ETHOS URBAN

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17413

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Dear Lauren,

STATE SIGNIFICANT INFRASTRUCTURE MP07_0171 MODIFICATION: RESPONSE TO SUBMISSIONS

This Response to Submissions (RTS) has been prepared by Ethos Urban on behalf of Aurizon Operations Limited (Aurizon) to address submissions received during the notification period of a modification application (Mod 1) to State Significant Infrastructure MP07_0171 (SSI) which relates to the construction and operation of a facility for the maintenance and provisioning of trains at Hexham, NSW. The project is known as the NSW Long Term Train Support Facility (LTTS).

The SSI Mod 1 application and Environmental Assessment Report (EAR) was lodged on 3 April 2019, and a revised application package was lodged on 12 June 2019 in response to Department of Planning, Industry and Environment (DPIE) comments. The modification consists of:

- Installation and operation of a new turning angle, including new rail tracks and level crossings comprising:
 - Excavation works for railway track foundation and ballast;
 - Approximately 1.5km of rail track and associated signal and turnout infrastructure comprising a single track straight of approximately 400m in length extending from the existing rail yard to the proposed turning angle;
 - A turning angle with two arcs approximately 250m in length and a straight of approximately 275m;
 - Two 85m straight single tracks at either end of the turning angle;
 - Four tangential turnouts; and
- Construction of vehicular access tracks and associated lighting;
- Installation of culverts within existing drainage channels, under the rail track and access tracks;
- Associated civil and stormwater works; and
- Changes to the wording of Condition E33.

The application was placed on exhibition from 26 June to 10 July 2019. This letter responses to the submissions made by various agencies and the request by the DPIE in its letter dated 15 July 2019.

An addendum Noise Impact Assessment prepared by SLR is attached at Attachment A.

1.0 Response to Submissions

Responses to each of the comments made by agencies are provided below. Agencies which provided comments include:

Australian Rail Track Corporation (ARTC);

- Department of Industry Lands and Water and Department of Primary Industries;
- Environment Protection Authority (EPA);
- · DPIE Biodiversity Conservation Division;
- · Roads and Maritime Services; and
- · City of Newcastle.

A supplementary submission was also made by the DPIE on the 30 July 2019.

1.1 Australian Rail Track Corporation

ARTC provided two comments relating to the hydraulic network and consultation. Regarding hydraulic issues, ARTC considers there will be minimal to no hydraulic or access impact to the broader ARTC rail network as a result of the proposed turning angle (refer to Section 6.3 of the EAR).

ARTC also identified potential impacts during the construction phase of these works and requested further consultation be undertaken between Aurizon and ARTC prior to construction commencing. Consultation was commenced with ARTC on the 22 July 2019. ARTC have confirmed that they are undertaking internal consultation with key stakeholders to identify if specific impacts of concern exist. Aurizon will continue to consult with ARTC prior to the commencement of construction to ensure any potential impacts are appropriately managed.

1.2 Department of Industry – Lands and Water and Department of Primary Industries

The Department of Industry - Lands & Water, and Department of Primary Industries confirmed they had no issues with the proposal.

1.3 Environment Protection Authority

The EPA provided commentary relating to the potential requirement for licensing of the proposal:

On 26 November 2018, the EPA informed DPE that the proposed development was not an activity that is listed in Schedule 1 of the Protection of the Environment Operations Act 1997 (POEO Act) and will not require licensing by the EPA. However, on 05 July 2019, amendments were made to Schedule 1 of the POEO Act through the passing of the Protection of the Environment Operations Legislation Amendment (Scheduled Activities) Regulation 2019 (the Regulation). In particular, specific changes were made regarding railway activities and rolling stock (see Clauses 33, 33A and 33B of Schedule 1 of the POEO Act).

Based on our review of the information provided, it still appears that licensing by the EPA is not required and as such, Newcastle City Council will be the appropriate regulatory authority for any environmental pollution related matters under the POEO Act in respect of the proposed development. However, the EPA recommends that the Proponent be required to assess that this position is in fact correct based on the nature of the proposed development.

