Infrastructure Approval

Section 115ZB of the *Environmental Planning and Assessment Act 1979*

I grant approval to the State significant infrastructure application referred to in schedule A, subject to the conditions in schedules B to E.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts including economic and social impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

The Hon Brad Hazzard MP
Minister for Planning and Infrastructure

08 MAY 2013
Sydney 2013

SCHEDULE A

Application No:	SSI-5414
Proponent:	Transport for NSW
Consent Authority:	Minister for Planning and Infrastructure
Land:	Land required for the construction and operation of the proposal, generally between Epping and Rouse Hill
State significant infrastructure:	Construction works for the North West Rail Link (not subject to State significant Infrastructure approval SSI 5100) and operation of the railway, including the construction and operation of stations and wider precincts, services facilities and a stabling facility at Tallawong Road, and rail infrastructure and systems.
Critical infrastructure	The Proposal is critical State significant infrastructure by virtue of Schedule 5, Clause 2 of the State and Regional Development SEPP.

DEFINITIONS

Act, the	*Environmental Planning and Assessment Act, 1979.*
Ancillary Facility	Temporary facility for construction not identified in the documents listed in condition B1 (b) and (c) of this approval, including for example an office and amenities compound, construction compound, batch plant (concrete or bitumen), materials storage compound, maintenance workshop, testing laboratory or material stockpile area.
Conditions of approval	The Minister's conditions of approval for the SSI.
Construction	Excludes work in respect of State Significant Infrastructure Approval SSI 5100. Includes all work in respect of the SSI other than: a) survey, acquisitions, building/ road dilapidation surveys; b) investigative drilling/ excavation, c) minor clearing or translocation of native vegetation; d) establishing ancillary facilities/ construction work sites (in locations meeting the criteria identified in the Conditions of Approval); e) installation of environmental impact mitigation measures, fencing, enabling works; f) other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/ utilities, etc). Work where heritage, threatened species, populations or endangered ecological communities would be affected, that work is classified as construction, unless otherwise approved by the Director General in consultation with the Office of Environment and Heritage and/ or the Heritage Council of NSW.
Council(s)	Blacktown City Council, and/ or The Hills Shire Council, and/ or Hornsby Shire Council, and/ or Parramatta City Council
Department, the	Department of Planning and Infrastructure.
Director General, the	Director General of the Department of Planning and Infrastructure.
Director General's approval, agreement or satisfaction	A written approval from the Director General (or nominee). Where the Director General's approval, agreement or satisfaction is required under a condition of this approval, the Director General will endeavour to provide a response within one month of receiving an approval, agreement or satisfaction request. The Director General may ask for additional information if the approval, agreement or satisfaction 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	Department of Primary Industries
EEC	Endangered ecological communities
EIS	Environmental Impact Statement
Enabling Works	Works which allow isolation of the site so that access for construction can be provided.
EPA	Environment Protection Authority.

EPL	Environment Protection Licence under the *Protection of the Environment Operations Act 1997.*
Feasible and Reasonable	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account mitigation benefits and cost of mitigation versus benefits provided, community views and nature and extent of potential improvements. Where requested by the Director General, the Proponent shall provide evidence as to how feasible and reasonable measures were considered and taken into account.
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement such as a shared associations in pastoral landscapes as well as associations linked with the mission period.
Heritage Item	An item as defined under the *Heritage Act 1977*, and assessed as being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the *National Parks and Wildlife Act 1974*.
ICNG	Interim Construction Noise Guideline (DEC, 2009)
IGANRIP	Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (DECC and DoP, 2007).
INP	NSW Industrial Noise Policy (NSW Government, 2000)
Minister, the	Minister for Planning and Infrastructure
NOW	NSW Office of Water
NWGC	North West Growth Centre
OEH	Office of Environment and Heritage
Operation	Means the operation of the SSI, but does not include testing or commissioning trials of equipment or temporary use of parts of the SSI during construction.
Proponent	Transport for NSW
Publicly available	Available for inspection by a member of the general public (for example available on an internet website).
RMS	Roads and Maritime Services
RNP	NSW Road Noise Policy (DECCW, 2011)
Sensitive receiver	Residence, education institution (e.g. school, university, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church), children's day care facility, community centres, and recreation areas.
SSI	Means the infrastructure approved under this approval and as generally described in Schedule A
TSF	Train Stabling Facility

SCHEDULE B

ADMINISTRATIVE CONDITIONS

TERMS OF APPROVAL

B1. The Proponent shall carry out the SSI generally in accordance with the:
   (a) SSI Application SSI-5414;
   (b) *North West Rail Link: Environmental Impact Statement – Stage 2 – Stations, Rail Infrastructure and Systems, dated October 2012;*
   (c) *North West Rail Link Submissions Report, Stage 2 – Stations, Rail Infrastructure and Systems, Incorporating Preferred Infrastructure Report,* dated March 2013; and
   (d) conditions of this approval.

B2. In the event of an inconsistency between:
   (a) the conditions of this approval and any document listed from condition B1(a) to B1(c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
   (b) any document listed from condition B1(a) to B1(c) inclusive, and any other document listed from condition B1(a) to B1(c) inclusive, the most recent document shall prevail to the extent of the inconsistency.

B3. In the event of an inconsistency between the terms of this approval and the staged infrastructure approval granted in respect of the North West Rail Link on May 6 2008 (MP06_1057), as modified from time to time, the terms of this approval (including the documents listed in B1) shall prevail to the extent of the inconsistency.

B4. The Proponent shall comply with any reasonable requirement(s) of the Director General arising from the Department's assessment of:
   (a) any reports, plans or correspondence that are required and/or submitted in accordance with this approval; and
   (b) the implementation of any actions or measures contained within these reports, plans or correspondence.

B5. Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.

LIMITS OF APPROVAL

B6. This approval shall lapse 10 years after the date on which it is granted, unless the works the subject of this SSI approval are physically commenced on or before that date.

B7. This approval does not permit the construction of any buildings or the undertaking of uses that do not form part of the operation or are not ancillary to the SSI. This includes retail and commercial uses at stations and buildings and uses at residual redevelopment sites, unless required by the conditions of this approval. Interim and permanent approval of these buildings and uses shall be sought separately in accordance with the requirements of the Act.

STATUTORY REQUIREMENTS

B8. The Proponent shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required throughout the life of the SSI. No condition of this approval removes the obligation for the Proponent or its contractors to obtain, renew or comply with such licences, permits or approvals.

STAGING

B9. The Proponent may elect to construct and/ or operate the SSI in stages. Where staging is proposed, the Proponent shall submit a Staging Report to the Director General prior to the commencement of the first proposed stage. The Staging Report shall provide details of:

(a) how the SSI would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and

(b) details of the relevant conditions of approval, which would apply to each stage and how these shall be complied with across and between the stages of the SSI.

Where staging of the SSI is proposed, these conditions of approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).

The Proponent shall ensure that an updated Staging Report (or advice that no changes to staging are proposed) is submitted to the Director General prior to the commencement of each stage, identifying any changes to the proposed staging or applicable conditions.

B10. The Proponent shall ensure that all plans, sub-plans and other management documents required by the conditions of this approval and relevant to each stage (as identified in the Staging Report) are submitted to the Director General no later than one month prior to the commencement of the relevant stages, unless otherwise agreed by the Director General.

Note: These conditions do not relate to staged infrastructure within the meaning of section 115ZD of the EP&A Act.

B11. With the approval of the Director General, the Proponent may:

(a) submit any strategy, plan, program (or the like) required by this approval on a progressive basis;

(b) combine any strategy, plan, program (or the like) required by this approval; and

(c) update corresponding strategies, plans and programs prepared to meet the requirements of State Significant Infrastructure Approval SSI-5100 for the purposes of meeting the requirements of the SSI.

Notes:

- *While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and*
- *If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.*

COMPLIANCE

B12. The Proponent shall ensure that any strategy, plan, program (or the like) incorporates mitigation measures identified in the documents listed in condition B1, as relevant, and as modified by this approval.

B13. The Proponent shall ensure that employees, contractors and sub-contractors are aware of, and the need to comply with, the conditions of this approval relevant to their respective activities.

B14. The Proponent shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.

SCHEDULE C

ENVIRONMENTAL PERFORMANCE

DESIGN

Suburban Rail

C1. The Proponent shall enter into an Interface Agreement(s) with RailCorp to ensure the successful operational integration of the SSI and the heavy railway network and the protection of physical and operational RailCorp assets and services, during construction and operation.

