Modification of Infrastructure Approval

Section 5.25 of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning under the Instrument of Delegation dated 11 October 2017, I approve the modification of the State significant infrastructure approval referred to in Schedule 1, subject to the conditions in Schedule 2.

Glenn Snow

Director Transport Assessments

Sydney 8 October 2019

SCHEDULE 1

Infrastructure Approval:	MP 07_0171 (SSI-6090) granted by the Executive Director, Development Assessment Systems and Approvals on 10 October 2013
For the following:	The construction and operation of a train support facility at Hexham, including: • new connections to the Great Northern Railway; • seven new train tracks parallel to the existing mainline and a shunt track at the northern part of the facility comprising 10.5 kilometres at new railway track; • a provisional building, a combined maintenance and administrative centre and service vehicle garage; • a bulk fuel storage area; • vehicle intersection and new road from the Tarro Interchange and construction of sealed internal access roads; • civil earthworks and importation of fill material; • utility connections and the protection or diversion of existing utilities; and • a wastewater treatment plant with on-site effluent irrigation.
Modification:	Installation and operation of a new turning angle and associated infrastructure.

SCHEDULE 2

1. In the list of Definitions and Abbreviations, remove the following:

Department, the	NSW Department of Planning and Infrastructure
Director-General	Director-General of the NSW Department of Planning & Infrastructure
Director-General's Approval	A written approval from the Director-General (or delegate). Where the Director-General's approval is required under a condition of this approval, the Director-General will endeavour to provide a response within one month of receiving an approval request. The Director-General may ask for additional information if the approval request is considered incomplete. When further information is requested the time taken for the Proponent to respond in writing will be added to the one month period.
DPI	NSW Department of Primary Industries
NoW	NSW Office of Water
OEH	NSW Office of Environment and Heritage
SSI	The State significant infrastructure approved under this approval and as generally described in Schedule A.

2. In the list of Definitions and Abbreviations, insert the following in alphabetical order:

Department, the	NSW Department of Planning, Industry and Environment
EESG	Environment, Energy and Science Group of the Department of Planning, Industry and Environment (former NSW Office of Environment and Heritage (OEH))
Heritage Division	Heritage Division of the Department of Premier and Cabinet (former Heritage Division of the Office of Environment and Heritage)
Hunter LLS	Hunter Local Land Services (former Hunter-Central Rivers Catchment Management Authority)
Planning Secretary, the	Secretary of the NSW Department of Planning, Industry and Environment, or nominee as delegated (formerly known as the Director-General)
RIAR	Regions, Industry, Agriculture and Resources Group of the Department of Planning, Industry and Environment (former Department of Industry).
SSI	The State significant infrastructure approved under this approval (as modified by SSI-6090-MOD 1) and as generally described in Schedule A.
Turning Angle Works	Works associated with the construction and operation of a turning angle as approved by modification SSI-6090-MOD 1.

Water Group, the	Water Group of the Department of Planning, Industry and Environment, the (former NSW Office of Water (NoW)).

3. Delete condition B1 and replace with the following:

B1. The Proponent shall carry out the SSI generally in accordance with the:

(a) Application MP 07_0171;

(b) Environmental Assessment, NSW Train Support Facility, Maitland Road, Hexham (ADW Johnson Pty Limited, November 2012);

(c) Preferred Project Report and Response to Submissions, NSW Train Support Facility, Maitland Road, Hexham (JBA, June 2013);

(d) State Significant Infrastructure – Modification: Detailed Environmental Assessment Report, Maitland Road, Hexham (Ethos Urban, June 2019);

(e) State Significant Infrastructure MP07_0171 Modification: Response to Submissions (Ethos Urban, August 2019); and

(f) conditions of this approval.

4. Delete condition B2 and replace with the following:

B2. In the event of an inconsistency between:

(a) the conditions of this approval and any document listed from condition B1(a) to B1(e) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency;

(b) any document listed from condition B1(a) to B1(e) inclusive, the most recent document shall prevail to the extent of the inconsistency.

5. Insert the following new condition:

B4A. The following Conditions of Approval do not apply to the Turning Angle Works:

B5, C3, C16, C18, C22, C23, C33, C34, C35, C38, C39, E1, E5, E13, E14, E15, E16, E17, E24, E25, E26, E30, E32, E36, E42, E43, E44, E49, E59, E60, and F3.

6. Insert the following new condition:

B4B. Any references to entities listed in column A are to be interpreted as entities in column B throughout the approval:

A	B
Director-General	Planning Secretary
Hunter-Central Rivers CMA	Hunter LLS
NoW	the Water Group
OEH	EESG
DPI	RIAR
Heritage Council, OEH (Heritage Branch) or Heritage Branch	Heritage Division

7. Delete conditions B8, B9 and B10 and replace with new conditions B8, B9, B10 and B10A:

B8 The SSI may be constructed and operated in stages. Where staged construction or operation is proposed, a **Staging Report** (for either or both construction and operation as the case may be) must be prepared and submitted to the Planning Secretary no later than one month before the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one month before the commencement of operation of the first of the proposed stages of operation).

B9 The **Staging Report** must:

(a) if staged construction is proposed, set out how the construction of the whole of the SSI will be staged, including details of work and other activities to be carried out in each stage and the general timing of when construction of each stage will commence and finish;
(b) if staged operation is proposed, set out how the operation of the whole of the SSI will be staged, including details of work and other activities to be carried out in each stage and the general timing of when operation of each stage will commence and finish (if relevant);
(c) specify how compliance with conditions will be achieved across and between each of the stages of the SSI; and
(d) set out mechanisms for managing any cumulative impacts arising from the proposed staging.