The key changes to the POEO Act gazetted in July 2019 relate to the replacement of the historic Clause 33 of Schedule 1 with new Clauses 33, 33A and 33B. This has the effect of replacing the scheduled activity 'railway systems activities' with three new activities: 'railway activities – railway infrastructure construction', 'railway activities – railway infrastructure operations' and 'railway activities – rolling stock operations' to provide further clarification of specific railway uses and operations.

In response to this, a review has been undertaken of Schedule 1 of the POEO Act and considered all listed scheduled activities including the recently made amendments. The review has considered the construction of the turning angle and operation of the LTTSF following completion of the turning angle as proposed.

The review determined that the proposed turning angle and operation of the LTTSF following construction of the turning angle do not trigger any scheduled activities. **Table 1** below outlines the key findings of the review of Clauses 33, 33A and 33B of Schedule 1 of the POEO Act, relating specifically to railway activities.

Table 1 Review of Clauses 33, 33A and 33B of Schedule 1 of the POEO Act

Table 1	Review of Clauses 33, 33A and 33B of Schedule 1 of th	e POEO ACT
EPA Scheduled Activity	Description	Review Assessment
33 Railway activities—railway infrastructure construction	(1) This clause applies to railway activities—railway infrastructure construction, meaning the following: (a) the construction of railway infrastructure (including the widening or rerouting of existing railway infrastructure) and any related tunnels, earthworks and cuttings, (b) any extraction of materials necessary for that construction, (c) any on site processing (including crushing, grinding or separating) of any extracted materials or other materials used in that construction. (2) The activity to which this clause applies is declared to be a scheduled activity if the activity results in one or more of the following: (a) the extraction or processing (over the life of the construction) of more than: (i) 50,000 tonnes of materials in the case of premises in the regulated area or in the local government areas of Bega Valley, Eurobodalla, Goulburn Mulwaree, Queanbeyan-Palerang Regional or Snowy Monaro Regional, or (ii) 150,000 tonnes of material in any other case, (b) the construction of new railway track that is: (i) in the metropolitan area—3 kilometres or more in length, or (ii) outside the metropolitan area—5 kilometres or more in length. (3) For the purposes of calculating the length of a railway track, individual tracks constructed alongside one another are not to be added together. (4) In this clause: railway infrastructure includes, but is not limited to, the following: (a) railway tracks, (b) sleepers and ballasts, (c) embankments, bridges, tunnels and over track structures, (d) signalling equipment.	Construction of the turning angle is not a Scheduled Activity under Clause 33. Construction of the turning angle will consist of approximately 1.5km of rail track and associated signal and turnout infrastructure. The construction of 1.5km rail infrastructure is below the Clause 33 (2,b,i) prescribed trigger of 3 kilometres within a metropolitan area. Aurizon estimates that approximately 13,000m³ of potential acid sulphate soil will be excavated during construction of the turning angle project. This volume is well below Clause 33 (2,a,ii) prescribed trigger of 150,000 tonnes of material. Excavated soil will be stockpiled onsite for neutralisation in accordance with the approved Acid Sulphate Soil Management Plan.
33A Railway activities— railway infrastructure operations	 (1) This clause applies to railway activities—railway infrastructure operations, meaning the operation or the onsite repair, maintenance or replacement of existing railway infrastructure. (2) However, this clause does not apply to any of the following: (a) railway activities—railway infrastructure construction to which clause 33 applies, (b) the operation of rolling stock to which clause 33B applies, (c) the operation or on-site repair, maintenance or replacement of existing railway infrastructure used solely by any of the following:	Construction of the turning angle and subsequent operation of the Hexham LTTSF is not a Scheduled Activity under Clause 33A. Construction of the turning angle will consist of approximately 1.5km of rail track and associated signal and turnout infrastructure. The existing Hexham LTTSF consists of approximately 10.5km of rail track. The total length of the Hexham LTTSF following construction of the turning angle will total approximately 12km. As per Clause 33A (3) this clause only applies where a continuous or connected length of track is equal to or exceeds 30km.

