

Infrastructure approval

Section 5.19 of the Environmental Planning and Assessment Act 1979

I grant approval for the carrying out of the State significant infrastructure (SSI).



Karen Harragon

**Director
Social and Infrastructure Assessments**

Sydney

23 July 2021

SCHEDULE 1

Application Number:	SSI 8896
Proponent:	Hunter Water Corporation
Approval Authority:	Minister for Planning and Public Spaces
Land:	Part Lot 1 DP 433549 Off Ocean Park Road, Belmont South
Description of State Significant Infrastructure:	Construction and operation of a drought response desalination plant producing up to 30ML/day including: seawater intake infrastructure; desalination units; brine discharge via existing ocean outfall; electricity/water supply; ancillary works.
Declaration as State Significant Infrastructure:	The proposal is State Significant Infrastructure by virtue of Schedule 3, clause 4 of <i>State Environmental Planning Policy (State and Regional Development) 2011</i> .

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DEFINITIONS

Aboriginal object	Has the same meaning as the definition of the term in section 5 of the <i>National Parks and Wildlife Act 1974</i>
ACH	Aboriginal Cultural Heritage (Heritage NSW)
Advisory Notes	Advisory information relating to the approval by do not form part of this approval.
ANZECC	Australian and New Zealand Environment Conservation Council
AR	Amendment Report
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2016</i>
CEMP	Construction Environmental Management Plan
Certifier	Means a Council or accredited certifier or in the case of Crown development, a person qualified to conduct a Certification of Crown building work
Compliance Reporting Post Approval Requirements	Compliance Reporting Post Approval Requirements as available on the Department's website
Conditions of this approval	Conditions contained in Schedule 2 of this document
Construction	<p>All physical work to enable operation including (unless specifically excluded by a condition) but not limited to the carrying out of works for the purposes of the development, including bulk earthworks and erection of buildings and other infrastructure permitted by this approval, but excluding the following:</p> <ul style="list-style-type: none"> • building and road dilapidation surveys; • investigative drilling or investigative excavation; • Archaeological Salvage; • establishing temporary site offices (in locations identified by the conditions of this approval); • installation of environmental impact mitigation measures, fencing, enabling works; and • minor adjustments to services or utilities <p>However, where heritage items, or threatened species or threatened ecological communities (within the meaning of the <i>Biodiversity Conservation Act 2016</i> or <i>Environment Protection and Biodiversity Conservation Act 1999</i>) are affected or potentially affected by any physical work, that work is construction, unless otherwise determined by the Planning Secretary in consultation with EES Group or DPIE Fisheries (in the case of impact upon fish, aquatic invertebrates or marine vegetation).</p>
Council	Lake Macquarie City Council
Day	The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays
Decommissioning	The controlled process of safely retiring a facility from service, including decontamination, dismantling and disposal after the cessation of operations.
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site
Department	NSW Department of Planning, Industry and Environment
Development	The development described in the EIS, Response to Submissions, Amendment Reports and associated documentation including the works and activities comprising construction, operation and decommissioning, as modified by the conditions of this approval.
Earthworks	Bulk earthworks, site levelling, import and compaction of fill material, excavation for installation of drainage and services, to prepare the site for construction
EESG	Environment, Energy and Science Group of the Department of Planning, Industry and Environment (former NSW Office of Environment and Heritage)
EIS	The Environmental Impact Statement titled <i>Hunter Water Corporation – Belmont Drought Response Desalination Plant Environmental Impact Statement</i> , prepared by GHD dated November 2019, submitted with the application for approval for the development, including any additional information provided by the Proponent in