B10 The SSI must be staged in accordance with the **Staging Report,** as submitted to the Planning Secretary.

B10A Where staging is proposed, the terms of this approval that apply or are relevant to the works or activities to be carried out in a specific stage must be complied with at the relevant time for that stage.

8. Delete condition C4 and replace with the following:

C4. In the event that the extent, type or condition of native vegetation communities or flora and fauna habitat to be lost or degraded as a result of the SSI varies to that described in the documents referred to in condition B1, or as otherwise agreed to by the Planning Secretary, the Proponent shall develop and submit a **Biodiversity Offset Package** for the approval of the Planning Secretary within 12 months of the commencement of construction. The Package shall detail how the ecological values lost as a result of the SSI will be offset. The Package shall be developed in consultation with the EESG and the Hunter LLS and shall include, but not necessarily be limited to:

(a) the objectives and biodiversity outcomes to be achieved;
(b) confirmation of the extent (in hectares), types and condition of the native vegetation communities (including SEPP 14 wetlands) and flora and fauna habitat to be lost or degraded as a result of the final design of the SSI, including consideration of the indirect impacts on adjacent retained vegetation and impacts caused through weed invasion, hydrological changes and potential edge effects;
(c) a process for addressing and incorporating offset measures arising from changes in biodiversity impacts (where these changes are generally consistent with the biodiversity impacts identified for the SSI in the documents listed under condition B1 inclusive from –
    (i) changes to the footprint due to design changes,

(ii) changes to predicted impacts as a result of changes to mitigation measures, and
(iii) identification of additional species/specimens and/or habitat during pre-clearing surveys, construction or the establishment of ancillary facilities);

(d) a statement of the methodology used to determine the offsets required;
(e) details of the final suite of the biodiversity offset measures selected and secured with consideration of the Biodiversity Offset Strategy (as set out in Appendix G of the document referred to in condition B1 (c);
(f) justification for the application of any Tier 2 and Tier 3 outcomes;
(g) the final selected means of securing the biodiversity values of the offset package in perpetuity;
(h) the management and monitoring requirements for compensatory habitat works (excluding biobanking sites) and other biodiversity offset measures proposed to ensure the outcomes of the Package are achieved including -
  (i) the monitoring of the condition of species and ecological communities at offset locations (excluding biobanking sites),
  (ii) the methodology for the monitoring program(s), including the number and location of offset monitoring sites and the sampling frequency at these sites, and
  (iii) provisions for annual reporting of the monitoring results for a specified period of time as determined in consultation with the EESG; and
(i) timing and responsibilities for the implementation of the provisions of the Package.

Land offsets shall be consistent with the *Principles for the Use of Biodiversity Offsets in NSW* and the *Interim Policy on Assessing and Offsetting Biodiversity Impacts of Part 3A, State Significant Development (SSD) and State Significant Infrastructure (SSI) Projects* (OEH, 2011). Any land offset shall be enduring and be secured by a conservation mechanism which protects and manages the land in perpetuity. Where land offsets cannot solely achieve compensation for the loss of affected biodiversity, additional measures shall be provided to collectively deliver a biodiversity offset in accordance with the *Interim Policy on Assessing and Offsetting Biodiversity Impacts of Part 3A, State Significant Development (SSD) and State Significant Infrastructure (SSI) Projects* (OEH, 2011) and to provide a positive biodiversity outcome for the region.

Where possible, priority shall be given to securing offset sites as near to the location of the impact/loss as possible to assist with the preservation of the specific endemic community of the area and assure that the ecological and amenity benefits of retaining endemic vegetation remain within the locality.

Should a conservation agreement under the *National Parks and Wildlife Act 1974* not be considered a viable alternative, then the Proponent must ensure that any offset arrangement it enters into must provide a provision for in-perpetuity conservation title on the land and a monetary contribution sufficient to carry out rehabilitation and monitoring actions pursuant to this consent and any actions outlined under a Vegetation Management Plan. This may be the subject of a Planning Agreement within the meaning of section 93F of the *Environmental Planning and Assessment Act 1979*. Upon execution of the Planning Agreement, or other conservation mechanism to the satisfaction of the EESG, the Proponent shall inform the Planning Secretary on the outcomes of such an agreement.

Should updates to the Nest Box Plan be required in accordance with condition E7, updates shall be undertaken in consultation with the EESG.

9. Delete condition C9 and replace with the following:

C9. Prior to the commencement of construction, the Proponent shall, in consultation with the Water Group and EESG, prepare a **Stormwater Management Plan** and submit the plan for the approval for the Planning Secretary at least one month prior to the commencement of construction of the SSI. The Plan shall include but not necessarily be limited to:

(a) final details of operational stormwater management measures to be implemented for the SSI based on detailed design, including identification of offsite discharge locations;
(b) if required, identification of the water quality standards to which wastewater from the wastewater treatment plant would be treated to prior to its irrigation. The plan shall demonstrate that the water quality criteria to which the waste water would be treated to is suitable for irrigation purposes based on the land capability of the irrigation site (including nutrient loads, pH and salinity), considering existing baseline conditions and cumulative inputs from other irrigation sources to the site;
(c) identification of the water quality standards to which stormwater from the three stormwater detention basins would be treated to prior to offsite discharge with consideration of the receiving environment and relevant water quality standards such as *Managing Urban Stormwater: Environmental Targets* (DECC & CMA, October 2007); and
(d) monitoring, review and maintenance procedures to assess and maintain the operational stormwater integrity and performance of the SSI consistent with the requirements of condition C19.