The Agreement(s) shall incorporate measures that ensure the safety and structural integrity of rail infrastructure facilities and assets, including auxiliary infrastructure; the safe and effective operation of these assets; and facilitate efficient and safe modal integration. The Agreement(s) shall incorporate proactive monitoring, and remediation and redress actions, including emergency procedures, should there be a design, mitigation or management failure.

TRANSPORT AND ACCESS

Traffic and related Network Facilities

C2. The SSI shall be designed and constructed with the objective of integrating with the existing and proposed road and related transport networks and minimising adverse changes to the efficiency, accessibility and safety of the networks, and where feasible and reasonable, facilitate an improved level of service, in relation to permanent and operational changes. Detailed design and assessment of related traffic, parking, pedestrian and cycle accessibility impacts and changes shall be undertaken:

(a) in consultation with, and to the reasonable requirements of the Traffic and Transport Liaison Group;
(b) in consideration of existing and future demand, connectivity (in relation to permanent changes), performance and safety requirements;
(c) to minimise and manage regional and local area traffic impacts;
(d) to ensure access is maintained to property and infrastructure; and
(e) to meet relevant design, engineering and safety guidelines, including Austroads, Australian Standards, and RMS (RTA) requirements.

Changes shall be certified by an appropriately qualified person(s) and certified copies of civil, structural and traffic signal design plans shall be submitted to the relevant road authority for consideration and acceptance prior to the commencement of the relevant works.

C3. Bridgeworks (under and over) and other structures in the proximity of the road and associated transport networks shall be designed to ensure the efficient and safe operation of the networks.

C4. Permanent road works, including vehicular access, signalised intersection works, and works relating to pedestrians, cyclists, and public transport users will be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits shall be submitted to the Traffic and Transport Liaison Group (condition C8) prior to the completion and use of the subject infrastructure and shall be made available to the Director General upon request.

Station Access Plans

C5. The Proponent shall develop a Station Access Plan(s) to inform the final design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road changes, and integration between current and proposed public domain and transport initiatives for each station. The Plan(s) shall consider, but not necessarily be limited to the area within defined and justified station walking and cycling catchments, and shall take into account:

(a) a station access hierarchy consistent with the transport planning principles defined within the EIS;
(b) safe, convenient and efficient access to stations and interchange between transport modes;
(c) current levels of access and service for all modes and services;
(d) the consideration of state and local transport initiatives and plans;
(e) the identification of opportunities and constraints presented by existing and proposed transport and access infrastructure and services;
(f) patronage changes resulting from land use, population, employment, transport infrastructure and service changes;
(g) integration with existing and proposed transport infrastructure and services;
(h) pedestrian, cycle, bus, taxi, vehicle, and emergency vehicle access and parking, infrastructure and servicing requirements;
(i) legislative requirements and applicable guidelines;
(j) safety audits , including but not limited to a review of traffic facility and cycle changes to ensure compliance with Austroads design criteria;
(k) final design, infrastructure, management and service measures, and the level of access and service to be achieved for all users; and
(l) operational management provisions for future operational requirements, including maintenance, security and management responsibilities.

The Plan(s) shall be prepared in consultation with the Traffic and Transport Liaison Group required under condition C8 and shall be supported by traffic and transport analysis. Where necessary, consultation shall also be undertaken with major landholders adjoining station precincts. The Plans shall detail a delivery and implementation program and shall be provided to the Director General and made publicly available prior to construction, unless otherwise agreed by the Director General.

C6. In developing the Station Access Plan(s) required under condition C5, the Proponent shall consider:

(a) traffic and accessibility design requirements (condition C2);
(b) Parking Management Strategy requirements (condition C11);
(c) Pedestrian and Cyclist Network and Facilities Strategy requirements and infrastructure (condition C10);
(d) Cherrybrook Station requirements (condition C12);
(e) bus layover requirements (condition C13); and
(f) the Urban Design and Corridor Landscaping Plan (condition C44).

C7. The Station Access Plan(s) required under condition C5 shall be reviewed by a qualified traffic and transport professional(s), independent of the detailed design process for the SSI, having regard to the requirements of this approval. The independent, qualified professional(s) shall be approved by the Director-General prior to commencement of the review process.

Note: nothing in this approval precludes the use of staff employed by the Proponent or other agencies, to review the Station Access Plan(s), provided that those staff are suitably qualified, independent of the design process and have been approved by the Director-General to act in that role.

Traffic and Transport Liaison Group

C8. A Traffic and Transport Liaison Group shall be established to inform the detail design of temporary construction and permanent operational traffic and transport measures and to inform ongoing management measures prior to and during construction of the SSI. The Group shall be chaired by the Proponent and shall comprise representatives from the Department (Land Release) relevant road authorities (including the RMS and Councils), transport operators (including bus and taxi operators), and emergency services as required. The Group shall be consulted on and shall inform the preparation of the Construction Traffic Management Plan (condition E34) and Station Access Plan(s) (condition C5).

C9. The Proponent shall undertake supplementary analyses as required by the Traffic and Transport Liaison Group and, where relevant, detailed modelling of traffic changes and impacts that have the potential to have a significant detrimental impact on traffic flow efficiency with the objective of informing and improving road network changes and traffic management measures. The requirement for and details of the modelling shall be undertaken in consultation with the Traffic and Transport Liaison Group. The revised traffic management measures, including changes to the pedestrian, bicycle and public transport networks, shall be incorporated into the Construction Traffic Management Plan (condition E34(c)) and Station Access Plan(s) (condition C5).

Pedestrian and Cyclist Network and Facilities Strategy

C10. A Pedestrian and Cyclist Network and Facilities Strategy shall be prepared in consultation with Councils, RMS, Bicycle NSW and Bike North. The Strategy shall identify pedestrian and cycle paths and associated facilities that are to be provided as part of the SSI with the objective of providing seamless, coherent, visible, and safe pedestrian and cycle access to, from and through stations. The Strategy shall consider:

(a) existing and proposed local and regional pedestrian and cycle facilities and strategies;
(b) pedestrian and cycle access to and from stations, including local and regional pedestrian and bicycle connections through and around each station;
(c) demand for pedestrian and cycle facilities with consideration of encouraging an increased pedestrian and cycle mode share;
(d) pedestrian and cycle infrastructure and facilities at each station and access paths to, from and through stations, including the provision of separated cycle paths, particularly where paths form part of an existing cycle thoroughfare;
(e) safe, secure and weather protected bicycle storage at each station (including all three classes);
(f) signage and wayfinding along routes and at each station; and
(g) the requirements of relevant design standards, including Austroads and NSW bicycle guidelines.

The Proponent shall implement the Strategy and incorporate it into the Station Access Plan(s) (condition C5).

Parking Management Strategy

C11. The Proponent shall prepare a **Parking Management Strategy** in consultation with the RMS, bus operators and Councils to manage car parking impacts at stations and adjoining areas as a result of the operation of the SSI. The Parking Management Strategy shall include, but not be limited to:

(a) the provision of parking spaces consistent with those identified in EIS documentation, except as required by this approval;
(b) the replacement of lost on street car parking in the vicinity of stations, where feasible and reasonable;

(c) the safe placement, access to (including safe pedestrian and cycle access) and management of parking;
(d) a monitoring and reporting methodology for the utilisation of park and ride spaces and impacts on parking supply and turnover on adjoining streets at each station; and
(e) the identification of measures to address on street parking impacts, such as resident parking schemes, should monitoring identify a significantly detrimental impact on local parking supply.

The Proponent shall be responsible for the coordination of measures in consultation with the relevant Council. The Strategy shall be submitted to the Director-General and the reporting of monitoring incorporated into the Compliance Tracking Program. The monitoring shall be undertaken in conjunction with the monitoring under condition F3 and apply for a minimum of one year following commencement of operation.

Cherrybrook Station

C12. The Proponent shall undertake a review of bus and vehicular access options for Cherrybrook Station, with the objective of reducing potential impacts on local roads within the vicinity of the Station. The review shall address, but not be limited to: transport access hierarchy; bus catchment and servicing requirements; modal interchange; safety and amenity; local traffic; and parking loss. The outcomes of the review shall be considered in the Station Access Plan(s)(condition C5).

Bus Layovers

C13. The Proponent shall, during the detailed design of stations, consult with bus operators in relation to the provisions of both short and long term bus layover facilities, including driver facilities, during construction and operation. The Proponent shall ensure that the reasonable requests of bus operators are met.

Cycle

C14. The SSI shall be designed and operated so as not to preclude the carrying of bicycles within stations, in station infrastructure and on rail vehicles.

NOISE AND VIBRATION

Land Use Survey

C15. Prior to construction of the SSI, a detailed land use survey to identify potentially critical areas that are sensitive to construction and operational noise (air and ground borne) and vibration impacts, shall be undertaken having regard to the type of land use. The results of the survey shall be incorporated into the Construction Noise and Vibration Management Plan (condition E34(b)) and the Operational Noise and Vibration Review (condition C20).

