads to the regional system on the plan to confirm the above arrangement. Given it is confirmed that <i>Catchment 3</i> does drain into the wetland via trunk drainage, no additional detention or water quality is required or proposed for <i>Catchment 3</i>. This is consistent with all sites within the Greystanes Northern Employment Land Precinct.
Item 6)	<i>Stormwater runoff from the street / footpath should not enter development site. In this regard, the architectural and stormwater design should be reviewed in conjunction with Council approved Boundary Line Levels.</i> <u>Response</u> This is noted and considered. Council approved boundary line levels would normally form part of detail design phase assessments and can be conditioned as such.

No.	Item and Response
<i>Sediment and Erosion Control</i>	
<i>Item 38)</i>	<i>A Sediment and Erosion Control Plan should be developed and implemented for the entirety of construction works on site. The Sediment and Erosion Control Plan should be designed to prevent the offsite migration of sediment from the proposed development.</i> <u>Response</u> Erosion and Sediment Control Plans have been included in the assessment submission. Refer to drawings Co13251.06-DA20 and DA25. Refer also Section 9 of the engineering report which includes a detailed draft stormwater management plan designed in accordance with Landcom Blue Book and Council Policy.

This letter is provided by Costin Roe Consulting Pty Ltd. Please contact the undersigned if clarification of any of the above items are required.

Yours faithfully,

COSTIN ROE CONSULTING PTY LTD



MARK WILSON MIEAust CPEng NER
Director

Encl 1. Blacktown City Council in their information request letter dated 18 September 2020

Encl 2. Cumberland City Council in their information request letter dated 16 September 2020

ENCLOSURE 1

Blacktown City Council in their information request letter dated 18 September 2020



Blacktown
City Council

Your ref: SSD 10399
File no MC-20-00009

18 September 2020

Department of Planning Industry and Environment
GPO Box 39
SYDNEY NSW 2001

Recipient Delivery deana.burn@planning.nsw.gov.au

Attention: Ms Deana Burn

Dear Ms Burn,

SSD 10399 – Clunies Ross Street, Prospect

Thank you for the opportunity to comment on the State Significant Development proposal lodged under Part 4 of the Environmental Planning and Assessment Act 1979 ("the Act").

The proposal has been reviewed by our officers and a number of issues have been raised and listed in **Attachment A** to this letter. We request the items listed in Attachment A to be addressed by way of amended or additional details and referred back to us for reconsideration before we provide final set of conditions prior to the final determination made by the Department.

If you would like to discuss this matter further, please contact our Senior Town Planner, Sara Smith on 9839 6262.

Yours faithfully

Judith Portelli
Acting Director Planning and Development

Connect - Create - Celebrate

Council Chambers - 62 Flushcombe Road - Blacktown NSW 2148

Telephone: (02) 9839 6000 - DX 8117 Blacktown

Email: council@blacktown.nsw.gov.au - Website: www.blacktown.nsw.gov.au

All correspondence to: The Chief Executive Officer - PO Box 63 - Blacktown NSW 2148

ATTACHMENT A

It is noted that Blacktown Council does not have any development controls for this site, however consideration must be given to controls under State Environmental Planning Policy (Western Sydney Employment Area) 2009 and respective DCP's and Blacktown Development Control Plan 2015 to ensure there is consistency across the entire Blacktown Local Government Area.

In reviewing the current proposal including the draft DCP, consideration has been given to the controls under Cumberland Council including the Holroyd DCP for Pemulwuy Industrial area. Whilst the draft DCP is generally consistent with this DCP and has adopted a significant number of these controls, the following matters listed below must be considered prior to any determination of the application.

It is noted that warehouse 1 and part of warehouse 7 are located within Blacktown Local Government area, whilst the remainder of the site is located within Cumberland Local Government area. The issues raised below are specific for the area of the development within Blacktown Local Government Area.

Matters to be considered and addressed:

1. Planning and Design

The following issues are raised with the Draft DCP and plans

a. Landscaped setback to Clunies Ross Street

- The Draft DCP states the building setback to Clunies Ross Street is 20 metres with a minimum 3 metre landscaped setback, whilst the plan for warehouse 1 indicates the landscape setback is 5 metres.

This landscaping setback is considered insufficient and should be a minimum of 10 metres. No parking or structures should be permitted within the landscaped area.

b. Building height and views

- The Draft DCP fails to nominate a maximum building height for the site. A maximum building height **must be** prescribed within the DCP for the site.