Nothing in this condition precludes the Proponent from updating the Stormwater Management Plan presented in Appendix E (Stormwater Management Plan) or the document referred to in condition C19 to meet the requirements of this condition.

Prior to construction of the Turning Angle Works, the Proponent must provide a copy of the revised plan including the Turning Angle Works to the Environmental Representative for approval. The ER may approve minor updates to the plan without further consultation with public authorities.

10. Delete condition C15 and replace with the following:

C15. The Proponent shall prepare a Flood Emergency Management Plan which sets out the management requirements and procedures for managing flood risks during the construction and operation of the SSI, including flood recovery measures. The Plan shall be prepared in consultation with City of Newcastle and the EESG and be submitted to the Planning Secretary at least one month prior to the commencement of construction, or as otherwise agreed by the Planning Secretary.

Prior to construction of the Turning Angle Works, the Proponent must provide a copy of the revised plan including the Turning Angle Works to the Environmental Representative for approval. The ER may approve minor updates to the plan without further consultation with public authorities.

11. Delete condition C19 and replace with the following:

C19. A Surface Water and Groundwater Monitoring Program shall be prepared and implemented to monitor impacts on surface water and groundwater quality and hydrology. The Program shall be developed in consultation with the EPA, the Water Group and Hunter LLS and shall include, but not necessarily be limited to:

(a) identification of works and activities during construction of the SSI, including emergencies and spill events, that have the potential to impact on surface and groundwater water quality and groundwater depths and flows;
(b) identification of surface and groundwater monitoring locations which are representative of the potential extent of impacts from the construction and operation of the SSI on water quality and groundwater depths and flows (including watercourses, waterbodies, wetlands, drainage swales and licensed discharge points);
(c) a description of the parameters (including physico-chemical) and standards against which any changes to water quality will be monitored and assessed, having regard to the principles of the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* (ANZECC, 2000);
(d) details of representative background monitoring of surface and groundwater quality parameters and groundwater depths and flows undertaken to date (or required to be undertaken) to establish baseline conditions;
(e) identification of 'trigger points' for further investigation or action to be taken;
(f) identification of the frequency and methodology of monitoring during background, construction and operation monitoring periods;
(g) details on how the results of monitoring would be recorded;
(h) details of how interactions with the ARTC Hexham Relief Roads Project and potential cumulative impacts would be monitored and managed;
(i) contingency and ameliorative measures in the event that adverse impacts to surface waters and groundwater are identified consequent to the construction and/or operation of the SSI; and
(j) methodology for reporting of the monitoring results to the Department and EPA.

Monitoring shall be undertaken in accordance with the requirements of the approved Construction Soil and Water Management Plan required under Condition E63(d) and Operation Environment Management Plan required by condition F2.

The Program shall be submitted to the Planning Secretary for approval at least one month prior to the commencement of construction of the SSI, or as otherwise agreed by the Planning Secretary.

Prior to construction of the Turning Angle Works, the Proponent must provide a copy of the revised plan including the Turning Angle Works to the Environmental Representative for approval. The ER may approve minor updates to the plan without further consultation with public authorities.

12. Delete condition D1 and replace with the following:

D1. The Proponent shall prepare and implement a **Community Communication Strategy** for the SSI. The Strategy shall be designed to provide mechanisms to facilitate communication between the Proponent (and its contractors), the Environmental Representative, City of Newcastle and the local community (broader and local stakeholders) on the detailed design, construction and environmental management of the SSI. The Strategy shall include, but not necessarily be limited to:

(a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners;
(b) procedures and mechanisms for the regular distribution of information to stakeholders on the progress of the SSI and matters associated with environmental management;
(c) procedures and mechanisms through which stakeholders can discuss or provide feedback to the Proponent and/or Environmental Representative in relation to the environmental management and delivery of the SSI;

(d) procedures and mechanisms through which the Proponent can respond to any enquires or feedback from stakeholders in relation to the environmental management and delivery of the SSI; and
(e) procedures and mechanisms that would be implemented to resolve any issues/disputes that may arise between parties on the matters relating to the environmental management and delivery of the SSI. This may include the use of an appropriately qualified and experienced independent mediator.

Key issues to be addressed in the Community Communication Strategy should include, but not necessarily be limited to:
(a) traffic management (including construction access and construction vehicle management);
(b) noise and vibration mitigation and management;
(c) erosion, sedimentation and stormwater management;
(d) surface and groundwater management;
(e) air quality; and
(f) construction scheduling and progress on construction activities.

The Proponent shall maintain and implement the Strategy throughout construction of the SSI. The Strategy shall be submitted to the Planning Secretary for approval at least one month prior to the commencement of construction, or as otherwise agreed to by the Planning Secretary.

Prior to construction of the Turning Angle Works, the Proponent must provide a copy of the revised plan including the Turning Angle Works to the Environmental Representative for approval. The ER may approve minor updates to the plan without further consultation with public authorities.