EPA Scheduled Activity	Description	Review Assessment
	 (iv) railway vehicles that are used solely for heritage purposes, (d) the operation of signalling, communication or train control systems, (e) any activity at any of the following places: (i) a railway station building (including platforms and offices), (ii) a railway workshop, (iii) a freight depot or centre, (iv) a railway fuel depot. (3) The activity to which this clause applies is declared to be a scheduled activity if it involves a continuous or connected length of track greater than 30 kilometres that is operated by the same person. (4) For the purposes of calculating the length of a railway track, individual tracks constructed alongside one another are not to be added together. (5) In this clause, railway infrastructure has the same meaning as in clause 33. 	
33B Railway activities — rolling stock operations	(1) This clause applies to railway activities—rolling stock operations, meaning the operation of rolling stock. (2) The activity to which this clause applies is declared to be a scheduled activity if it is carried out on railway infrastructure, the operation of which is a scheduled activity by virtue of clause 33A. (3) In this clause: rolling stock means railway vehicles used or intended to be used to transport passengers or freight for reward but does not include: (a) railway vehicles used, or intended to be used, solely for heritage purposes, or (b) railway vehicles used, or intended to be used, to construct or maintain railway infrastructure.	Construction of the turning angle and subsequent operation of the Hexham LTTSF is not a Scheduled Activity under Clause 33B. As per Clause 33B (2) the turning angle and Hexham LTTSF is not a scheduled activity under clause 33A and as such does not form a scheduled activity under clause 33B.

1.4 DPIE Biodiversity Conservation Division

The Biodiversity Conservation Division (BCD) has reviewed the application in relation to impacts on flooding, coastal issues, biodiversity and the National Parks and Wildlife Service Estate.

BCD confirm no comments in relation to flooding or flood risk, coastal impacts or impacts to the National Parks and Wildlife Service Estate.

In relation to biodiversity impacts, BCD considers that the modification will not increase the impact on biodiversity values on the site and that a biodiversity development assessment report (BDAR) is not required, in accordance with clause 30A(2)(c) of the Biodiversity Conservation (Savings and Transitional) Regulation 2017.

Section 7.17(c) of the *Biodiversity Conservation Act 2016* (BC Act) provides that the requirement for a BDAR can be waived should the authority or person determining the application for modification be satisfied the modification will not increase the impact on biodiversity values.

Per Section 6.4 of the EAR and the Ecological Assessment at Appendix G, the proposed turning angle has been assessed and considered unlikely to result in an increased impact to any of the eight biodiversity values outlined in Section 1.5 of the BC Act and the Biodiversity Conservation Regulations 2017.

As outlined in the EAR, the applicant requests a waiver of the requirement for a BDA and the BCD assessment indicates that such a waiver should reasonably be provided.

Ethos Urban | 17413

1.5 Roads and Maritime Services

Roads and Maritime Services (RMS) identified the current development of a concept design for the proposed M1 Pacific Motorway extension to Raymond Terrace. The investigations to date indicate that if the proposal proceeds, it may affect the Aurizon access road which connects directly to the existing Tarro Interchange. At this time the project has not been approved or secured construction funding.

It is considered that due to timeframes associated with the road extension to the M1 the delivery of the turning angle on the Hexham LTTSF site will not be impacted. If the M1 extension is pursued it is expected that RMS would consult with Aurizon in relation to access arrangements for the LTTSF.

The property has a common boundary with the New England Highway (HW9) which has been declared as Controlled Access Road by notification in Government Gazette No 33 of 14/03/2008 Folio 2274. RMS note that direct access across this boundary is restricted.

Aurizon understand and accept access restrictions from the New England Highway. Access is provided by the existing access road.

1.6 City of Newcastle

The City of Newcastle provided a submission that addressed four key matters:

- · Flooding and stormwater;
- Onsite stormwater system;
- · Biodiversity; and
- Bushfire.

Responses to each comment received are provided in Table 2 below.