	support of the application
EMS	Environmental Management System
ENM	Excavated Natural Material
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
Environmental Representative Protocol	The document of the same title published by the Department.
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence under the POEO Act
ER	Environmental Representative
Evening	The period from 6 pm to 10 pm
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement
Heritage item	An item as defined under the <i>Heritage Act 1977</i> , and assessed as being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i> , the World Heritage List, or the National Heritage List or Commonwealth Heritage List under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth), or anything identified as a heritage item under the conditions of this approval
IBRA	Interim Biogeographic Regionalisation for Australia
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance Note: "material harm" is defined in this approval
Independent Audit Post Approval Requirements	Independent Audit Post Approval Requirements as available on the Department's website
Land	Has the same meaning as the definition of the term in section 1.4 of the EP&A Act
Management and mitigation measures	The management and mitigation measures set out in Appendix 2
Material harm	Is harm that: <ul style="list-style-type: none"> involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
Minister	NSW Minister for Planning and Public Spaces (or delegate)
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring
Monitoring	Any monitoring required under this approval must be undertaken in accordance with section 9.40 of the EP&A Act
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Non-compliance	An occurrence, set of circumstances or development that is a breach of this approval
OEMP	Operational Environmental Management Plan
Operation	The use of the Belmont Drought Response Desalination Plant upon completion of construction.
PA	Means a planning agreement within the meaning of the term in section 7.4 of the

EP&A Act.

PCA	Principal Certifying Authority in accordance with the EP&A Act
Planning Secretary	The Secretary of the Department of Planning, Industry and Environment, or nominee
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Proponent	The person identified as such in Schedule 1 of this approval and any other person carrying out any part of the SSI from time to time
Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements.
Registered Aboriginal Parties	Means the Aboriginal persons identified in accordance with the document entitled " <i>Aboriginal cultural heritage consultation requirements for proponents 2010</i> " (DECCW)
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting.
Response to submissions	The Proponent's response to issues raised in submissions received in relation to the application for approval for the development under the EP&A Act.
SA NSW	Subsidence Advisory NSW (formerly the Mine Subsidence Board)
Sensitive receivers	A location where people are likely to work, occupy or reside, including a dwelling, school, hospital, office or public recreational area.
Site	The land defined in Schedule 1.
Site Auditor	As defined in section 4 of the <i>Contaminated Land Management Act 1997</i>
Site Audit Report	As defined in section 4 of the <i>Contaminated Land Management Act 1997</i>
Site Audit Statement	As defined in section 4 of the <i>Contaminated Land Management Act 1997</i>
TfNSW	Transport for New South Wales
VENM	Virgin Excavated Natural Material
Waste	Has the same meaning as the definition of the term in the Dictionary to the POEO Act
Year	A period of 12 consecutive months

SCHEDULE 2

PART A ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

- A1. In addition to meeting the specific performance measures and criteria in this approval, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this approval.

TERMS OF APPROVAL

- A2. The development may only be carried out:
- (a) in compliance with the conditions of this approval;
 - (b) in accordance with all written directions of the Planning Secretary;
 - (c) in accordance with the EIS, Amendment Report, Response to Submissions and additional information provided in support of the application during the assessment period;
 - (d) in accordance with the management and mitigation measures in Appendix 2.
- A3. Consistent with the requirements in this approval, the Planning Secretary may make written directions to the Proponent in relation to:
- (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this approval, including those that are required to be, and have been, approved by the Planning Secretary; and
 - (b) the implementation of any actions or measures contained in any such document referred to in condition A3(a).
- A4. The conditions of this approval and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

Note: For the purposes of this condition, there will be an inconsistency between documents if it is not possible to comply with both documents, or in the case of a condition of approval or direction of the Planning Secretary, and a document, if it is not possible to comply with both the condition or direction, and the document.

LIMITS OF APPROVAL

Lapsing

- A5. This approval lapses ten years after the date from which it operates, unless the development has physically commenced on the land to which the approval applies before that date.