The draft DCP has utilised a number of the Objectives contained within the Pemulwuy DCP including some outlined below but without prescriptive controls it is not clear now these objectives are being met. The existing Pemulwuy DCP has a height limit of 12m to 12.2m and in addition on certain land sets a maximum RL limit.

Objectives include:

- To ensure buildings do not adversely affect views from the M4, Great Western Highway and Prospect Reservoir environs to Prospect Hill.

- To create building forms with appropriate scale and height, taking into consideration site topography.
- To ensure building heights do not adversely impact on the amenity of adjacent residential areas.
- Concerns are raised regarding the height of warehouse 1, which will be visually dominant when travelling south along Clunies Ross Street. The submitted Landscape and Visual Impact Assessment (LVIA) prepared by Habit8 states the Viewpoint H (Clunies Ross Street North (looking west) has a medium-high visual sensitivity, but is of a minor impact.

Consideration must be given to the reduction in height of warehouse 1 which is the first building seen when driving south along Clunies Ross Street towards the development site. In addition the height of the warehouse at 42 metres is considered to be excessive given its location within the wider development site as it's the gateway from Clunies Ross Street and the warehouses close proximity to the residential properties.

- The submitted LVIA prepared by Habit8 only outlines the impacts on views along Clunies Ross Street directly across from the proposed development, but fails to outline the visual impacts of the development driving west along Clunies Ross Street from the Great Western Highway, over the M4 Motorway. This must be considered as part of the assessment and prior to any determination of the application.
- In addition, it is not clear how the height of warehouse 1 meets the objective *"to ensure building heights do not adversely impact on the amenity of adjacent residential areas"*, warehouse 1 is located directly opposite the residential area, where the development will be visually dominant from the backyards of properties in Muttong Street.

c. Parking rates

- The proposed car parking rates are not satisfactory and do not comply with the current rates applied across the Blacktown Local Government Area, specifically areas which also fall under State Environmental Planning Policy (Western Sydney Employment Area) 2009.
- The DCP for the Blacktown Local Government Area should be amended to provide the following rates:
 - Warehouse - 1 space per 100sqm GFA
 - Office – 1 space per 40sqm GFA
 - Café – 1 space per 10sqm of dining area and 1 space per 2 employees
- The DCP should be amended to ensure the car parking rates are a minimum control and not a maximum control.

d. **Car parking areas**

- Pedestrian links within all car parks are to be provided, including pedestrian line markings and footpaths.

e. **Inconsistencies between documentation**

- The draft DCP states the setback to Clunies Ross Street is 20 metres to the building and the first 3 metres is to be landscaped, however the LVIA prepared by Habit8 states the landscaping buffer zone to Clunies Ross Street is 5 metres. The submitted plans for Warehouse 1 indicate the landscape buffer as 5 metres.

f. **Landscaping**

- The DCP should be amended to include controls which require the planting of mature trees along street frontages to reduce the visual dominance of the buildings.
- The DCP should be amended to include the following control:
 - Carparking areas are to be suitably treated with landscaping to soften the appearance of the areas and to provide shade for parked cars. At a minimum standard one tree should be planted every 25 metres (9 bays) and be at a minimum height of 1 metre at the time of planting with a minimum 2 metre bay of deep soil.

g. **Communal open space**

- Section 2.7 - Landscaping of the draft DCP provides the following development standard – C4. *“provide outdoor amenity / recreation facilities for employees within the landscaped areas, to meet the needs of the workforce”.*
- The DCP fails to nominate a minimum communal open space area that needs to be provided as part of the development. The DCP control is considered to be poorly worded and should be specific in the requirements for development sites.
- In addition, the architectural plans and landscaping plans fails to nominate any areas as communal open space.

h. **Signage**

- The DCP should be amended to provide maximum dimensions including the height and width of proposed signage.
- The DCP should include a development control that all signage comply with State Environmental Planning Policy No. 64 Advertising and Signage.

i. **Fencing**

- The DCP should be amended to state the maximum fence heights, the development controls listed are not prescriptive and lack detail.

j. **Retaining walls**

- The DCP fails to include a section on retaining walls. Any retaining wall shall not exceed 3 metres in height and has be terraced at intervals of 1.5 metres. The terraced areas shall be suitably landscaped.

2. Building

Prior to determination of the application, the applicant should submit the following documents for review:

- An access premises report under the Disability Discrimination Act; and
- A site investigation report on the buildings to be demolished, including a work plan and hazardous material management plan.