13. Delete condition D4 and replace with the following:

D4 A website providing information in relation to the SSI must be established before commencement of works and maintained for the duration of construction. Up-to-date information (excluding confidential commercial information) must be published before the relevant works commencing and maintained on the website or dedicated pages including:
(a) information on the current implementation status of the SSI;
(b) a copy of the documents listed in Condition B1 of this approval, and any documentation relating to any modifications made to the SSI or the terms of this approval;
(c) a copy of this approval in its original form, a current consolidated copy of this approval (that is, including any approved modifications to its terms), and copies of any approval granted by the Minister to a modification of the terms of this approval;
(d) a copy of each statutory approval, licence or permit required and obtained in relation to the SSI;
(e) a current copy of each document required under the terms of this approval, which must be published before the commencement of any works to which they relate or before their implementation, as the case may be; and
(f) a copy of the compliance reports required under Condition D5 of this approval.

Documents related to the construction of the project shall be maintained for a minimum of 24 months following the completion of construction of the Turning Angle Works. Documents related to the operation of the project must be maintained for the life of the project.

14. Delete condition D5 and replace with the following:

D5. No later than 4 weeks before the commencement of construction, a **Compliance Monitoring and Reporting Program** prepared in accordance with the *Compliance Reporting Requirements* (Department 2018) must be endorsed by the **ER** and submitted to the Department.

D5A. Compliance reports of the SSI must be carried out in accordance with the *Compliance Reporting Requirements* (Department 2018). The Department must be notified of the commencement dates of construction and operation of the SSI in the pre-construction and pre-operational compliance reports.

D5B. The construction compliance report must provide details of any review of, and minor amendments made to, the **CEMP** (which must be approved by the **ER**), resulting from construction carried out during the reporting period.

D5C. The Proponent must make each compliance report publicly available and notify the Department in writing when this has been done.

D5D. The **Compliance Monitoring and Reporting Program** in the form required under **Condition D5A** of this approval must be implemented for the duration of construction and for a minimum of one (1) year following commencement of operation, or for a longer period as determined by the Planning Secretary based on the outcomes of independent audits and regular compliance reviews submitted through **Compliance Reports**. If staged operation is proposed, or operation is commenced of part of the SSI, the **Compliance Monitoring and Reporting Program** must be implemented for the relevant period of each stage or part of the SSI.

15. Delete condition D6 and replace with the following:

D6. The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident. The notification must identify the SSI (including application number and the name of the SSI), and set out the location and nature of the incident.

16. Delete condition E6 and replace with the following:

E6. Prior to construction, pre-clearing surveys and inspections for threatened flora and fauna species and habitat features (including hollow bearing trees) shall be undertaken. The surveys and inspections, and any subsequent relocation of species, shall be undertaken under the guidance of a suitably qualified and experienced ecologist. The methodology for pre-clearance surveys shall be incorporated into the Construction Flora and Fauna Management Plan (condition E63(b)).

The Proponent is to undertake pre-clearing surveys prior to commencement of construction of the Turning Angle Works.

17. Delete condition E11 and replace with the following:

E11. The Proponent shall implement measures to minimise impacts to fauna species and their habitat as far as practicable (and where feasible and reasonable), during the construction of the SSI, including:

(a) protocols for the removal and relocation of fauna during clearing, including a two-stage clearing strategy;
(b) establishing “no go” zones, including at freshwater wetland and coastal saltmarsh sites outside of the construction zone;
(c) provision of setbacks;
(d) presence of a suitably qualified and experienced ecologist to oversee clearing activities and facilitate fauna rescues and relocation;
(e) timing construction to be outside of the breeding season of threatened species with the potential to occur on the site;
(f) maintaining and reinstating habitat features (such as large woody debris, bush rock, leaf litter/mulch and topsoil etc.);
(g) developing measures for minimising the incidence of fauna being trapped in excavation cells (such as minimising the length of time that cells are left exposed) and measures to deal with trapped or injured fauna;

(h) implementing drainage controls to prevent the extension of *Gambusia holbrooki* (Eastern Mosquitofish) into the Hexham Swamp Nature Reserve; and
(i) progressive re-vegetation of areas temporarily disturbed by construction.

The Proponent is to implement the specific flora and fauna mitigation measures prior to commencement of construction of the Turning Angle Works.

18. Delete condition E12 and replace with the following:

E12. Where reasonable and feasible, all private access tracks and internal service roads are to be at least 50 metres from SEPP 14 wetlands and the Hexham Swamp Nature Reserve, or as otherwise agreed by the Planning Secretary, or as specified at an alternative distance in the documents listed under conditions B1(c) of this approval.

19. Delete condition E31 and replace with the following:

E31. Where unexpected contaminated materials are identified during construction works, these materials would be identified, managed, treated and disposed of in accordance with the procedures outlined in the updated Site Management Plan. Where required, the Proponent shall engage a suitably qualified contaminated land consultant to prepare an addendum to the Validation Report referred to in condition E33 to cover the additional areas of contamination identified and additional remediation measures undertaken. The Proponent shall also engage an accredited NSW Site Auditor to prepare an updated Site Audit Report to assess the addendum Validation Report and submit a copy of both reports to the Planning Secretary and City of Newcastle.

20. Delete condition E33 and replace with the following:

E33. The Proponent shall engage a suitably qualified contaminated land consultant to prepare a Validation Report upon completion of the remediation of the areas identified in the Remediation Action Plan. The Validation Report shall verify that the site has been remediated in accordance with the Remediation Action Plan (if and as amended) and to a standard consistent with the intended land use. The Proponent shall engage an accredited NSW Site Auditor to prepare a Site Audit Report to determine the appropriateness of the Validation Report. The Validation Report and Site Audit Report shall be submitted to the Planning Secretary within six months of completion of remediation works. A copy of the reports shall also be submitted to the City of Newcastle for its information.