The land survey, prepared to meet condition E11 of State significant Infrastructure Approval SSI 5100, may be revised, if necessary and resubmitted.

Operational Noise and Vibration

C16. Rail line components of the SSI shall be designed and operated with the objective of not exceeding the airborne and ground-borne noise trigger levels at existing development, at each stage of the SSI, as presented in the *Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects* (DECC and DoP, 2007).

In particular, the final viaduct design shall incorporate feasible and reasonable methods and materials that will reduce radiated noise from the structure.

For the purpose of this condition, existing development includes all development that at the date of this approval, has been carried out in the vicinity of the rail corridor and any such development approved prior to the determination of this SSI, but only to the extent that the location of sensitive receivers is known.

C17. Stationary facilities (including but not limited to stations; the TSF; substations; and heating, ventilating and air conditioning equipment) shall be designed and operated with the objective of meeting operational noise levels derived from the *NSW Industrial Noise Policy* (NSW Government, 2000).

In particular, the procurement of rail vehicles should facilitate reduced noise levels from train auxiliary systems, and public announcement systems at stations shall be designed and installed in accordance with best practice.

Operational noise levels shall be reviewed within 2 years of commencement of operations and at any subsequent time as required by the Director General. The review shall have regard to the status of land use planning, any land use changes and the background noise environment within areas adjacent to the fixed facilities at the time of the relevant review. The Proponent shall submit the results of the review to the Director General. Any proposed changes to the operational noise levels as a result of the review shall be included in a revised ONVR.

C18. Road noise attributed to the operation of the SSI, shall be considered and mitigated with the objective of meeting the noise criteria presented in the *NSW Road Noise Policy* (DECCW, 2011).

C19. The SSI shall be designed and operated with the objective of not exceeding the vibration goals for human exposure for existing sensitive receivers, as presented in *Assessing Vibration: a Technical Guideline* (DECC, 2006).

C20. The Proponent shall prepare an **Operational Noise and Vibration Review** (ONVR) within 6 months of commencing construction unless otherwise agreed by the Director-General to confirm noise (air and ground-borne) and vibration control measures that will be implemented for the SSI. The ONVR shall be prepared in consultation with the Department (Land Release), the EPA and relevant Councils and shall:

(a) identify the appropriate operational noise and vibration objectives and levels for receiving existing development, including sensitive receivers and critical working areas;
(b) predict the operational noise and vibration impacts at receiving existing development based on the final design and operation of the SSI (this should include consideration of rail movements associated with future Tier 1 rail operations);
(c) examine all feasible and reasonable noise and vibration mitigation measures, with a focus on source control and design;
(d) identify specific physical and other mitigation measures for controlling noise and vibration at the source and at the receiver (if relevant) including location, type and timing for the erection of permanent noise barriers and/or other noise mitigation measures;
(e) include a consultation strategy to seek feedback from directly affected property owners on the noise and vibration mitigation measures; and
(f) include procedures for operational noise and vibration complaints management, including investigation and monitoring (subject to complainant agreement).

The ONVR is to be independently verified by a noise and vibration expert. The scope of the verification exercise undertaken by the noise and vibration expert is to be developed by the Proponent in consultation with the EPA. The verification will be undertaken at the Proponent's expense and the independent expert shall be approved

by the Director-General. The ONVR and independent review is to be submitted to the Director-General prior to the commencement of the laying of rail track or the construction of physical noise mitigation structures, unless otherwise agreed to by the Director-General.

Where the noise and vibration objectives cannot be achieved, the assessment shall present an analysis of feasible and reasonable noise and vibration mitigation measures, and the 'best practice' achievable noise and vibration outcome for each activity.

The Proponent shall implement the identified noise and vibration control measures prior to operation and make it publicly available.

C21. The Proponent shall consult with the Department (Land Release) and relevant Councils during detailed design of the SSI to facilitate appropriate rail infrastructure and land use planning responses to potential noise and vibration impacts within the NWGC and new development adjacent to the SSI.

Operational Noise and Vibration Compliance

C22. The Proponent shall undertake a noise and vibration compliance assessment to confirm the predictions of the noise assessment referred to in the ONVR (condition C20). The noise and vibration compliance assessment shall be developed in consultation with the EPA and be undertaken within twelve months of the commencement of operation of the SSI, or as otherwise agreed by the Director-General. The assessment shall include, but not necessarily be limited to:

(a) noise and vibration monitoring and compliance assessment, to assess compliance with conditions C15 to C18 of this approval and the ONVR;
(b) methodology for assessment;
(c) details of any complaints received relating to operational noise and vibration impacts;
(d) any required recalibration of the noise and vibration model taking into account considerations such as land use change;
(e) an assessment of the performance and effectiveness of the applied noise and vibration mitigation measures; and
(f) identification, if required, of further noise and vibration mitigation measures to meet the requirements of C15 to C18 of this approval and the objectives identified in the ONVR.

A **Noise and Vibration Compliance Assessment Report** providing the results of the assessment shall be submitted to the Director-General and the EPA within 60 days of its completion. If the assessment indicates an exceedance of the noise and vibration objectives identified in the ONVR, the Proponent shall implement further feasible and reasonable measures (where required) to mitigate these exceedances in consultation with affected property owners.

ECOLOGY

Ecological Monitoring

C23. The Ecological Monitoring Program required under condition C1 of State Significant Infrastructure Approval SSI-5100 shall continue and be updated as necessary during the construction of the SSI, unless otherwise agreed by the Director-General, in consultation with OEH and relevant Council's depending on the outcomes of monitoring.

Riparian and Aquatic Ecology

C24. Riparian Buffer Widths for waterways which are affected by the SSI are to be managed for a Total Riparian Buffer Width of between 10m to 50m where feasible and

reasonable, dependant on the Category of Watercourse determined by the Riparian Assessment for the North West Rail Link (Ecological Australia, 2011)

C25. Watercourses affected by the proposal shall, where feasible and reasonable, be rehabilitated to emulate a natural stream system. The rehabilitation of watercourses shall be consistent with the *Guidelines for Controlled Activities* (DWE, 2008) and stream armouring should be minimised to the greatest extent practicable.

C26. Riparian vegetation in and around watercourses affected by the SSI shall be restored and rehabilitated in consultation with NOW and DPI (Fisheries) and with the relevant Council/s. Restoration and rehabilitation measures, including timeframes and reporting on completion of works, shall be included in the Construction Flora and Fauna Management Plan (condition E34(f)).

HERITAGE

C27. The Proponent shall prepare and implement a Visual Impact Strategy in consultation with the Department and the NSW Heritage Council to detail and minimise the visual impacts of the SSI on heritage items, including Glenhope, Inala School, Castle Hill Showground, Mungerie House and the former Swann Inn; and the rehabilitation of bushland associated with works at Epping.

C28. During detailed design and construction of the SSI, impacts to heritage items shall, where feasible and reasonable, be avoided and minimised, under the guidance of an appropriately qualified heritage specialist.

Where impacts identified in the EIS are unavoidable, works shall be undertaken in accordance with the strategy outlined in the Construction Heritage Management Plan (condition E34(e)).

C29. Archival recording of affected heritage items shall be undertaken in accordance with the NSW Heritage Council guidelines as relevant.

C30. Prior to the commencement of pre-construction and/ or construction activities that will impact the Aboriginal archaeological sites identified in table 7.3 of the North West Rail Link EIS: Technical Paper - Indigenous Heritage, dated March 2012 and table 12.6 of the North West Rail Link EIS: Volume 1B – Environmental Impact Statement Stage 2 – Stations, Rail Infrastructure and Systems, the Proponent shall undertake an archaeological salvage program using a methodology prepared in consultation with the registered Aboriginal stakeholders, and to the satisfaction of the Director-General. This work shall be undertaken by an appropriately qualified archaeological heritage consultant.

Within 2 years of completing the salvage, unless otherwise agreed by the Director General, the Proponent shall submit a report containing the findings of the salvage, including artefact analysis, and the identification of a final repository for any Aboriginal objects, prepared in consultation with the Aboriginal stakeholders and to the satisfaction of the Director-General.

If the impacts or works to the Aboriginal archaeological sites identified in table 7.3 of the North West Rail Link EIS: Technical Paper – Indigenous Heritage, dated March 2012 have been addressed in accordance with Condition E9 of State Significant Infrastructure Approval SSI-5100, the requirements of this part of the condition are taken to be fulfilled.