Table 2 City of Newcastle Submission Responses

Council Submission	Response
A flood report (BMT consulting engineers 27 May 2019) has been prepared to assess the flood impacts of the proposed modification. It is concluded that the impacts of the development are minor. This conclusion is reasonable and acceptable.	Noted.
A stormwater assessment (GHD consulting engineers May 2019) of the requirements of the modification has been prepared which acknowledges an increase in impervious area and associated peak flows but demonstrates that the resultant water quantity and quality numbers are still within acceptable levels. This conclusion is reasonable and acceptable.	Noted.
It is noted that part of the track extension will extend over an existing approved onsite wastewater system effluent irrigation area. No details are provided as to how the irrigation system is proposed to be modified as a result of the proposal.	The lodged civil engineering plan 22-19583-C006 Issue D identifies that the proposed turning angle will be located adjacent to the existing effluent irrigation area. As identified labelling on the drawing states that 'Existing effluent irrigation area to be removed and/or relocated to Aurizon requirements.'
Table 14 (Pg. 41) of the Detailed Environmental Assessment Report (DEAR) prepared by Ethos Urban (2019) includes the following statement:	The existing wastewater treatment plant (WWTP) and associated irrigation area operates under Notice of Determination Application for Approval to Operate a System of Sewage Management: Application No: 737.

Council Submission

'The proposed modification will be managed consistently with existing management measures outlined in the site-wide Operational Environmental Management Plan. Cess drains are provided either side of the turning angle and access road alignment consistent with Condition CB(d)'.

The updated 'Drainage and Earthworks' drawing No 22-19583-C006 Issue D indicates that 'Existing effluent irrigation area to be removed and/or relocated to Aurizon. requirements.' Furthermore, the Stormwater Assessment (GHD May 2019), Detailed Environmental Assessment Report (Ethos Urban 12 June 2019) and Soil Assessment (GHD Pty Ltd March 2019) do not provide any details of how the effluent irrigation area will be modified.

Consequently, it is not clear from this application how the effluent irrigation area is proposed to be modified/relocated in respect to the modification and as such a detailed assessment cannot be undertaken.

Response

The irrigation area was assessed in accordance with AS/NZS 1547:2012, On-site Domestic Wastewater Management. This assessment was included in the Environmental Assessment: QR National NSW Train Support Facility, 37417 (ADW Johnson Pty. Ltd., 16 November 2012) Appendix N - Effluent Disposal Assessment Proposed Train Support Facility, 39798.07 (Douglas Partners, November 2012) (the Assessment). This document was subsequently approved as part of SSI MP07_0171.

The Assessment considered a primary and secondary back up irrigation area as shown in Appendix C of the Assessment. The Assessment findings considered that both the primary and secondary areas were generally suitable for irrigation activities subject to the implementation of identified mitigation/ground improvement measures where required.

Aurizon currently utilises approximately 11,000m² of the primary irrigation area out of a total available area of approximately 40,000m². The secondary irrigation area has a surface area of approximately 20,000m². The primary and secondary areas are within the same surface water catchment and are located immediately adjacent to each other.

The proposed turning angle will bisect the utilised and available portions of the primary irrigation area preventing further utilisation of the primary area to the west of the existing irrigation infrastructure. As the irrigation infrastructure is essentially modular the impacted portion of the irrigation infrastructure will be relocated south to the approved secondary irrigation area ensuring current irrigation capacity is maintained.

Relocation of the impacted infrastructure will result in the continued use of area available in the primary irrigation area as well as the required portion of the secondary irrigation area.

Performance criteria for the treated effluent applied to land have been based on *Environment and Health Protection Guidelines – Onsite Sewerage Management for Single Households, EPA (1998)* and *Use of Effluent by Irrigation, DEC (2004)*.

Developed performance criteria will continue to be utilised as previously approved and included in the Aurizon Hexham TSF Operational Environmental Management Plan, Annexure 8: Operation Stormwater Management Plan (February, 2016).

Current utilisation of the irrigation area was assessed in 2017 as part of the Hexham Train Support Facility Waste Water Treatment Plant Elevated Nitrogen Levels (22 December 2017). It was determined that the irrigation area and WWTP had excess capacity as it operated at a peak irrigation rate of 52% versus the conservatively modelled Initial Build Up irrigation rates during December/November 2017. Comparison of actual irrigation to the greater Maximum Average Dry Weather flow show that the WWTP only irrigated at 12% of modelled capacity year to date (2017 January - November). This report was issued to Newcastle City Council Regulatory, Planning and Assessment: Environmental Health Team in 2017.