12. Delete condition E41 and replace with the following:

E41. The Proponent shall engage an independent and qualified person(s) to prepare Road Dilapidation Reports for the Tarro Interchange prior to their use by construction heavy vehicles. The report shall assess the current condition of the road and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the SSI. The Report shall be submitted to the relevant road authority(ies) for review prior to use of the roads for construction.

Following completion of construction, a subsequent report shall be prepared to assess any damage caused by the construction of the SSI.

The Proponent shall ensure that any measures to restore or reinstate roads affected by the construction of the SSI are undertaken in a timely manner, in accordance with the requirements, and to the satisfaction, of the relevant road authority(ies), and at the full expense of the Proponent.

Any pavement failures arising from construction traffic that result in safety concerns for other road users, shall be repaired in accordance with the relevant road authority's specifications no later than 48 hours following notification by the relevant road authority.

The Proponent must ensure that Road Dilapidation Reports are prepared prior to commencement of construction of the Turning Angle Works.

13. Delete condition E45 and replace with the following:

E45. Construction traffic shall not be permitted to access the SSI site via the New England Highway/Woodlands Close intersection at any time, unless approved by RMS.

14. Delete condition E47.

15. Delete condition E61 and replace with the following:

E61. Prior to the commencement of construction of the SSI, or as otherwise agreed by the Planning Secretary, the Proponent shall nominate for the approval of the Planning Secretary a suitably qualified and experienced Environment Representative(s) that is independent of the design (including preparation of documentation referred to condition B1), and construction personnel. The Proponent shall employ the Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Planning Secretary. The Environment Representative(s) shall:

(a) be the principal point of advice in relation to the environmental performance of the SSI;
(b) monitor the implementation and outcome of all environmental management plans and monitoring programs required under this approval and advise the Proponent upon the achievement of these plans and programs;
(c) have responsibility for considering and advising the Proponent on matters specified in the conditions of this approval, and all other licences and approvals related to the environmental performance and impacts of the SSI;
(d) ensure that environmental auditing is undertaken in accordance with the requirements of condition D5A of this approval and the Proponent's Environmental Management System(s);
(e) be given the authority to approve/reject minor amendments to the Construction Environment Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environment Management Plan required under condition E62;
(f) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and
(g) be consulted in responding to the community concerning the environmental performance of the SSI where the resolution of points of conflict between the Proponent and the community is required.

The Environmental Representative must be retained for the duration of the construction of the Turning Angle Works. If the Environmental Representative previously engaged by this condition has been discharged from the SSI, a new Environmental Representative must be nominated to and approved by the Planning Secretary.

16. Delete condition E62 and replace with the following:

E62. Prior to the commencement of construction, the Proponent shall prepare and (following approval) implement a **Construction Environmental Management Plan** for the SSI. The Plan shall be prepared in accordance with the *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004) and outline the environmental management practices and procedures to be followed during construction, and shall include, but not necessarily be limited to:

(a) a description of all relevant activities to be undertaken during construction of the SSI, including scheduling;

(b) statutory and other obligations that the Proponent is required to fulfil during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies. Evidence of consultation with relevant public authorities shall be included;

(c) a description of the roles and responsibilities for all relevant employees involved in the construction of the SSI, including relevant training and induction provisions for ensuring that all employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval;

(d) identification of ancillary facility site locations, including an assessment against the location criteria outlined in condition E59;

(e) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase and details of how environmental performance would be monitored and managed to meet acceptable outcomes including the actions to be undertaken to address identified potential adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:

  (i) measures to monitor and manage dust emissions including dust generated by haulage trucks, traffic on unsealed internal access roads and stockpile management,

  (ii) measures to monitor and manage waste (solid and liquid) generated during construction including, but not necessarily limited to, identification of potential waste streams, general procedures for waste classification, waste management and mitigation measures, use of secondary waste material in construction wherever feasible and reasonable, and procedures for dealing with green waste,

  (iii) measures to monitor and manage spoil and fill including earthworks volumes, details of how spoil and fill would be handled, stockpiled, classified, used and disposed of, and a stockpile management protocol detailing location criteria that would guide the placement of stockpiles and minimum management measures (including rehabilitation) that would be implemented to avoid and/or minimise amenity impacts to surrounding residents and environmental risks (including to surrounding watercourses and wetlands), and

  (iv) measures to monitor and manage hazard and risks including emergency management;

(f) measures for rehabilitating construction disturbance areas that are not required for ongoing operations including construction compounds;

(g) details of community complaints handling procedures and community involvement strategies during construction, consistent with the requirements of conditions D1 and D2 of this approval,

(h) details of compliance and incident management and reporting consistent with the requirements of conditions D5, D6 and D7;

(i) procedures for the periodic review and update of the Construction Environmental Management Plan as necessary (including where minor changes can be approved by the Environmental Representative); and

(j) the additional Plans listed under condition E63.

The Plan shall be submitted for the approval of the Planning Secretary at least one month prior to the commencement of construction, or within such period otherwise agreed by the Planning Secretary. Construction works shall not commence until written approval has been received from the Planning Secretary.

Prior to construction of the Turning Angle Works, the Proponent must provide a copy of the revised plan including the Turning Angle Works to the Environmental Representative for approval. The ER may approve minor updates to the plan without further consultation with public authorities.