C31. Prior to the commencement of pre-construction and/ or construction activities that will impact the historical archaeological sites identified in identified in table 4.2 of the North West Rail Link EIS: Technical Paper – European Heritage, dated March 2012, the Proponent shall undertake an archaeological excavation program in accordance with the Heritage Council of NSW Archaeological Assessments Guideline (1996) using a methodology prepared in consultation with the Heritage Council of NSW, and to the satisfaction of the Director-General. This work shall be undertaken by an appropriately qualified archaeological heritage consultant.

Within 2 years of completing the above work, unless otherwise agreed by the Director General, the Proponent shall submit a report containing the findings of the excavations, including artefact analysis, and the identification of a final repository for any finds, prepared in consultation with the Heritage Council of NSW and to the satisfaction of the Director-General.

If the impacts or works have been addressed in accordance with Condition E10 of State Significant Infrastructure Approval SSI-5100, the requirements of this condition are taken to be fulfilled.

SOIL, WATER QUALITY AND HYDROLOGY

C32. Except as may be provided by an EPL, the SSI shall be constructed and operated to comply with section 120 of the *Protection of the Environment Operations Act 1997*, which prohibits the pollution of waters.

Flooding

C33. The SSI shall be designed, to the extent that it is feasible and reasonable, to not worsen existing flood characteristics in the vicinity of the SSI. Not worsen is defined as:

(a) a maximum increase flood levels of 50mm in a 100 year Average Recurrence Interval (ARI) flood event; and

(b) a maximum increase in time of inundation of one hour in a 100 year ARI flood event; and

(c) any increase in flow velocity in a 100 year ARI flood event should not increase the potential for soil erosion and scouring.

Flood Risk Management Plan

C34. A **Stormwater and Flooding Management Plan(s)** shall be prepared in consultation with the Department (Strategies and Land Release), OEH, and relevant Councils during detailed design of the SSI and prior to construction, or as otherwise agreed by the Director General. The Plan shall identify actions to ensure that the SSI addresses existing flooding characteristics within the vicinity of the SSI for a full range of flood sizes up to and including the probable maximum flood. The Plan(s) shall be prepared by appropriately qualified person(s) and facilitate a holistic approach to detailed hydrologic assessment and stormwater management, which gives consideration to the cumulative impacts of the SSI associated with its construction and operation, and shall include but not be limited to:

(a) the design of temporary works, compensatory and management measures that would be implemented during construction to not worsen, to the extent that it is feasible and reasonable, existing and known future flooding characteristics;

(b) the identification of flood risks to the SSI and adjoining areas, including the consideration of local and regional drainage catchment assessments, strategies and guidelines; and climate change implications on rainfall and drainage characteristics;

(c) the design and layout of each station precinct and rail service facility to not worsen, to the extent that is feasible and reasonable, existing and known future flooding characteristics;

(d) identification of design and mitigation measures that would be implemented to protect proposed construction and operational activities and not worsen existing flooding characteristics, including soil erosion and scouring. Design of mitigation measures should consider more frequent floods besides flood of design; and
(e) identify flood risk, potential for inflows, potential consequences and required mitigation measures for each tunnel entrance;
(f) specific information related to flood risk in larger floods (for example PMF) and the incorporation of management measures in the flood emergency response planning required under condition F4.

For surface components of the SSI located on floodplains, flood impacts shall be confirmed in accordance with the *Floodplain Development Manual* (2005), and other relevant NSW Government Guidelines.

Salinity

C35. A **Soil Salinity Report** detailing the outcomes of geotechnical investigations and groundwater monitoring, to determine the presence, extent and severity of soil salinity within the SSI area and impacts to groundwater resources and hydrology, shall be prepared and submitted to the Director General prior to the commencement of bulk earth activities, or as otherwise agreed by the Director General.

The report shall be prepared in consultation with OEH and NOW and detail, where relevant, that the SSI minimises, avoids and/or mitigates impacts on local/regional salinity processes, impacts on groundwater systems, and receiving environments.

The recommendations of the Soil Salinity Report shall be incorporated into the Construction Soil and Water Quality Management Plan (condition E34(c)).

The Soil Salinity Report, prepared to meet condition C9 of State Significant Infrastructure approval SSI-5100, may be revised, if necessary and resubmitted.

Watercourse crossings

C36. Watercourse crossings (temporary and permanent) shall be designed in consultation with NOW, and where feasible and reasonable, be consistent with the *Guidelines for Controlled Activities*, *Policy and Guidelines for Fish Friendly Waterway Crossings* (NSW Fisheries, 2004) and *Policy and Guidelines for Design and Construction of Bridges, Roads, Causeways, Culverts and Similar Structures* (NSW Fisheries, 1999). Where multiple cell culverts are proposed for creek crossings, at least one cell shall be provided for fish passage, with an invert or bed level that mimics creek flows.

Water Quality Monitoring Program

C37. A **Water Quality Monitoring Program** shall be prepared and implemented to monitor impacts on surface and groundwater quality resources and wetlands during construction and operation. The Program shall be developed in consultation with the EPA, DPI (Fisheries), NOW and relevant Councils and shall include but not necessarily be limited to:
(a) identification of surface and groundwater quality monitoring locations which are representative of the potential extent of impacts from the SSI. This should include representative locations near the discharge point of the Lady Game Drive Water Treatment Plant;
(b) identification of the water quality parameters to be monitored at each location;
(c) identification of works and activities during construction and operation of the SSI, including emergencies and spill events, that have the potential to impact on surface water quality of potentially affected waterways;
(d) presentation of parameters and standards against which any changes to water quality will be assessed, having regard to the principles of the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* (ANZECC,

2000), and identification of 'trigger points' for further investigation or action to be taken;

(e) representative background monitoring of surface and groundwater quality parameters, to establish baseline water conditions, unless otherwise agreed by the Director General;

(f) identification of the frequency of water sampling during background, and construction monitoring periods;

(g) a minimum monitoring period of three years following the completion of construction or until the affected waterways and/ or groundwater resources are certified by an independent expert as being rehabilitated to an acceptable condition;

(h) contingency and ameliorative measures in the event that adverse impacts to water quality relevant to the SSI are identified; and

(i) reporting of the monitoring results to the Department, EPA, DPI, NoW and relevant Councils.

The Program shall be submitted to the Director General for approval prior to the commencement of construction of the SSI, or as otherwise agreed by the Director General. A copy of the Program shall be submitted to the EPA, DPI (Fishing and Aquaculture) and NOW prior to its implementation.

The Water Quality Monitoring Program, prepared to meet condition C11 of State Significant Infrastructure approval SSI-5100, may be revised, if necessary and resubmitted.

Groundwater

C38. The Proponent shall design and construct the SSI, as far as is feasible and reasonable, in a manner that minimises impacts to groundwater hydrology including capture, drawdown and quality.

C39. The Proponent shall take all feasible and reasonable measures to limit operational groundwater inflows into the tunnels to no greater than 0.5 ML/day.

C40. The management of groundwater and surface water ingress into the station boxes and tunnels, including the design of capture, monitoring, treatment and discharge methods shall be undertaken in consultation with the EPA.

C41. The Proponent shall ensure that groundwater which is treated at the Lady Game Drive water treatment plant is not discharged into the Lane Cove River without first meeting the discharge criteria outlined in Table 8.5 of the document referred to in condition B1(b). The Proponent shall review the discharge criteria in consultation with the EPA to ensure the level of discharge will not cause pollution of waters.

Contamination

C42. The following documents shall be submitted to the Director General, within the identified timeframes, unless otherwise agreed by the Director General:

(a) reports detailing Stage 2 Contamination Site Investigations in areas identified as having a risk of contamination (soil, water and building materials), and a Site Auditor endorsed Remediation Action Plan (or similar), where required, prior to site preparation or construction; and

(b) Certification by a Site Auditor that any contaminated land and/or groundwater, identified in (a) has been remediated to a standard consistent with the intended land use, prior to the use of the land.

Note: Terms used in this condition have the same meaning as in the Contaminated Land Management Act 1997.

C43. Where the investigations identify that the site is suitable for the intended operations and that there is no need for a specific remediation strategy, measures to identify, handle and manage potential contaminated spoils, materials and groundwater shall be incorporated into the Construction Environmental Management Plan (condition E33).

URBAN DESIGN

C44. The Proponent shall, prior to the commencement of permanent built works and/or landscaping, unless otherwise agreed by the Director-General, prepare and implement an **Urban Design and Corridor Landscape Plan** for the corresponding permanent built works and/or landscaping. The Plan shall be submitted to the Director-General and made publicly available.

In preparing the Plan, the Proponent shall consult with the Department (Land Release), RMS, relevant Councils and the community.