NOTIFICATION OF COMMENCEMENT

- A6. The date of commencement of each of the following phases of the development must be notified to the Department in writing, at least one month before that date:
- (a) construction;
 - (b) operation;
 - (c) cessation of operations; and
 - (d) decommissioning.
- A7. If the construction, operation or decommissioning of the development is to be staged, the Department must be notified in writing at least one month before the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

EVIDENCE OF CONSULTATION

- A8. Where conditions of this approval require consultation with an identified party, the Proponent must:
- (a) consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and
 - (b) provide details of the consultation undertaken including:
 - (i) the outcome of that consultation, matters resolved and unresolved; and
 - (ii) details of any disagreement remaining between the party consulted and the Proponent and how the Proponent has addressed the matters not resolved.

STAGING

- A9. The project may be constructed and operated in stages. Where compliance with conditions is required to be staged due to staged construction or operation, a Staging Report (for either or both construction and operation as the case may be) must be prepared and submitted to the satisfaction of the Planning Secretary. The Staging Report must be submitted to the Planning Secretary no later than one month before the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one month before the commencement of operation of the first of the proposed stages of operation).
- A10. A Staging Report prepared in accordance with condition A9 must:
- (a) if staged construction is proposed, set out how the construction of the whole of the project will be staged, including details of work and other activities to be carried out in each stage and the general timing of when construction of each stage will commence and finish;
 - (b) if staged operation is proposed, set out how the operation of the whole of the project will be staged, including details of work and other activities to be carried out in each stage and the general timing of when operation of each stage will commence and finish (if relevant);
 - (c) specify how compliance with conditions will be achieved across and between each of the stages of the project; and
 - (d) set out mechanisms for managing any cumulative impacts arising from the proposed staging.
- A11. Where a Staging Report is required, the project must be staged in accordance with the Staging Report, as approved by the Planning Secretary.
- A12. Where construction or operation is being staged in accordance with a Staging Report, the terms of this approval that apply or are relevant to the works or activities to be carried out in a specific stage must be complied with at the relevant time for that stage as identified in the Staging Report.

COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS

- A13. The Proponent may:
- (a) prepare and submit any strategy, plan (including management plan, architectural or design plan) or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan (including management plan, architectural or design plan) or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan (including management plan, architectural or design plan) or program);
 - (b) combine any strategy, plan (including management plan, architectural or design plan), or program required by this approval (if a clear relationship is demonstrated between the strategies, plans (including management plan, architectural or design plan) or programs that are proposed to be combined); and
 - (c) update any strategy, plan (including management plan, architectural or design plan), or program required by this approval (to ensure the strategies, plans (including management plan, architectural or design plan), or programs required under this approval are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).
- A14. Any strategy, plan or program prepared in accordance with condition A13, where previously approved by the Planning Secretary under this approval, must be submitted to the satisfaction of the Planning Secretary.
- A15. If the Planning Secretary agrees, a strategy, plan (including management plan, architectural or design plan), or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this approval.
- A16. Updated strategies, plans (including management plan, architectural or design plan), or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan, program or drawing.

PROTECTION OF PUBLIC INFRASTRUCTURE

- A17. Before the commencement of construction, the Proponent must:
- (a) consult with the relevant owner and provider of services that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure;
 - (b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and
 - (c) submit a copy of the dilapidation report to the Planning Secretary and Council.
- A18. Unless the Proponent and the applicable authority agree otherwise, the Proponent must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the development; and

- (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

STRUCTURAL ADEQUACY

- A19. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with
- (a) the relevant requirements of the BCA;
- (b) any additional requirements of the SANSW where the building or structure is located on land within a declared Mine Subsidence District.

Note:

- Under Part 6 of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.
- Under section 21 of the Coal Mine Subsidence Compensation Act 2017, the Proponent is required to obtain the Chief Executive of Subsidence Advisory NSW's approval before carrying out certain development in a Mine Subsidence District.

EXTERNAL WALLS AND CLADDING

- A20. The external walls of all buildings including additions to existing buildings must comply with the relevant requirements of the BCA.