3. Drainage

Review of the following documents was undertaken:

1. Letter from Blacktown City Council to NSW Department of Planning, Industry and Environment reference no. SSD 10399 dated 4 December 2019.
2. Civil Engineering Report Incorporating Water Cycle Management Strategy by Costin Roe Consulting, project no. CO13251.06, revision A dated 4 June 2020.
3. Appendix B to Appendix H of the Civil Engineering Report Incorporating Water Cycle Management Strategy by Costin Roe Consulting, project no. CO13251.06, revision A dated 4 June 2020.
4. Engineering Plans by Costin Roe Consulting drawing nos. CO13251.06-DA10(D), CO13251.06-DA20(B), CO13251.06-DA25(B), CO13251.06-DA30(C), CO13251.06-DA31(C), CO13251.06-DA35(B) to CO13251.06-DA37(B), CO13251.06-DA40(C) to CO13251.06-DA42(C), CO13251.06-DA44(B), CO13251.06-DA45(C), CO13251.06-DA47(D), CO13251.06-DA48(B), CO13251.06-DA51(C), CO13251.06-DA52(C), CO13251.06-DA55(B), CO13251.06-DA56(B), CO13251.06-F01(B) and CO13251.06-F02(B) dated 3 June 2020.
5. Geotechnical Investigation report by PSM reference no. PSM4010-003L dated 11 February 2020.
6. Environmental Assessment report by JBS&G reference 58238/130144, revision 0 dated 3 June 2020.
7. SEARs Report for Prospect Logistics Estate application no. SSD-10399 dated 16 December 2019.

The following items need to be addressed to meet the requirements under Council's DCP Part J 2015 and Council's Engineering Guide for Development 2005:

General Notes:

1. It is acknowledged that the subject site is situated within two separate LGAs (Blacktown City Council and Cumberland Council). The proposed stormwater quality for the overall development is split into catchments to target the water quality requirements for the particular Council. Notwithstanding, the stormwater system from the overall development is proposed to be discharged to the regional detention basin / wetland located and managed by Blacktown City Council.

Therefore, the drainage design for the entire development is to be amended to meet Blacktown City Council's guidelines which include (not limited to):

- i. BCC DCP 2015 including Part J – Water Sensitive Urban Design and Integrated Water Cycle Management;
 - ii. BCC DRAFT WSUD developer handbook with MUSIC modelling and design guide 2020
 - iii. BCC WSUD Standard Drawings A(BS)175M;
 - iv. BCC Engineering Guide for Development 2015; and
 - v. BCC Works Specification 2005 – Civil land development.
2. Clarity is required in relation to the combined area of the site. Section 2.1 of the Civil Engineering Report by Costin Roe (project no. C013251 revision A dated 4 June 2020) has stated the combined area of the site is 18.40 hectares, the architectural plans by SBA Architects (project no. 19280 revision 0 dated 4 June 2020) has stated a site area of approximately 18.66 hectares and the Environmental Assessment report by JBS&G (reference 58238/130144 revision 0 dated 3 June 2020) has stated an area of 18.77 hectares. The correct combined area of the site is to be adopted on all reports, engineering plans and relevant modelling for the Water Cycle Management.
 3. Geotechnical Investigation report by PSM (dated 11 February) has suggested that Groundwater seepage was encountered at boreholes conducted onsite (boreholes 2020/BH09 and 2020/BH10). Results and recommendations carried out in this report must be considered (i.e. excavation methods, batter slopes and heights above the groundwater table etc) for the civil engineering designs. Since these boreholes were tested at the location of proposed building pads (i.e. Pad 7), further investigation and possibly long-term groundwater monitoring is required to ensure that the proposed development does not impact the groundwater table and groundwater flows.
 4. Provide electronic copies of the XP-RAFTS, DRAINS, MUSIC and flood model used to assess Water Cycle Management Strategy for the development. Ensure that the correct models are submitted and are consistent with the engineering plans.
 5. A dam break assessment of the existing regional detention basin with the proposed modifications is required. The engineer is to assess whether the proposed modifications to the detention basin will have risks to the population should the basin fails. Where there is any population at risk, a comprehensive risk assessment is to be undertaken. The requirements of this risk assessment are to be implemented including any remediation works. Provide details.
 6. Any flows that are discharging to Blacktown Council's drainage network including any flows from the area under Cumberland Council control are to meet all Council's water quality targets and be located on land under Blacktown Council control to ensure ongoing monitoring.