Relocation of the impacted portion of the irrigation area to the approved secondary area is not expected to result in any additional environmental impacts due to:

Council Submission

Response

- The secondary irrigation area having been assessed as suitable for irrigation activities as part of the Assessment and approved under M07_0171.
- The portion of the primary and secondary irrigation areas proposed to be utilised have had ground improvement works already undertaken during construction of the TSF.
- If additional irrigation capacity is required (outside of what has already been identified) in the secondary irrigation area ground improvement works will be completed, consistent with the Assessment recommendations, as required.
- The secondary irrigation area having sufficient area available to accommodate the relocated portion of the impacted irrigation infrastructure.
- The primary and secondary irrigation areas being within the same catchment.
- Relocation of the infrastructure will be installed and completed in accordance with AS/NZS 1547-2012, "On-site domestic wastewater management".
- Excess irrigation capacity being available and a material increase in site personnel during construction or any increase following construction of the turning angle not being proposed.
- Implementation of mitigation measures prescribed by the Assessment as required.
- The system will continue to be operated in accordance with Determination Application for Approval to Operate a System of Sewage Management: Application No: 737 conditions of approval.

Prior to relocation of the impacted portion of the irrigation infrastructure Aurizon will consult with Newcastle City Council to determine if the *Notice of Determination Application for Approval to Operate a System of Sewage Management: Application No: 737.* under Section 68 of the *Local Government Act 1993* is required to be modified or renewed.

Due to the nature of the approved development the additional encroachment into the wetland area of the proposed modification has the potential to impact threatened species in the wetland environment. This impact could include indirect impacts from noise and lighting and stormwater discharge to the wetland area along with physical impacts such as habitat removal. Therefore, CN agrees with the advice of the Office of Environment and Heritage that a Biodiversity Development Assessment Report is required for the proposed modification.

Section 7.17(c) of the *Biodiversity Conservation Act 2016* (BC Act) provides that the requirement for a BDAR can be waived should the authority or person determining the application for modification be satisfied the modification will not increase the impact on biodiversity values.

Section 6.4 of the EAR and the Ecological Assessment at Appendix G, the proposed turning angle has been assessed and concluded that it is unlikely to result in an increased impact to any of the eight biodiversity values outlined in Section 1.5 of the BC Act and the Biodiversity Conservation Regulations 2017. Consequently, the applicant requests a waiver of the requirement for a BDAR.

The Biodiversity Conservation Division has reviewed the proposal and determined that:

'In relation to biodiversity impacts, BCD considers that the modification will not increase the impact on biodiversity values on the site and that a biodiversity development assessment report is not required, in accordance with clause 30A(2)(c) of the Biodiversity Conservation (Savings and Transitional) Regulation 2017.'

As such, it is expected that a waiver will be granted in relation to the need for a BDAR.

Council Submission

The Newcastle Bush Fire Prone Land Map (2018) identifies the subject land as bush fire prone land. Subclause (b) of condition B1 of the Infrastructure Approval (Oct 2013) for the Hexham Train Support Facility requires the proponent to carry out the development generally in accordance with the Environmental Assessment (ADW Johnson Pty Ltd, November 2012). Appendix F of the Environmental Assessment is a Bushfire Protection Assessment (Ecological Australia 11 September 2012).

Since the granting of the approval the Newcastle Bush Fire Prone Land Map has been reviewed and the extent and type of vegetation categories which affect the site have changed. Also, the works associated with the modification will traverse the 'Asset Protection Zone-Southern Section' of the site as identified in the above Bushfire Protection Assessment. These matters have not been addressed in the DEAR despite being brought to the proponent's attention in CN's letter dated 10 April 2019. Consideration of bush fire risk is particularly relevant to the modification given the DEAR indicates in its consideration of climate change risk that is anticipated in the future maximum temperatures in the Hunter Valley will increase and 'With this increase sees the projected increase in severe fire weather through summer and spring.'

Response

The original Bushfire Protection Assessment identified the land the subject of the turning angle works to be 'Buffer' zone or non-categorised in terms of bushfire prone land.

Since the Bushfire Prone Land Map has been updated in 2016, the site is now mapped as Vegetation Category 3, considered to be a medium bush fire risk and surrounded by a 30m buffer. This is not considered to be significant given the proposal does not include any habitable dwellings (Class 1, 2 or 3) or Special Fire Protection Purpose development. Additionally, the turning angle does not include any buildings or access proposed to be occupied and the site is largely cleared of vegetation and surrounded by the Hexham Swamp wetlands on its southern and western boundaries.