Note: The approval of a Construction Environmental Management Plan does not relieve the Proponent of any requirement associated with this infrastructure approval. If there is an inconsistency with an approved Construction Environmental Management Plan and the conditions of this infrastructure approval, the requirements of this infrastructure approval prevail.

17. Delete condition E63 and replace with the following:

E63. As part of the Construction Environment Management Plan for the SSI required under condition E62 of this approval, the Proponent shall prepare and implement the plans listed at (a) to (f) below. Where a plan is required to be prepared in consultation with an authority or stakeholders, the plan shall provide details on the consultation undertaken including any comments received and where these have been addressed in the plan.

(a) A **Construction Traffic and Access Management Plan** to manage construction traffic and access impacts of the SSI and minimise disruptions to local traffic movements. The Plan shall be developed in consultation with the relevant road authority(ies) and include, but not necessarily be limited to:

(i) identification of construction traffic and haulage routes and quantification of projected construction traffic volumes (including light, heavy and over-dimensional/ over mass sized vehicle movements, and spoil haulage), including any necessary route or timing restrictions on oversized loads. Construction traffic volumes and haulage routes should be detailed for the proposed T-intersection at the Tarro Interchange and New England Highway/Woodlands Close;

(ii) details of the construction program for the T-intersection at the Tarro Interchange and construction access road connecting the intersection to Woodlands Close;

(iii) a description of the site access arrangements for light, heavy and over-sized vehicles prior to and upon completion of the T-intersection at the Tarro Interchange and construction access road connecting the intersection to Woodlands Close;

(iv) a Vehicle Movement Plan and Traffic Control Plans;

(v) a protocol for minimising the cumulative construction traffic impacts of the SSI and proposed ARTC Hexham Relief Roads project, prepared in consultation with ARTC;

(vi) methods for advising motorists of construction activities at the T-intersection on Anderson Drive (Tarro Interchange);

(vii) details of the traffic management measures and key warning signage to be installed at the T-intersection on Anderson Drive (Tarro Interchange);

(viii) construction staff parking requirements and the location(s) of proposed parking facilities;

(ix) details of all temporary road closures and detours and measures to minimise impacts on local traffic;
(x) a description of any proposed changes to pedestrian access at Woodlands Close, including measures to minimise impacts on pedestrian access;
(xi) a driver code of conduct; and
(xii) mechanisms for the monitoring, review and amendment of this plan.

(b) A **Construction Flora and Fauna Management Plan** to detail how construction impacts on ecology will be minimised, managed and monitored. The Plan shall be developed in consultation with the EESG and the Water Group and shall include, but not necessarily be limited to:

(i) details of pre-construction surveys required to verify the construction boundaries/footprint of the SSI based on detailed design and to confirm the vegetation to be cleared as part of the SSI (including threatened flora and fauna species, endangered ecological communities, riparian vegetation and tree hollows);
(ii) details on the location (including plans) of all native vegetation communities, threatened flora and fauna species and their habitat, and endangered ecological communities to be impacted by the SSI;
(iii) details of mitigation measures to be implemented during construction to minimise impacts on native fauna and vegetation (particularly threatened species and endangered ecological communities and their habitats), including measures to be implemented in those areas that will not be cleared. Measures shall include, but not necessarily be limited to, the mitigation measures set out in this infrastructure approval, delineation of sensitive areas, a protocol for the removal and relocation of fauna during clearing, fauna rescue procedure, appropriate topsoil management, erosion and sediment control, and construction worker education;
(iv) a procedure for dealing with unexpected finds of threatened species and endangered ecological communities and their habitat identified during construction, including stopping works and notification to the EESG and the Department, determination of appropriate mitigation measures in consultation with the EESG (including relevant re-location measures), and updating of biodiversity offset requirements consistent with condition C4;
(v) procedures for clearing blockages in waterways resulting from construction of the SSI;
(vi) weed management measures focusing on early identification of invasive weeds and effective management controls;
(vii) proposed revegetation and rehabilitation measures, including identification of flora species and sources, completion criteria and measures for the management and maintenance of rehabilitated/ revegetated areas;
(viii) a description of how the effectiveness of management measures would be monitored and linked to the Ecological Monitoring Program required under condition C3; and
(ix) mechanisms for the monitoring, review and amendment of this plan.

(c) A **Construction Noise and Vibration Management Plan** to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall include, but not necessarily be limited to:

(i) identification of the nearest sensitive receivers and relevant construction noise and vibration goals applicable to the SSI;
(ii) identification of key noise and vibration generating construction activities (based on representative construction scenarios) that have the potential to impact on surrounding sensitive receivers;

(iii) details on predicted worst-case construction noise impacts, including traffic noise and cumulative noise impacts associated with on-site construction activities and construction of the adjacent proposed HRR project;
(iv) identification of all feasible and reasonable measures for minimising construction noise and achieving the relevant noise management goals at sensitive receivers (including construction traffic noise impacts) required by condition E21;
(v) procedures and mitigation measures to ensure relevant vibration criteria are achieved, including applicable buffer distances for vibration intensive works, use of low-vibration generating equipment/vibration dampeners or alternative construction methodology, and pre- and post- construction dilapidation surveys of sensitive structures where vibration is likely to result in damage to structures;
(vi) a protocol for minimising the cumulative construction noise and vibration impacts of the SSI and proposed ARTC Hexham Relief Roads project, prepared in consultation with ARTC;
(vii) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints;
(viii) a safety risk assessment to determine the availability of safe alternatives to 'beeper' type reversing or movement alarms on vehicles, plant and equipment used during the construction of the SSI;
(ix) a program and procedures for construction noise and vibration monitoring indicating monitoring frequency and location, monitoring methods, responsibilities for monitoring and assessment, methods for recording and reporting monitoring results, and procedures to be followed where exceedances of relevant noise and vibration goals are detected; and
(x) mechanisms for the monitoring, review and amendment of this Plan.