7. The WSUD design is to capture a minimum of 90% of the post development average annual load of Hydrocarbons and oils. Council does not accept the proposition in Section 7.4.7 of the Civil Engineering Report by Costin Roe Consulting dated 4 June 2020 which states that the proposed development is expected to produce low source loadings of hydrocarbons. This can be achieved with a number of alternatives.
 - i. GPTs can be provided prior to discharge from the site including all areas located in BCC. GPTs are to have an oil baffle able to trap and contain oil or hydrocarbons and sized to treat a minimum 2EY flow considered as 75% of the 1EY flow. The GPTs are to be located in an area that can be easily accessed by truck for maintenance. Or
 - ii. If a Stormfilter Cartridge system is proposed to manage the water quality, provide an oil baffle within the Stormfilter chamber to trap and contain oil or hydrocarbons. The oil baffle is to be 250 mm upstream of the Stormfilter weir and extend 400 mm below the weir level for a 690 cartridge. The minimum length of the Stormfilter weir (L) is to be increased to provide a maximum velocity of 0.4 m/s under the baffle during peak flow (i.e. $L > Q_{20} / (0.4 \times 0.25)$, or $L > 10 \times Q_{20}$) in m, where Q_{20} is in m³/s). Provide calculations

MUSIC Modelling:

8. The Blacktown water quality targets are to apply to all parts of the site that drain to the Blacktown drainage network even where such water originates from the Cumberland Council area. Locate all treatment devices within the Blacktown boundaries.
9. Provide two separate and additional MUSIC models (pre and post) to demonstrate that the Stream Erosion Index (SEI) is less than 3.5. The pre development is to consider a vacant pervious block. Provide all calculations used to determine $Q_{critical}$.
10. The proposed rainwater tanks for the site are to be amended to comply with Blacktown City Council guidelines. Ensure that all rainwater tanks provide the minimum 80% non-potable water reuse. Allow for a 10% loss in rainwater tank size volume in MUSIC to that shown on the design plans below the overflow invert to allow for anaerobic zones and mains water top up levels (i.e. where a 100 kL tank is specified on the drainage plan, it is to be modelled as 90 kL in MUSIC).
11. For watering landscaped areas only (excluding turf areas) allow 0.4 kL/year/m² as PET-Rain.
12. For industrial developments allow for internal rainwater reuse of 0.1 KL/day per toilet/urinal. However, where the site is occupied say 5 days per week the daily usage rate is to be reduced by 5 / 7.
13. Ensure that the areas draining to surface inlet pits with OceanGuards match the engineering plans.
14. Ensure that Blacktown Council's specific MUSIC modes are used for the total development area draining to the devices.

15. The minimum Stormfilter chamber area is to be No. of Cartridges x 0.177 m²/cartridge excluding the area of the weir.
16. Ocean Protect has advised that the maximum storage permitted below the Stormfilter weir to ensure effective operation of the filter cartridges is limited to an equivalent volume derived from 2.0 mm of rainfall (20 m³/Ha) without losses, falling over the site area that drains to the Stormfilter chamber (ignoring any bypass area).
17. It is acknowledged that there is no development proposed within the Aboriginal Heritage area located south east of the site and this area has not been included in the provided MUSIC model. However, this area appears to drain directly into the proposed development and affect the proposed stormwater system. The options below are to be considered to ensure this area is managed:
 - i. Where levels permit, relocate the proposed retaining walls further away from the Aboriginal Heritage area and provide a catch drain with a series of pits and pipes at the top of the wall just clear of the heritage zone to capture the 5% AEP flows and discharge these flows independently to the wetland area.
 - ii. Where the retaining walls are not relocated or it is too difficult to discharge an area independently to the wetland, then this area will need to be included in the MUSIC model as a "Forest" node.
18. Amend the MUSIC model accordingly. Provide an electronic copy of the model with MUSIC Link report that matches the MUSIC model and drainage plans.
19. Provide a MUSIC catchment plan that shows both the land use and the areas contributing to each specific device. To make this more understandable it may be easier in many cases to split these into two separate plans.

DRAINS Modelling:

20. The DRAINS model provided seems to be incorrect. The surface areas of the regional detention basin in the model do not match with Tables 6.1 and 6.5 of the Civil Engineering Report and the engineering plans. Furthermore, the high flow overflow routes levels do not match the levels within the detention basin. Ensure that the correct DRAINS models are provided.
21. Council is unable to run the DRAINS models provided. Ensure that the model provided can be opened in a version of DRAINS that does not require the use of Storage Network Routing (i.e. XP-RAFTS).