The Plan shall be prepared by appropriately qualified person(s) and detail the design initiatives to integrate rail infrastructure, stations and facilities into their existing and proposed settings, and landscaping measures to minimise, mitigate and/or offset the impacts of the SSI (including acoustic barriers and embankments/cuttings) on property and other land uses (such as open space), visual amenity and local vistas and heritage values. The Plan shall include, but not necessarily be limited to:

(a) identification of design objectives and standards based on local environmental and heritage values, strategic and statutory planning, future land release form and function, sustainable design and maintenance, transport and land use integration, passenger and community safety and security, community amenity and privacy, and relevant design standards and guidelines;
(b) details on the plans to provide, mitigate and/or augment landscaped areas and elements, with landscaping works to enhance ecological values, including riparian areas and fauna corridors, the provision of water sensitive urban design initiatives and to mitigate impacts to heritage landscapes;
(c) design details of the built elements of the SSI, including retaining walls, embankments, viaducts, culverts, bridges and underpasses, noise barriers, train stabling facility, and substations, and the measures to minimise the impact of these elements, particularly with respect to the impacts on adjoining residences, educational facilities, open space areas and heritage items and landscapes, including the recommendations of the Visual Impact Strategy (condition C27);
(d) specific plans for station precincts to provide high quality sustainable stations that enhance the public domain and provide for active uses, ensure intermodal integration and equitable and safe access, including connectivity of the stations to surrounding precincts and integration into strategic planning directions for these areas consistent with Station Access Plan(s) (condition C5);
(e) details on pedestrian and cycle access elements and fixtures, including crossings, secure cycle facilities, and other fixtures such as seating, lighting, fencing and signs etc, to enhance connectivity and the provision of a safe and secure environment consistent with the Pedestrian and Cyclist Network Facilities Strategy (condition C10);
(f) details on parking elements and how commuter parking areas at stations shall be designed to minimise amenity impacts and so as not to preclude or prejudice the future functionality of town centres consistent with the Parking Management Strategy (condition C11);
(g) details on public art and heritage (indigenous and non-indigenous) interpretation installations;
(h) implementation, management and monitoring strategies to ensure the establishment and ongoing maintenance of built elements and landscaped areas, including performance standards; and
(i) consideration of relevant design standards, such as the *Sustainable Design Guidelines for Stations, Commuter Car Parks and Maintenance Facilities* (2011),

Bridge Aesthetics Design guidelines to improve the appearance of bridges in NSW (2012), *Guidelines for the Development of Public Transport Interchange Facilities* (2008) and *Crime Prevention Through Environmental Design Principles*, and relevant Agency and Council design standards.

The Plan shall be endorsed by an independent Design Review Panel. The Design Review Panel shall consist of appropriately skilled professionals in the fields of architecture, landscape design, transport integration and heritage. The Panel representatives shall be approved by the Director-General.

HAZARDS AND RISK

C45. Dangerous goods, as defined by the *Australian Dangerous Goods Code*, shall be stored and handled strictly in accordance with:
(a) all relevant Australian Standards;
(b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
(c) the *Environment Protection Manual for Authorised Officers: Bunding and Spill Management,* technical bulletin (EPA, 1997).

In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

WASTE MANAGEMENT

C46. Waste generated outside the site shall not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.

UTILITIES AND SERVICES

C47. Utilities, services and other infrastructure potentially affected by construction shall be identified prior to construction affecting the item, to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the SSI shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The Proponent shall ensure that disruption to any service is minimised and shall be responsible for advising local residents and businesses affected prior to any planned disruption of service.

C48. The Proponent shall prepare dilapidation surveys and reports (including movement prediction studies) on the condition of roads, footpaths, services and utilities affected by construction. The Proponent shall carry out rectification work at the Proponent's expense and to the reasonable requirements of the owners.

C49. All excavations adjacent to RMS road infrastructure shall meet the requirements of RMS Technical Direction GTD 2012/0001 "*Excavation adjacent to RMS infrastructure*".

C50. The Proponent shall consult with relevant Councils regarding the use of any weight restricted road by heavy construction vehicles if required.

CLIMATE CHANGE

C51. The Proponent shall, where feasible and reasonable, fully offset carbon emissions generated by the operation of the SSI.

SCHEDULE D

COMMUNITY INFORMATION, REPORTING AND AUDITING

COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

D1. A **Stakeholder and Community Involvement Plan** shall be prepared and implemented to provide mechanisms to facilitate communication between the Proponent (and its contractor(s)), the Environmental Representative (condition E32), the relevant Council and community stakeholders (particularly adjoining landowners) on the construction environmental management of the SSI and detailed design elements of the SSI. The Strategy shall include, but not be limited to:

(a) identification of community and business 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 community and business stakeholders on construction progress and matters associated with environmental management;

(c) the formation of community/business-based forums that focus on key environmental management issues and design aspects of the SSI. The Strategy shall provide detail on the structure, scope, objectives and frequency of the forums;

(d) procedures and mechanisms through which community and business stakeholders can discuss or provide feedback to the Proponent and/or Environmental Representative in relation to the environmental management, design and delivery of the SSI;

(e) procedures and mechanisms through which the Proponent can respond to enquires or feedback from community and business stakeholders in relation to the environmental management, design and delivery of the SSI; and

(f) procedures and mechanisms that would be implemented to resolve issues/ disputes that may arise between parties on the matters relating to environmental management, design and the delivery of the SSI. This may include the use of an appropriately qualified and experienced independent mediator.

Issues that shall be addressed through the Stakeholder and Community Involvement Plan include (but are not necessarily limited to) traffic and access arrangements, noise and vibration, impacts to local businesses, land uses and community facilities, urban design and landscaping and other construction and design related impacts and management measures.

The Proponent shall maintain and implement the Plan throughout construction of the SSI. The Plan shall be approved by the Director General prior to the commencement of construction, or as otherwise agreed by the Director General.

Complaints and Enquiries Procedure

D2. Prior to the commencement of construction, or as otherwise agreed by the Director General, the Proponent shall ensure that the following are available for community enquiries and complaints for the duration of construction:

(a) a 24 hour telephone number(s) on which complaints and enquiries about the SSI may be registered;

(b) a postal address to which written complaints and enquires may be sent;

(c) an email address to which electronic complaints and enquiries may be transmitted; and

(d) a mediation system for complaints unable to be resolved.

The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction.

This information shall also be provided on the website (or dedicated pages) required by this approval.

D3. Prior to the commencement of construction, or as otherwise agreed by the Director General, the Proponent shall prepare and implement a **Construction Complaints Management System** consistent with *Customer satisfaction-Guidelines for complaints handling in organisations – ISO 10002:2004, MOD (formerly AS 4269: Complaints Handling)* and maintain the System for the duration of construction and up to 12 months following completion of the SSI.

Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the construction compliance reports required by this approval. The information contained within the System shall be made available to the Director General on request.

Provision of Electronic Information

D4. Prior to the commencement of construction, or as otherwise agreed by the Director General, the Proponent shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the SSI, for the duration of construction and for 12 months following completion of the SSI. The Proponent shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to:

(a) information on the current implementation status of the SSI;
(b) a copy of the documents referred to under condition B1 of this approval, and any documentation supporting modifications to this approval that may be granted from time to time;
(c) a copy of this approval and any future modification to this approval;
(d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the SSI;
(e) a copy of each current strategy, plan, program or other document required under this approval;
(f) the outcomes of compliance tracking in accordance with condition D5 of this approval; and
(g) details of contact point(s) to which community complaints and enquiries may be directed, including a telephone number, a postal address and an email address.

COMPLIANCE MONITORING AND TRACKING

Compliance Tracking Program

D5. The Proponent shall develop and implement a **Compliance Tracking Program** to track compliance with the requirements of this approval. The Program shall be submitted to the Director General for approval prior to the commencement of construction and operate for a minimum of one year following commencement of operation. The Program shall include, but not necessarily be limited to:

(a) provisions for the notification of the Director General prior to the commencement of construction of the SSI (including prior to each stage, where works are being staged);
(b) provisions for periodic review of the compliance status of the SSI against the requirements of this approval;
(c) provisions for periodic reporting of compliance status to the Director General, including a Pre-Construction Compliance Report, during construction reporting, and a Post-Construction Compliance Report;
(d) a program for independent environmental auditing in accordance with ISO 19011:2003 - Guidelines for Quality and / or Environmental Management Systems Auditing;

(e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;
(f) provisions for reporting environmental incidents to the Director General and relevant public authorities during construction;
(g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and
(h) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

Incident Reporting

D6. The Proponent shall notify the Director General of an incident with significant off-site impacts on people or the biophysical environment as identified by the Environmental Representative within 48 hours of becoming aware of the incident. The Proponent shall provide full written details of the incident to the Director General within seven days of the date on which the incident occurred.