(d) A **Construction Soil and Water Management Plan** to manage surface water and groundwater impacts during the construction of the SSI. The Plan shall be developed in consultation with the City of Newcastle, the Water Group and Hunter LLS and include, but not necessarily be limited to:
(i) surface water and groundwater impact assessment criteria consistent with the principles of the Australian and New Zealand Environment Conservation Council (ANZECC) guidelines;
(ii) identification of all potential sources of water pollution and contaminants and details on the mitigation measures to be implemented to prevent the discharge of pollutants and contaminants from the SSI site, including saline and acid sulphate soils, and groundwater contaminants;
(iii) details of the control measures to be employed to minimise surface and groundwater impacts, including drawdown of groundwater levels and connections with surface waters;
(iv) management measures to be used to minimise surface and groundwater impacts, including identification of water treatment measures and discharge points, details of how spoil and fill material required by the SSI will be sourced, handled, stockpiled, reused and managed; erosion and sediment control measures; salinity control measures and the consideration of flood events;
(v) management measures for contaminated material and a contingency plan to be implemented in the case of unanticipated discovery of contaminated material during construction;
(vi) details on the methods for managing surface water runoff (including inlets and outlets and their capacity) and any accumulation of groundwater (including

from excavation and dewatering) and surface water, including procedures for handling, treatment and disposal and/or reuse;

(vii) details of how construction activities would be managed and mitigated to minimise erosion and sedimentation, consistent with condition E27;

(viii) a program for reporting on the effectiveness of the water management measures and sediment and erosion controls against performance criteria; including procedures for rectifying any non-compliances;

(ix) water quality monitoring consistent with the requirements of condition C19;

(x) contingency plans to be implemented in the event of major fuel spills or other chemicals;

(xi) an Acid Sulfate Soils Management Plan consistent with the *Acid Sulfate Soils Manual*, including a contingency plan to deal with the unexpected discovery of actual or potential acid sulfate soils, including procedures for the investigation, handling, treatment and management of such soils and water seepage;

(xii) a contingency plan in the event that groundwater levels are observed to fall below the top of areas defined as containing potential acid sulfate soils;

(xiii) a water balance plan detailing the source and security of construction water supply, water use on site, and water and wastewater management on site;

(xiv) measures to minimise stream hydrology impacts, including measures to stabilise bank structures where required and details of proposed buffer zones adjacent to waterways;

(xv) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance of the criteria is detected how any non-compliance can be rectified; and

(xvi) mechanisms for the monitoring, review and amendment of this Plan

(e) a **Construction Heritage Management Plan** to detail how construction impacts on Aboriginal and Historic heritage will be minimised and managed. The Plan shall be developed in consultation with the EESG and registered Aboriginal stakeholders (for Aboriginal heritage), and include, but not necessarily be limited to:

(i) In relation to Aboriginal Heritage -

I. identification of Aboriginal objects directly and indirectly affected by the SSI,

II. details of management measures to be carried out in relation to Aboriginal heritage, including a detailed methodology and strategies for protection, monitoring, salvage, and conservation of objects associated with the SSI,

III. procedures and timing for implementing the requirements of conditions E13 to E16 inclusive,

IV. procedures for dealing with previously unidentified Aboriginal objects (excluding human remains) including cessation of works in the vicinity, assessment of the significance of the item(s), determination of appropriate mitigation measures by a suitably qualified archaeologist in consultation with the Department, EESG and registered Aboriginal stakeholders, procedure for determining when works can re-commence, and assessment of the consistency of any new Aboriginal heritage impacts against the approved impacts of the SSI, and registering of any new site(s) in the AHIMS database,

V. details of an appropriate keeping place agreement with local Aboriginal community representatives for any Aboriginal objects salvaged during construction,

VI. procedures for ongoing Aboriginal consultation and involvement for the duration of the SSI, and
VII. procedures for managing the discovery of confirmed or potential human remains, including the temporary cessation of works in the vicinity and notification to the NSW Police Force, EESG, the Department and registered Aboriginal stakeholders and not recommencing any works in the area unless authorised by the EESG and/ or the NSW Police Force;

(ii) In relation to Historic Heritage -
I. developed in consultation with the Heritage Division,
II. identification of heritage items directly and indirectly affected by the SSI,
III. details of management measures to be implemented to prevent and minimise impacts on heritage items including measures to protect unaffected sites during construction works in the vicinity,
IV. details of the Interpretation Plan as required by condition E17;
V. details of monitoring and reporting requirements for impacts on heritage items;
VI. procedures for dealing with previously unidentified heritage items, (including cessation of works in the vicinity), assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified and experienced archaeologist in consultation with the Heritage Division and the Department, and assessment of the consistency of any new heritage impacts against the approved impacts of the SSI;

(iii) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this approval including site identification, protection and conservation of Aboriginal and historic heritage; and

(iv) mechanisms for the monitoring, review and amendment of this Plan.