Specific Notes:

22. Civil Engineering Report Incorporating Water Cycle Management Strategy by Costin Roe Consulting, project no. C013251.06, revision A dated 4 June 2020
 - i. Delete reference to Penrith Council in Section 5.1.
 - ii. The Erosion and Sediment Control must be prepared in accordance with Blacktown City Council guidelines and not Penrith City Council as stated in Table 5.1 under the "Reference" column and Section 9.1 of the report.
 - iii. Delete reference to "2hr duration" under Table 6.9 title. The table includes 2, 6 and 9 hour durations.

- iv. Insufficient information is provided in relation to the flood assessment. A comprehensive flood assessment is required for the development in conjunction with the BCC guidelines and SEAR's. All information must be provided including which software was used for the assessment, methodology, calibration of the flood model to ensure consistency of the flood behaviour documented by Council, rainfall data, catchments, hazard and flood difference maps, flow velocities, hydraulic categories, assumptions, etc.
 - v. The flood planning level mentioned in Section 8.4 seems to be incorrect. The minimum FPL should be the 1% AEP flood level with climate change + 0.5 m freeboard. Furthermore, the section suggests that the lowest proposed building level on the site is RL 60.0 m AHD when drawing CO13251.06 of the engineering plans shows Warehouse 1 FLL = 57.50 +/- 500 mm.
 - vi. Section 5.1 (Page 23) of the report states that the existing regional detention basin caters for catchment with an area of approximately 167 hectares while Section 6.2 states that the area is 173.55 hectares. Clarity is required.
 - vii. Section 6.3 (Assessment of Existing Detention System) – values in the discussion section on Page 36 do not match the tabulated results. For example, the water level stated in the discussion for the existing detention basin is RL 55.01 m AHD in the 1% AEP and RL 56.43 in PMF. Results of the assessment in Tables 6.2 and 6.3 depict RL 55.20 m AHD in the 1% AEP and RL 57.15 in PMF respectively.
 - viii. Section 6.4 (Assessment of Modified Detention System) – similar to the above, values in the discussion on Page 39 do not align with the results in Tables 6.6 – 6.9.
 - ix. Section 5.5 (Climate Change) – the section states an assessment was undertaken for the effect of climate change on the development with a 10% increase in rainfall intensity for the 1% AEP and reference to Table 6.9 to compare the flows. However, no such results are shown in this table respectively. Also, rainfall intensities for the 1% AEP are to be increased to 15% for a conservative estimate on climate change and to meet Council guidelines.
 - x. Recheck all results, values and grammar in the report. Ensure consistency in/between the models and report.
23. Engineering Plans by Costin Roe Consulting dated 3 June 2020:
- i. Considering that the stormwater system for the entire development will be discharged to the regional devices managed Blacktown City Council, the engineering plans for the total development are to be amended to comply with meet Blacktown City Council's guidelines which include (not limited to):
 - BCC DCP 2015 including Part J – Water Sensitive Urban Design and Integrated Water Cycle Management;
 - BCC DRAFT WSUD developer handbook with MUSIC modelling and design guide 2020

- BCC WSUD Standard Drawings A(BS)175M;
 - BCC Engineering Guide for Development 2015; and
 - BCC Works Specification 2005 – Civil land development.
- ii. The internal pipe network is to be designed in accordance with the Council's Engineering Guide for Development 2005 to carry the 5% AEP (20 year ARI) storm flows.
 - iii. The 1% AEP flows from the site are to be directed to the OSD. Demonstrate how the surface flows in excess of the pipe capacity are directed to the OSD basin.
 - iv. Consider the tailwater conditions in the regional detention basin when discharging the stormwater system. High backwater levels can reduce the effectiveness of the stormwater system. For example, to reduce impact of tailwater levels, set the false floor level within the Stormfilter Cartridge chamber and also the outlet from the CDS GPT units above the 1 EY water level immediately downstream of the basin.
 - v. Provide step irons at 300 cts for pits deeper than 1.2 m.
 - vi. Show how the roof water gets to the rainwater tanks. Provide a separate system for roof water and surface drainage. Pits between the roof lines (i.e. charged pipes) are to be sealed.
 - vii. Charge line cleanout pits are to be provided at the low point of all charge line systems for the rainwater tanks to facilitate cleaning of the system.
 - viii. Provide pit numbers/identifications on all plans.
 - ix. Review the pit size as 600 * 600 mm pits are limited to 600 mm maximum depth and 600 * 900 mm pits are limited to 900 mm depth. Pits greater than 900 mm depth are all to be minimum 900 * 900 mm. All pits within the proposed development must comply with these requirements.
 - x. On drawing Co13251.0-DA44, show the impervious area in % adopted for each catchment in the hydrology model.
 - xi. Provide details of the proposed CDS GPT units (where used) including sections, levels, calculations of treatable flow rates.
 - xii. As noted above any flows that are discharging to Blacktown Council's drainage network including any flows from the area under Cumberland Council control are to meet all Council's water quality targets and be located on land under Blacktown Council control to ensure ongoing monitoring.
 - xiii. OceanGuards should treat a maximum of 1000 m² of non-roof areas and 1500m² of roof areas. All OceanGuards are to be clearly notated as "200 micron OceanGuards".
 - xiv. OceanGuards treating only surface flows require a minimum clear depth of 500 mm below the grate to any inlet or outlet pipe obvert. OceanGuards treating surface flows and upstream pipe flows require a minimum clear depth of 500 mm from the invert of the upstream pipes to be treated, to the obvert of