SCHEDULE E

CONSTRUCTION ENVIRONMENTAL MANAGEMENT

TRANSPORT AND ACCESS

E1. Where construction will impact the efficiency and safety of road and related transport networks (including traffic flow, access, bus routes, parking and user safety), the Proponent shall develop, assess, and implement appropriate management measures in consultation with the relevant road authority, transport operator(s), and emergency services, and adjoining major land holders, as relevant. Such measures shall be addressed in the Construction Traffic Management Plan (E34(c)) and shall include but not be limited to:

(a) construction site access, including the efficient and safe egress and ingress of vehicles, consistent relevant Austroads, Australian Standards and RMS requirements;
(b) parking management, including on and off street and remote parking and access;
(c) heavy vehicle management, the restriction (unless otherwise approved) of heavy vehicles on certain routes (for example T-Ways and past education facilities) and the minimisation of heavy vehicle traffic in peak traffic periods;
(d) bus rerouting and access to bus stops;
(e) full and partial road closures and associated restrictions, detours and the like;
(f) special event management;
(g) the retention and reinstatement of emergency and property access;
(h) the retention of user and passenger safety, including pedestrians, cyclists, public transport users, including at stops and related facilities; and
(i) incident response planning.

E2. Access to property shall be maintained during construction unless otherwise agreed with the property owner in advance. A landowner's access that is physically affected by the SSI shall be reinstated to at least an equivalent standard, in consultation with the property owner.

E3. Impacts to existing parking (on and off street) should be minimised, including the amount of spaces reduced and the time associated with this reduction. Where parking is impacted, particularly for periods greater than four weeks, the proponent shall identify and implement, where feasible and reasonable, alternate parking arrangements. Displaced vehicles must not be accommodated on the state road network.

E4. Without limiting the outcomes of the Construction Traffic Management Plan for the SSI, construction traffic shall be scheduled, where feasible and reasonable, to outside of AM and PM peak hours, and also during special events. Methods used to limit construction traffic outside of peak traffic periods shall be incorporated into the Construction Traffic Management Plan (E34(c)).

Road Dilapidation

E5. Upon determining heavy vehicle routes associated with the SSI, and prior to use of these route(s) by heavy vehicles, an independent and qualified person or team shall undertake a **Road Dilapidation Report** on local roads from the construction access/ egress point(s) to the arterial road network. 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, during construction. The Report shall be submitted to the relevant road authority for review prior to use of the haulage routes(s).

Following completion of construction, a subsequent report shall be prepared to assess any damage that may have resulted from the construction of the SSI.

Measures undertaken to restore or reinstate roads affected by the SSI shall be undertaken in a timely manner, in accordance with the reasonable requirements of the relevant road authority, and at the full expense of the Proponent.

Access

E6. Safe pedestrian and cyclist access through or around worksites shall be maintained during construction. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a feasible and reasonable alternate route shall be provided and signposted.

E7. Construction vehicles (including staff vehicles) associated with the SSI shall be managed to:
(a) minimise parking or queuing on public roads and non associated sites;
(b) minimise the use of local roads (through residential streets and town centres) to gain access to construction sites and compounds;
(c) minimise traffic past schools and child care centres, particularly during opening and closing periods; and
(d) adhere to the nominated heavy vehicle routes identified in the Construction Traffic Management Plan (E34(c)).

AIR QUALITY

E8. The SSI shall be constructed in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust and tracking of material onto public roads. All activities on the site shall be undertaken with the objective of minimising visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all feasible and reasonable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.

VISUAL AMENITY

E9. The SSI shall be constructed in a manner that minimises visual impacts resulting from construction sites, including retaining, where feasible and reasonable, existing vegetation around the perimeter of construction sites, providing temporary landscaping where appropriate to soften views of the construction sites, minimising light spillage, and incorporating architectural treatment and finishes within key elements of temporary structures that reflect the context within which the construction sites are located.

BIODIVERSITY

E10. The SSI shall be constructed with the objective of not clearing additional vegetation beyond that approved under State Significant Infrastructure Approval SSI 5100 or identified in the documents listed in Condition B1.

REHABILITATION

E11. Where land associated with construction sites are not proposed to be utilised as part of the operational stage of the SSI, the Proponent shall ensure that these sites are fully rehabilitated to either the same level or better than their condition, prior to the construction of Infrastructure Approval SSI-5100, in consultation with relevant Council(s).

NOISE AND VIBRATION

Construction Hours

E12. Construction activities associated with the SSI shall be undertaken during the following standard construction hours:

(a) 7:00am to 6:00pm Mondays to Fridays, inclusive; and
(b) 8:00am to 1:00pm Saturdays;
(c) at no time on Sundays or public holidays.

E13. Notwithstanding condition E12, track work, tunnel systems works and fit out works within the tunnel may be undertaken 24 hours, seven days a week.

E14. Except as permitted by an EPL, activities resulting in impulsive or tonal noise emissions shall only be undertaken:

(a) between the hours of 8:00 am to 5:00 pm Monday to Friday;
(b) between the hours of 8:00 am to 1:00 pm Saturday; and
(c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block.

For the purposes of this condition 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition.

E15. Notwithstanding conditions E12 to E14, construction activities outside of the prescribed construction hours may be undertaken in any of the following circumstances:

(a) construction works that generate air-borne noise that is:
    (i) no more that 5 dB(A) above rating background level at any residence in accordance with the ICNG;
    (ii) no more than the noise management levels specified in Table 3 of the ICNG at other sensitive receivers;
(b) construction works that generate continuous or impulsive vibration values, measured at the most affected residence, that are no more than those for human exposure to vibration, specified for residences in Table 2.2 of *Assessing Vibration: a technical guideline* (DEC, 2006);
(c) works that generate intermittent vibration values, measured at the most affected residence, that are no more than those for human exposure to vibration, specified for residences in Table 2.4 of *Assessing Vibration: a technical guideline* (DEC, 2006);
(d) where a negotiated agreement has been reached with affected receivers, where the prescribed noise and vibration levels can not be achieved;
(e) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons;
(f) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; and
(g) works approved through an EPL, including for works identified in an out of hours procedure.

E16. In relation to construction hours, including for standard and out of hours activities, the SSI shall be constructed to comply with an EPL applying to the SSI, including all relevant noise mitigation and management measures. In the event of a dispute between the Proponent (including its contractors) and the EPA, in relation to construction hours, either party may refer the matter to the Director-General for resolution.

E17. For any section of construction where blasting is proposed, a series of initial trials at reduced scale shall be conducted prior to production blasting to determine site-specific blast response characteristics and to define allowable blast sizes to meet the air blast overpressure and ground vibration limits in this approval.

Construction Noise and Vibration

E18. The SSI shall be constructed with the aim of achieving the construction noise management levels detailed in the ICNG. All feasible and reasonable noise mitigation measures shall be implemented and any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the Construction Noise and Vibration Management Plan (E34(b)).

Note: The ICNG identifies 'particularly annoying' activities that require the addition of 5dB(A) to the predicted level before comparing to the construction Noise Management Levels.

E19. The SSI shall be constructed with the aim of achieving the following construction vibration goals:

(a) for structural damage, the vibration limits set out in the German Standard *DIN 4150-3: Structural Vibration - effects of vibration on structures*; and

(b) for human exposure, the acceptable vibration values set out in the *Assessing Vibration: a Technical Guideline* (DEC, 2006).

Where vibration levels exceed the acceptable vibration dose values, feasible and reasonable mitigation measures shall be considered.

E20. Ground vibration generated by blasting associated with the SSI shall not exceed the criteria specified in Table 3 when measured at the most affected receiver.

Table 3 – Ground vibration criteria

Receiver	Peak particle velocity (mm/s)	Allowable exceedance
Residence on privately owned land	5	5% of total number of blasts over a 12 month period
	10	0%
Other sensitive receivers	5, or alternatively a specific limit determined to the satisfaction of the Director-General by the structural design methodology in AS 2187.2-2006, or its latest version	0%
Historic heritage structures	3	0%
Public infrastructure	50, or alternatively a specific limit determined to the satisfaction of the Director-General by the structural design methodology in AS 2187.2-2006, or its latest version	0%

These criteria do not apply if the Proponent has a written agreement with the relevant owner, and has advised the Department in writing of the terms of this agreement.

E21. Wherever feasible and reasonable, piling activities shall be undertaken using quieter alternative methods than impact or percussion piling, such as bored piles or vibrated piles.