There is a 5m (minimum width) cleared gravel access track adjacent to the turning angle rail to allow access for heavy vehicles, with cleared and managed vegetation either side of the turning angle alignment. Passing bays are provided at key locations along the access tracks.

Notwithstanding, a Bushfire Safety Authority under Section 100B of the *Rural Fires Act 1997* is not required for SSI, per Section 5.23(1f) of the *Environmental Planning and Assessment Act 1979*.

1.7 DPIE Transport Assessments Division

The DPIE Transport Assessments Division provided a supplementary submission that addressed two key matters relating to construction noise and operational traffic.

Responses to each comment received are provided in Table 3 below.

Table 3 - DPIE Supplementary Submission Response

DPIE Submission

Please provide anticipated quantitative construction noise levels for representative sensitive receiver locations identified in the Noise Impact Assessment and compare these to adopted project noise levels. This must consider construction noise in its own right, as well as cumulative impacts from the construction of the turning angle and operation of the LTTSF.

Response

SLR has assessed the predicted noise impacts of the proposed turning angle as a conservative operating scenario (Attachment A). The operational noise of the proposed turning angle was assessed in accordance with the Project Trigger Noise Levels (PTNLs) under the Noise Policy for Industry and is predicted to achieve compliance at all receiver locations.

Cumulative noise levels of the Project construction and the operation of the LTTSF are expected to comply with the PTNLs and Project Approval (PA) noise limits during normal daytime operational and construction hours.

Cumulative operational noise levels during the night time period (operation of the turning angle and the existing LTTSF operations) were found to be in exceedance of the PTNLs by 2 dBA at R3 and 1 dBA at R4 but compliant with the PA noise limits. As the operational noise of the turning angle is predicted to be 10 dBA or more below the PTNLs at all receivers, the exceedance of the PTNLs for the combined operation of the turning angle and the existing LTTSF is largely caused the LTTSF and not the turning angle. Further, the assessment by SLR identifies that the PTNLs have been conservatively calculated, and the based on a conservative worst-

DPIE Submission	Response
	case night time operating scenario. As such, there would be no benefit from applying additional noise mitigation measures to the proposed turning angle.
	Importantly, the modified project remains compliant with the SSI consent and the Project Approval noise limits. The turning angle itself is a minor contributor to overall noise levels, with the majority of predicted noise levels being less than 30dBA at receivers R1, R2, R3 and R4.
Please outline whether the proposed modification would increase operational traffic movements. If so, please provide the additional light and heavy vehicle movements.	As shunting movements will be undertaken by existing site personnel present on the site (and no increase in the number of daily staff onsite), no increase to operational traffic movements is proposed to occur in response to the operation of the proposed turning angle.

2.0 Required Amendments to Proposal

There are no amendments required to the proposal based on any submissions received.

3.0 Conclusion

Submissions were received from the ARTC, Department of Industry – Lands and Water, and Department of Primary Industries, Environment Protection Authority, DPIE Biodiversity Conservation Division, RMS and the City of Newcastle. A supplementary submission was also received from the DPIE Transport Assessments Division. Responses to each of the issues raised in the submissions have been provided above.

Additional environmental assessment undertaken in response to the DPIE Transport Assessments Division relating to noise identified that while the operation of the turning angle and the LTTSF results in minor exceedances of the Noise Policy for Industry at two sensitive receivers, the proposed modification still maintains compliance with the Project Approval noise limits.

The nature of the submissions does not require the amendment of the turning angle nor not affect the conclusions of the original technical reports/statements prepared in support of the modification application. No changes are required to environmental mitigation and management measures.

In accordance with section 5.25 of the EP&A Act, the Minister may modify the approval for SSI. The nature of the proposed modifications represent further enhancements to the overall design and continue to ensure the project's original objectives are maintained.

In light of its merits and in the absence of significant environmental impact, we recommend that the proposed modification be supported by DPIE. We trust that this additional information in response to each submission received is sufficient to enable a prompt assessment of the proposed modification. Should you have any queries regarding the above do not hesitate to contact me on 9956 6962.

Yours sincerely,

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