the outlet pipe. Where these pits are treating upstream pipe flows the inverts of all pipes in and out of the pit are to be shown.

- xv. Where OceanGuards (Enviropods) are designed to treat upstream pipe flows, the invert levels on all pipes discharging to and from the pit are to be clearly shown. Provide a minimum clear depth of 500 mm from the invert of the upstream pipes to be treated to the outlet pipe obvert.
- xvi. All proposed Stormfilter Cartridge Systems are to be designed in accordance with BCC guidelines. Provide all details of the proposed Stormfilter Cartridge system including plan view, sectional view, levels, cartridges, calculations etc.

ENCLOSURE 2

Cumberland City Council in their information request letter dated 16 September 2020



CUMBERLAND
CITY COUNCIL

Our Ref: OA2020/0002
DPIE Ref: SSD-10399

16 September 2020

NSW Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Deana Burn

Dear Sir/Madam,

Subject: Request for Comments - State Significant Development (SSD)
Application No: SSD-10399
Property: 44 Clunies Ross Street & Great Western Highway, PROSPECT NSW 2145
615A Great Western Highway & Boral House – Clunies Ross Street,
PEMWULWUY NSW 2145
Proposal: Proposed warehouse and logistics estate at Clunies Ross Street,
Pemulwuy, including the construction and operation of seven warehouses
ranging in height from 11 metres to 42 metres, with a combined gross floor
area of circa 96,000m²

Reference is made to the Department of Planning, Industry & Environment referral dated 26 August 2020 regarding the abovementioned application, which was referred to Cumberland City Council (**Council**) to provide advice in relation to Application No. SSD-10399, related to the Prospect Logistics Estate.

Council has reviewed the submitted information, and requests that the following matters be addressed in the assessment of the application.

PLANNING

Exclusion of Application of Development Control Plans

1. In accordance with Clause 11 of State Environmental Planning Policy (State and Regional Development) 2011, *development control plans (whether made before or after the commencement of this Policy) do not apply to (a) state significant development.* Notwithstanding, the following items as per Part Q – Pemulwuy Northern Employment Lands Controls of the Holroyd Development Control Plan 2013 (**HDCP**), are raised for your attention.
 - a) **Setback to Clunies Ross Street** - In accordance with *Clause 3.3, Control C1*, the *buildings to the west of Clunies Ross Street shall be setback as follows:*
 - *North-south spine road - Buildings are to be setback 20 metres from the property boundary. The first 10 metres is to be landscaped.*

In this regard, the proposed development is setback 15 metres from the property boundary with Clunies Ross Street, with landscaping maintained to the first 5 metres,

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which reduces opportunities for landscaping on site, and limits the landscape curtilage between the development and the public domain.

Note: The Draft Site Specific DCP submitted, further seeks to reduce the extent of landscape area required to the first 3 metres, as measured from the property boundary with Cluniess Ross Street.

- b) **Height** - In accordance with *Clause 3.5, Control C1*, generally, 12 metres is the building height limit in the Northern Employment Area.

In this regard, the proposed development is *designed to a maximum height of 11.7m and 42m above the amended ground level*, as identified within Page ix of the Environmental Impact Statement (EIS), which is considered excessive, and out of character with the surrounding area, in particular the interface with, and views towards, Prospect Hill, and the existing residential area to the east of the site.