E22. The Proponent shall identify and consult with potentially-affected community, religious, educational institutions and vibration-sensitive businesses and critical working areas (such as theatres, laboratories and operating theatres) and where feasible and reasonable ensure that noise generating construction works in the vicinity of the receivers are not timetabled during sensitive periods, unless appropriate other arrangements are made.

E23. During construction, Proponent's of other construction works in the vicinity of the SSI shall be consulted, and reasonable steps taken to coordinate works to minimise impacts on, and maximise respite for, affected sensitive receivers.

PROPERTY AND BUSINESS IMPACTS

E24. The Proponent shall design and construct the SSI with the objective of minimising impacts to, and interference with, third party property and infrastructure, and that such infrastructure and property is protected during construction and operation.

E25. Any damage caused to property as a result of the SSI shall be rectified or the property owner compensated, within a reasonable timeframe, with the costs borne by the Proponent. This condition is not intended to limit any claims that the property owner may have against the Proponent.

Business Impacts

E26. The Proponent shall prepare and implement a **Business Management Plan** to minimise impacts on business adjacent to major construction sites and activities during construction of the SSI. The Plan shall include measures to minimise business related impacts, maintain where feasible and reasonable vehicular and pedestrian access during business hours, and the maintenance of visibility of the business appropriate to its reliance on such. The Plan shall include, but not necessarily be limited to:

(a) a Business Consultation forum linked with the Community Construction Strategy as required by condition D1;

(b) Business Management Strategies for each construction site (and/ or activity), identifying affected businesses and associated management strategies, including the employment of place managers and specific measures to be put in place to assist small business owners adversely impacted by the construction of the SSI;

(c) a monitoring program to assess the effectiveness of the measures including the nomination of performance parameters and criteria against which effectiveness of the measures will be measured; and

(d) provision for reporting of monitoring results to the Director General, as part of the Compliance Tracking Program (condition D5).

SOIL, WATER QUALITY AND HYDROLOGY

Construction Soil and Water Management

E27. Soil and water management measures consistent with *Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition* (Landcom, 2004) shall be employed during the construction of the SSI to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.

E28. Where available, and of appropriate chemical and biological quality, subject to a health risk assessment, stormwater, recycled water, groundwater inflows to tunnels or other water sources shall be used in preference to potable water for construction activities, including concrete mixing and dust control.

LANDUSE AND COMMUNITY FACILITIES

E29. Where community and Council facilities are impacted during construction works through temporary or permanent land acquisition, reduced amenity, reduced access, reduced functionality or other impact, the Proponent shall, in consultation with the relevant Council, community groups and key stakeholders, address construction impacts and agree on feasible and reasonable mitigation, management and rehabilitation measures. Where appropriate, the Proponent shall determine viable alternative options for community facilities during the construction phase. Mitigation and management measures shall be implemented, prior to impacts occurring.

ANCILLARY FACILITIES

E30. Unless otherwise approved by the Director General, the location of Ancillary Facilities shall:

(a) be located more than 50 metres from a waterway;
(b) be located within or adjacent to land where the SSI is being carried out;
(c) have ready access to the road network;
(d) be located to minimise the need for heavy vehicles to travel through residential areas;
(e) be sited on relatively level land;
(f) be separated from nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant);
(g) not require vegetation clearing beyond that already required by the SSI;
(h) not impact on heritage items (including areas of archaeological sensitivity) beyond those already impacted by the SSI;
(i) not unreasonably affect the land use of adjacent properties;
(j) be above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented; and
(k) provide sufficient area for the storage of raw materials to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours.

The location of the ancillary facilities shall be identified in the Construction Environmental Management Plan (E34) and include consideration of the above criteria. Where the above criteria cannot be met for any proposed ancillary facility, the Proponent shall demonstrate to the satisfaction of the Director General that there will be no significant adverse impact from that facility's construction or operation. Such assessment(s) can be submitted separately or as part of the Construction Environmental Management Plan.

E31. All Ancillary Facilities shall be rehabilitated to at least their pre-construction condition, unless otherwise agreed by the landowner where relevant.

ENVIRONMENTAL REPRESENTATIVE

E32. Prior to the commencement of construction of the SSI, or as otherwise agreed by the Director General, the Proponent shall nominate for the approval of the Director General a suitably qualified and experienced Environment Representative(s) that is independent of the design and construction personnel. The Proponent shall employ the Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Director General. 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 of environmental management plans and monitoring programs required under this approval and advise the Proponent upon the achievement of these plans/ programs;
(c) have responsibility for considering and advising the Proponent on matters specified in the conditions of this approval, and 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 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 (condition E33);
(f) be present on site during certain activities that could result in potential adverse environmental impacts such as dewatering activities. If the ER is unable to attend then as a minimum, he/she should review the assessment and plans of proposed works prior to commencement of these works on site;
(g) be given the authority and independence to advise on reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts; and
(h) 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.

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

E33. Prior to the commencement of construction, or as otherwise agreed by the Director General, the Proponent shall prepare and implement (following approval) a **Construction Environmental Management Plan** for the SSI. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant government agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004). The Plan shall include, but not necessarily be limited to:
(a) a description of activities to be undertaken during construction of the SSI (including staging and scheduling);
(b) statutory and other obligations that the Proponent is required to fulfil during construction, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
(c) a description of the roles and responsibilities for relevant employees involved in the construction of the SSI, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval;
(d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase; and
(e) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the SSI). In particular, the following environmental performance issues shall be addressed in the Plan:
    (i) ancillary facilities management;
    (ii) noise and vibration;
    (iii) traffic and access;
    (iv) soil and water quality;
    (v) groundwater management and discharge;

(vi) air quality and dust management;
(vii) visual amenity;
(viii) management of Aboriginal and historic heritage;
(ix) soil contamination, groundwater contamination, hazardous material and waste management;
(x) management of ecological impacts; and
(xi) hazard and risk management.

The Plan shall be submitted for the approval of the Director General no later than one month prior to the commencement of construction, or as otherwise agreed by the Director General. The Plan may be prepared in stages, however, construction works shall not commence until written approval has been received from the Director General.

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

E34. As part of the Construction Environmental Management Plan for the SSI required under condition E33, the Proponent shall prepare and implement:

(a) a **Construction Compound and Ancillary Facilities Management Plan** to detail the management of Ancillary Facilities associated with the SSI. The Plan shall include but not be limited to:
(i) a description of the facility, its components and the surrounding environment;
(ii) details of the activities to be carried out at each facility, including the hours of use and the storage of dangerous and hazardous goods;
(iii) an assessment against the locational criteria outlined in condition E30;
(iv) details of the mitigation and management procedures specific to the facility that would be implemented to minimise environmental and amenity impacts and an assessment of the adequacy of the mitigation or offsetting measures;
(v) identification of the timing for the completion of activities at the facility and how the site will be decommissioned (including any necessary rehabilitation); and
(vi) mechanisms for the monitoring, review and amendment of this Plan.

(b) a **Construction Noise and Vibration Management Plan** to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be consistent with the guidelines contained in the *Interim Construction Noise Guidelines* (DECC, 2009) and *Assessing Vibration: a technical guide* (DEC, 2006). The plan shall be developed in consultation with the EPA and shall include, but not be limited to:
(i) identification of work areas, site compounds and access points;
(ii) identification of sensitive receivers and relevant construction noise and vibration goals applicable to the SSI stipulated in this approval;
(iii) details of construction activities and an indicative schedule for construction works, including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios, including at ancillary facilities) that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas;
(iv) identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise impacts (including construction traffic noise impacts), including, but not limited to, acoustic

enclosures, erection of noise walls (hoardings), respite periods and the limiting of truck movements during night periods;

(v) identification of feasible and reasonable procedures and mitigation measures to ensure relevant vibration and blasting criteria are achieved, including a suitable blast program, 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 blasting and/or vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria);

(vi) if blasting is required, an assessment of the potential noise and vibration impacts, and a strategy to minimise and manage those impacts, including preparation of an appropriate community information program;

(vii) a description of how the effectiveness of mitigation and management measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported, and, if any exceedance is detected, how any non-compliance would be rectified; and

(viii) mechanisms for the monitoring, review and amendment of this plan.