(f) a **Construction Contamination Management Plan** to detail how contaminated materials, water and soil will be managed to protect human health and the environment. The Plan shall include, but not necessarily be limited to:
(i) location of areas identified as contaminated;
(ii) procedures for the sampling and assessment of excavated material at depth consistent with the requirements of condition E30;
(iii) procedures for the sampling and testing of ballast, chitter and tailings consistent with the requirement of condition E32;
(iv) procedures for the classification, remediation, handling and monitoring of contaminated materials, water and soils identified during construction (including asbestos), consistent with the *Remediation Action Plan* included as Appendix H in the document referred to in condition B1(c).
(v) a contingency plan to be implemented in the case of unanticipated discovery of contaminants;
(vi) a procedure for updating the *Remediation Action Plan* consequent to amendments in the remediation procedures or the discovery of contaminants during construction;
(vii) program for validating soil quality upon completion of remediation; and
(viii) mechanisms for the monitoring, review and amendment of this Plan.

Prior to construction of the Turning Angle Works, the Proponent must submit revised plans including the Turning Angle Works to the Environmental Representative for approval. The ER may approve minor updates to the plan without further consultation with public authorities. The plans required by Condition E63(e) only apply to the Turning

Angle Works insofar as they provide for unexpected finds procedures and staff training and induction.

The reference to the ecological monitoring plan referred to in condition E63(b)(viii) does not apply to the Turning Angle Works.

18. Delete condition F2 and replace with the following:

F2. Prior to the commencement of operation, or as otherwise agreed by the Planning Secretary, the Proponent shall prepare and implement an **Operation Environmental Management Plan** for the SSI. The Plan shall detail the environmental management framework, practices and procedures to be followed during operation of the SSI. The Plan shall be consistent with the document *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004). The Plan shall be prepared in consultation with the relevant government authorities and include, but not necessarily be limited to:

(a) a description of all relevant activities to be undertaken during operation of the SSI;
(b) statutory and other obligations that the Proponent is required to fulfil during operation including all approvals, consultations and agreements required from authorities, and key legislation and policies;
(c) details of how the SSI's environmental performance will be monitored and what actions will be taken to address identified adverse environmental impacts;
(d) where required, measures to monitor and maintain biodiversity offset measures implemented in accordance with condition C4 of this approval;
(e) measures to monitor and maintain the effectiveness of flora and fauna management measures, including revegetated areas, landscaped areas and the control of the spread of weeds;
(f) measures to monitor and manage noise impacts;
(g) measures to monitor and control soil erosion and the discharge of sediment and other pollutants to surrounding lands and waterways;
(h) procedures for periodic monitoring of groundwater depth and flow and groundwater quality in the vicinity of the SSI and groundwater seepage, including the location and frequency of monitoring;
(i) a contingency plan to address changes in groundwater depths and flows and/or groundwater quality and groundwater seepage into the drainage swales;
(j) measures to monitor and manage hazards and risks;
(k) management and maintenance measures for the floating wetlands, and for the entire stormwater system, including pits and pipes, cess drains, sediment basins, gross pollutant traps and detention basins;
(l) management measures for maintaining the Purgatory Creek culvert;
(m) emergency management procedures;
(n) measures for maintaining the stormwater management system including the drainage swales; and
(o) measures to minimise dust generation from internal service roads.

The Plan shall be submitted for the Planning Secretary's approval no later than one month prior to the commencement of operation, or as otherwise agreed by the Planning Secretary. Operation of the SSI shall not commence until written approval has been received from the Planning Secretary.

Prior to construction of the Turning Angle Works, the Proponent must provide a copy of the revised plan including the Turning Angle Works to the Environmental Representative for approval. The ER may approve minor updates to the plan without further consultation with public authorities.

Nothing in this condition precludes the Proponent from updating an existing Operational Environment Management Plan, (environmental) management system, existing policies and/or procedures to meet this requirement, providing the Operational Environment Management Plan demonstrates, to the satisfaction of the Planning Secretary, where the relevant conditions of this approval have been addressed.

Note: The approval of an Operation Environmental Management Plan does not relieve the Proponent of any requirement associated with this SSI approval. If there is an inconsistency with an approved Operation Environmental Management Plan and the conditions of this SSI approval, the requirements of this SSI approval prevail.

19. Insert new condition F4 as follows:

F4A. The Proponent shall undertake a noise and vibration compliance assessment, consistent with the requirements of condition F4, to include the Turning Angle Works within 12 months of the commencement of operation of the Turning Angle Works.

20. Delete condition F5 and replace with the following:

F5. A **Flood Review Report** shall be prepared following each of the following flood events at the SSI site – 1%, 2%, 5% and 10% AEP flood events to assess the actual flood impacts against those predicted in Appendix D of the *Preferred Infrastructure Report* referred to in condition B1(c) and the *Modification Report* referred to in condition B1(d). The Report shall be prepared by an appropriately qualified person(s) and include:

(a) Identification of the properties and infrastructure affected by flooding during the reportable event;
(b) A comparison of the actual extent, level and duration of the flooding event against the impacts predicted in Appendix D of the document referred to in condition B1(c);
(c) Where the actual extent and level of flooding exceeds the predicted level with the consequent effect of adversely impacting on property(ies), structures and infrastructure, identification of the measures to be implemented to reduce future impacts of flooding including the timing and responsibilities for implementation.

Flood mitigation measures shall be developed in consultation with the affected property/structure/infrastructure owners, the Water Group and City of Newcastle.