Note: Page 60 of the Statement of Heritage Impact (SoHI) identifies *Warehouse 1 will be the highest of the proposed development, extending to a height of RL 99.5. ... This structure may however obscure views towards Prospect Hill when viewed from the north of the development. ... The proposed works would also reduce the prominence of Prospect Hill as a landscape feature when viewed from surrounding areas.*

- c) **Excavation – Bulk Earthworks** - In accordance with *Clause 3.5, Control C12*, development shall *minimise cut and fill to protect existing drainage patterns and maintain integrity of the groundwater system.*

In this regard, the proposed development is designed to *require significant bulk earthworks with cut and fill in the order of 8m and 14m respectively*, as identified on Page 11 of the Geotechnical Investigation (GI), which is considered excessive.

- d) **Landscaping – Amenity Areas** - In accordance with *Clause 3.8, Control C4*, development shall *provide outdoor amenity / recreation facilities for employees within the landscaped areas, to meet the likely needs of the workforce.*

In this regard, outdoor amenity / recreation facilities for employees within the landscaped areas, have not been provided.

Other Matters

2. Page viii of the EIS identifies *office premises* are permissible with consent in the IN1 General Industrial zone, however, pursuant to State Environmental Planning Policy (Western Sydney Employment Area) 2009 (**WSEA SEPP**), *office premises* are prohibited in the IN1 General Industrial zone.

Note: The development proposes ancillary office areas associated with the warehouse buildings, which are permissible pursuant to WSEA SEPP.

ENGINEERING

Flooding

3. The site is located within the Flood Risk precinct. In this regard, a Flood Advice Letter should be obtained from Council.
4. The subject development shall comply with the Flood Advice Letter, and should be designed in accordance with Part A, Section 8.0 - Stormwater Management of the HDCP.

Stormwater

5. Stormwater runoff from Catchment 3 does not discharge to the regional detention basin. In this regard, On-site Stormwater Detention (OSD) should be provided for Catchment 3.
6. Stormwater runoff from the street / footpath should not enter development site. In this regard, the architectural and stormwater design should be reviewed in conjunction with Council approved Boundary Line Levels.

Note: The Applicant should submit an application to Council for Boundary Line Levels.

Transport Impact Assessment

7. The Transport Impact Assessment indicates that the proposed development will generate approximately 1807 vehicles per day, and a net increase of 444 vehicles per day. This increase would adversely impact on the road environmental capacity, particular for Clunies Ross Street, which should be addressed.
8. Appropriate measures should be incorporated as part of the development, to improve the intersection performance of Prospect Highway / Foundation Place.
9. Any existing / proposed new signs and line marking plans shall be issued to Council, which will be subject to the approval of the Cumberland Traffic Committee.

Off-Street Parking

10. The provision of off-street parking spaces should comply with the HDCP, and Blacktown Development Control Plan 2015 (**BDCP**).
11. Accessible parking should be provided in accordance with the Building Code of Australia.

Internal Car Park Design and Loading Areas

12. The size of the largest heavy vehicle that will enter and exit the site in a forward direction should be confirmed by the Applicant.
13. Adequate facilities should be provided on-site for servicing of the development. Details should be provided demonstrating that the design (largest) heavy/delivery vehicle is suitable for the proposed development, and measures to ensure safety while heavy vehicles are entering, manoeuvring and exiting the site.

14. Sight distance at the entry / exit points should be demonstrated to comply with AS2890.1-2004. Details such as heights of fencing, parked vehicles on the road or other structures adjacent to the driveway, should be considered.
15. Dimensions (parking spaces length and width, aisle width (particularly between angle and parallel parking spaces), parking space gradients, head height clearance, extensions at dead end aisles, etc.) should be shown on the plans in accordance with AS2890.1-2004, AS2891.6-2009 and AS2890.2-2002.
16. The loading area design shall comply with AS2890.2-2002.
17. All accessible spaces shall be designed with a shared area. The shared area shall have bollard and accessible for a person on a wheel chair.
18. Clearances from walls, columns and other structures should be shown on the plans.
19. A swept path analysis should be provided demonstrating the following:
 - A car can pass another car at passing areas (i.e. entry and exit points / internal road ways).
 - The largest vehicle can enter the site, manoeuvre into the loading areas, and exit the site in a forward direction. The swept path analysis should demonstrate that the largest vehicle entering / exiting the site does not encroach onto the road centre line, and / or parked vehicles on the frontage roads, etc.
 - Details of the road including, kerb line, signs, traffic devices, power poles, other structures and neighbouring driveways, should be shown on the plans.