(c) A **Construction Traffic Management Plan** to manage construction traffic and transport access impacts of the SSI. The plan shall be developed in consultation with and meet the reasonable requirements of the relevant road authority and transport operator(s), and shall include but not be necessarily limited to:

(i) a traffic route management plan that identifies:
   i. traffic generation from other major infrastructure developments;
   ii. construction traffic and heavy routes and associated traffic impacts,
   iii. types and volumes of construction vehicles and associated route and time restrictions, including details of oversized load movements,
   iv. potential traffic disruptions and temporary and permanent detours,
   v. traffic noise impacts, sensitive receivers and times of the day;
   vi. management, mitigation and restoration measures;

(ii) a parking management plan that identifies:
   i. parking requirements and on and offsite parking arrangements and associated impacts,
   ii. remote parking arrangements and associated access between sites and public transport nodes,
   iii. alternate parking arrangements for displaced parking,
   iv. communication and parking management measures;

(iii) site traffic and access management plans that detail:
   i. site access and associated route and turning movements and the design and signalisation of intersections,
   ii. potential activities that could result in the disruption to traffic and transport networks, including pedestrian, cyclist and public transport networks and during special events,
   iii. the timing of works to limit disruptions to the road and transport networks,
   iv. the maintenance of access to and safety of transport networks, parking and property,
   v. service facilities and station sites, and other locations identified by the relevant road authority or transport operator,

(iv) an incident response plan detailing responses to the management of an event that directly involves or impacts on traffic and transport networks; and

(v) mechanisms for the monitoring, review and amendment of this plan.

(d) A **Construction Soil and Water Management Plan** to manage soil surface and groundwater impacts during construction of the SSI. The plan shall be developed in consultation with the EPA and NOW and include, but not necessarily be limited to:

(i) details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater;

(ii) details of proposed extraction, use and disposal of groundwater, and measures to mitigate potential impacts to groundwater sources, incorporating monitoring, impact trigger definition and response actions for all groundwater sources potentially impacted by the SSI;

(iii) surface water and ground water impact assessment criteria consistent with the principles of the Australian and New Zealand Environment Conservation Council (ANZECC) guidelines;

(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) a contingency plan, consistent with the *Acid Sulfate Soils Manual*, 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;

(vi) management measures for contaminated material (soils, water and building materials) and a contingency plan to be implemented in the case of unanticipated discovery of contaminated material, including asbestos, during construction;

(vii) 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

(viii) 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 include, but not necessarily be limited to:

(i) In relation to Aboriginal Heritage:

I. developed in consultation with registered Aboriginal stakeholders;

II. details of further investigation and identification of Aboriginal cultural heritage sites impacted by and within the construction areas except where the requirements of condition C30 have been met;

III. 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 sites and items associated with the SSI and the long term storage and curation of any Aboriginal objects recovered in accordance the section 85A of the *National Parks and Wildlife Act;*

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) and determination of appropriate mitigation measures including when works can re-commence

by a suitably qualified archaeologist in consultation with the Department, OEH and registered Aboriginal stakeholders and assessment of the consistency of any new Aboriginal heritage impacts against the approved impacts of the SSI, and registering of the new site in the OEH's Aboriginal Heritage Information Management System (AHIMS) register; and

V. procedures for ongoing Aboriginal consultation and involvement for the duration of the SSI; and

(ii) In relation to Historic Heritage:

I. developed in consultation with the NSW Heritage Council;

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 further heritage investigations, archival recordings and/ or measures to protect unaffected sites during construction works in the vicinity);

IV. details on how the recommendations identified in the North West Rail Link EIS: Technical Paper – European Heritage, prepared by Godden Mackay Logan, dated March 2012 will be implemented, including archaeological research designs for all archaeological sites except where the requirements of condition C31 have been met;

V. a detailed plan for the implementation of any measures resulting from further investigations associated with potentially affected heritage items, including Glenhope, Inala School, Windsor Road and Old Windsor Road, and Mungerie House;

VI. details of monitoring and reporting requirements for impacts on heritage items; and

VII. procedures for dealing with previously unidentified relics, (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 OEH 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;

(iv) procedures for dealing with human remains, including cessation of works in the vicinity and notification of the Department, NSW Police Force, OEH and registered Aboriginal stakeholders and not recommencing any works in the area unless authorised by the NSW Police Force and/ or the Department; and

(v) mechanisms for the monitoring, review and amendment of this plan.

(f) a **Construction Flora and Fauna Management Plan** to detail how construction impacts on ecology will be minimised and managed. The Plan shall be developed in consultation with the OEH and relevant Councils and shall include, but not necessarily be limited to:

(i) plans for impacted and adjoining areas showing vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded;

(ii) vegetation management plan(s) for sites where vegetation is proposed to be retained and for reaches of riparian zones, which intersect with the construction footprint;

(iii) identification of measures to reduce disturbance to bats and nocturnal birds (and other sensitive fauna);

(iv) rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas (including duration of the implementation of such measures);
(v) weed management measures focusing on early identification of invasive weeds and effective management controls;
(vi) a description of how the effectiveness of these management measures would be monitored and linked to the Ecological Monitoring Program (condition C23);
(vii) a procedure for dealing with unexpected EEC/ threatened species identified during construction, including cessation of work and notification of the Department, determination of appropriate mitigation measures in consultation with the OEH (including relevant re-location measures) and updating of ecological monitoring and/ or biodiversity offset requirements; and
(viii) mechanisms for the monitoring, review and amendment of this plan.

(g) a **Construction Air Quality Management Plan** to detail how construction impacts on air quality will be minimised and managed. The Plan shall include, but not necessarily be limited to:
(i) the identification of potential sources of air pollutants of concern, in particular dust and PM_{10};
(ii) air quality management objectives;
(iii) mitigation measures to be implemented, including measures during adverse weather conditions (such as strong winds in dry weather);
(iv) a monitoring program to assess compliance with the identified objectives;
(v) mechanisms for the monitoring, review and amendment of this plan.

SCHEDULE F

OPERATIONAL ENVIRONMENTAL MANAGEMENT

OPERATIONAL PERFORMANCE

Maintenance

F1. The ongoing maintenance and operation costs of urban design and landscaping items and works implemented as part of this infrastructure approval shall remain the Proponent's responsibility until satisfactory arrangements have been put in place for the transfer of the asset to the relevant entity. Prior to the transfer of assets, the Proponent will maintain items and works to the design standards established in the Urban Design and Landscape Plan required by condition C44.

Operation Performance Audit Report

F2. Within fifteen months of the completion of construction, or as otherwise agreed by the Director General, the Proponent shall commission an independent qualified person or team to undertake an Operational Performance Audit of the SSI. The independent person or team shall be approved by the Director General prior to the commencement of the Audit. The Operational Performance Audit Report shall be submitted to the Director General within one month of the completion of the Audit, unless otherwise agreed by the Director General. The Audit shall:

(a) assess compliance with the requirements of this approval, and other licences and approvals that apply to the SSI;

(b) assess the environmental performance of the SSI against the predictions made and conclusions drawn in the documents referred to under condition B1 of this approval; and

(c) review the effectiveness of the environmental management of the SSI, including any environmental impact mitigation works.

Traffic monitoring

F3. Traffic changes on local roads around each station shall be monitored. Monitoring shall be undertaken 12 months before opening and for a period of no less than 12 months after opening. Should monitoring indicate unacceptable traffic intrusion on local roads/streets as a result of SSI operation reasonably beyond that predicted in the EIS and/or Station Access Plans (condition C5), appropriate traffic management measures to mitigate the impacts of intrusive traffic in affected areas shall be implemented following consultation with the RMS and the relevant Council(s).

OPERATIONAL ENVIRONMENTAL MANAGEMENT

F4. Prior to the commencement of operation, or as otherwise agreed by the Director General, the Proponent shall prepare and implement (following approval) an **Operation Environmental Management Plan** for the SSI. The Plan shall outline the environmental management practices and procedures that are to be followed during operation, and shall be prepared in consultation with relevant agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:

(a) a description of activities to be undertaken during operation of the SSI (including staging and scheduling);

(b) statutory and other obligations that the Proponent is required to fulfil during operation, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies;

(c) overall environmental policies, guidelines and principles to be applied to the operation of the SSI;
(d) a description of the roles and responsibilities for relevant employees involved in the operation of the SSI, including relevant training and induction provisions for ensuring that employees are aware of their environmental and compliance obligations under these conditions of approval;
(e) an environmental risk analysis to identify the key environmental performance issues associated with the operation phase; and
(f) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts, including those safeguards and mitigation measures detailed in the documents listed under condition B1 (and any impacts arising from the staging of the construction of the SSI). In particular, the following environmental performance issues shall be addressed in the Plan:
    (i) traffic and transport;
    (ii) noise and vibration;
    (iii) ecology;
    (iv) visual amenity and landscaping (including in relation to heritage);
    (v) climate change and energy use;
    (vi) surface water (including quality) and flooding (including emergency response planning);
    (vii) soils and groundwater management and discharge;
    (viii) waste and resource management; and
    (ix) air quality.

The Plan shall be provided to the Director General and made publicly available prior to operation.