Note: The submitted swept path analysis indicates that heavy vehicles encroach onto the opposite side of the travelling lane when entering / exiting the site, which should be addressed.

Left turn manoeuvring of trucks should not encroach the centre of the road.

20. Long sections of the proposed internal road ways / ramps, should be provided with gradients and dimensions. The transition at the top and bottom of the ramp should be assessed for scraping and bottoming out.
21. A turning area shall be provided at blind aisles.
22. If entry points are provided with a security gate, then a queue area should be provided within the property boundary for the largest vehicle that will enter the site in accordance with the relevant Australian Standard.
23. Any power pole and streetlight relocation is subject to the approval of the relevant service provider and Council.
24. All vehicles (including heavy vehicle) shall be able to enter and exit the site in a forward direction.

25. Appropriate measures should be in place to ensure pedestrian safety is maintained at all times. Visitor pedestrian movements between the car park and office, should be separated from the path of heavy vehicles.
26. All off-street parking spaces should be made available for parking purposes only, and not for storage of good / materials etc.
27. All delivery vehicles should be accommodated within the site, and should not queue on the frontage street/s, or the nature strip.
28. Forklift or service vehicles should not load / unload / operate on the frontage streets.

Driveway and Access

29. Driveway ramps should not extend beyond the site boundary.

Note: The Applicant should submit an application to Council for Boundary Line Levels.

30. Driveway access in the Clunies Ross Street cul-de-sac shall be modified, so as to be located away from the cul-de-sac.
31. Truck access at the Clunies Ross Street cul-de-sac, and truck access to Warehouse 6, should be perpendicular to the site boundary alignment.
32. Truck access to Warehouse 6 interferes with the existing stormwater pit and lintel. Access should be minimum 1.2m from the stormwater pit and lintel.
33. Car parking access for Warehouse 3 should be relocated away from the truck access.

Street Lighting

34. Street lighting shall be reviewed, and adequate measures should be incorporated as part of the proposal to address the increased vehicular and pedestrian activity.

ENVIRONMENTAL HEALTH

Noise / Acoustics

35. The recommendations within the Noise Impact Assessment should be adhered to for the duration of construction works on site, and the recommendations regarding noise mitigation measures for the proposed infrastructure, should be implemented into the design.

Contamination / Remediation

36. The site has historically been used for commercial and industrial activities, and areas of environmental concern have been identified in the Environmental Site Assessment (ESA). The ESA identifies a range of data gaps, based on previous investigations of the site, and recommends that a Data Gap Investigation be undertaken to determine the extent of the contamination, followed by the preparation of a Remedial Action Plan, detailing the required remediation and validation works. Any excavated soil being disposed of offsite, should be classified prior to disposal in accordance with the EPA's Waste Classification Guidelines.

Air Quality (Odour / Dust)

37. The mitigation measures identified within the Air Quality Impact assessment should be implemented during the construction and demolition phases.

Sediment and Erosion Control

38. A Sediment and Erosion Control Plan should be developed and implemented for the entirety of construction works on site. The Sediment and Erosion Control Plan should be designed to prevent the offsite migration of sediment from the proposed development.

Waste Management Plan (Construction / Demolition / Operation)

39. The Waste Management Plan should be adhered to.

Food Premises

40. Part of the proposal is to include a small café, which would be available for community use. Where the proposed use of the kitchen includes the preparation and handling of food for sale, as defined by the Food Act, the plans should demonstrate that the kitchen will be constructed in a manner that is fit for the intended use (i.e. a commercial kitchen). The kitchen should comply with the Food Act 2003, Food Regulations 2015, the Food Standards Code and AS4674-2004 - Design, Construction and Fit out of Food Premises.
41. Detailed and scaled plans of any mechanical ventilation should be provided for the proposed food premises, demonstrating compliance with AS1668.

TREE MANAGEMENT

Landscape Plan

42. The Landscape Plan appears to only contain a 'Schedule & Details', with a drawing 'Indicative Planting Palette' for the front setback, and no other plant schedules for the other sections of the development. Additional plant schedules and details should be provided with the Landscape Plan, providing for a variety of trees and shrubs to be planted on site.

Street Tree

43. One street tree (Eucalyptus species) on Clunies Ross Street requires retention and protection during all proposed works.

Should you have any further enquiries please do not hesitate to contact William Attard on 8757 9924 in relation to this matter.

Yours faithfully,



Michael Lawani
Coordinator Major Development Assessment