APPLICABILITY OF GUIDELINES

- A21. References in the conditions of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this approval.
- A22. However, consistent with the conditions of this approval and without altering any limits or criteria in this approval, the Planning Secretary may, when issuing directions under this approval in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

MONITORING AND ENVIRONMENTAL AUDITS

- A23. Any condition of this approval that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, Site audit report and independent auditing.

Note: For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the approval or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the approval or the environmental management or impact of the development.

ACCESS TO INFORMATION

- A24. At least 48 hours before the commencement of construction until the completion of all works under this approval, or such other time as agreed by the Planning Secretary, the Proponent must:
- (a) make the following information and documents (as they are obtained or approved) publicly available on its website:
- (i) the documents referred to in condition A2 of this approval;
- (ii) all current statutory approvals for the development;
- (iii) all approved strategies, plans and programs required under the conditions of this approval;
- (iv) regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval;
- (v) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;
- (vi) a summary of the current stage and progress of the development;
- (vii) contact details to enquire about the development or to make a complaint;
- (viii) a complaints register, updated monthly;
- (ix) audit reports prepared as part of any independent audit of the development and the Proponent's response to the recommendations in any audit report;
- (x) any other matter required by the Planning Secretary; and
- (b) keep such information up to date, to the satisfaction of the Planning Secretary and publicly available for 12 months after the commencement of operations.

COMPLIANCE

- A25. The Proponent must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the development.

INCIDENT NOTIFICATION, REPORTING AND RESPONSE

- A26. The Planning Secretary must be notified through the major projects portal immediately after the Proponent becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident.
- A27. Subsequent notification must be given and reports submitted in accordance with the requirements set out in **Appendix 1**.

NON-COMPLIANCE NOTIFICATION

- A28. The Planning Secretary must be notified through the major projects portal within seven days after the Proponent becomes aware of any non-compliance. The Certifier and/or ER must also notify the Planning Secretary through the major projects portal within seven days after they identify any non-compliance.
- A29. The notification must identify the development and the application number for it, set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.
- A30. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

REVISION OF STRATEGIES, PLANS AND PROGRAMS

- A31. Within three months of:
- (a) the submission of a compliance report under condition A34;
 - (b) the submission of an incident report under condition A27;
 - (c) the submission of an Independent Audit under condition D36 or D37;
 - (d) the approval of any modification of the conditions of this approval; or
 - (e) the issue of a direction of the Planning Secretary under condition A2 which requires a review,

the strategies, plans and programs required under this approval must be reviewed, and the Planning Secretary and the ER and Certifier must be notified in writing that a review is being carried out.

- A32. If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans, programs or drawings required under this approval must be revised, to the satisfaction of the Planning Secretary or Certifier/ER (where previously approved by the Certifier/ER). Where revisions are required, the revised document must be submitted to the Planning Secretary and / or Certifier/ER for approval and / or information (where relevant) within six weeks of the review.

Note: This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.

COMPLIANCE REPORTING

- A33. Compliance Reports of the project must be carried out in accordance with the Compliance Reporting Post Approval Requirements.
- A34. Compliance Reports must be submitted to the Department in accordance with the timeframes set out in the Compliance Reporting Post Approval Requirements, unless otherwise agreed by the Planning Secretary.
- A35. The Proponent must make each Compliance Report publicly available 60 days after submitting it to the Planning Secretary.
- A36. Notwithstanding the requirements of the Compliance Reporting Post Approval Requirements, the Planning Secretary may approve a request for ongoing annual operational compliance reports to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an operational compliance report has demonstrated operational compliance.

OPERATION OF PLANT AND EQUIPMENT

- A37. All plant and equipment used on site, or to monitor the performance of the development must be:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

UTILITIES AND SERVICES

A38. Before the construction of any utility works associated with the development, the Proponent must obtain relevant approvals from service providers.

ENVIRONMENTAL REPRESENTATIVE

- A39. Works must not commence until an ER has been approved by the Planning Secretary and engaged by the Proponent.
- A40. The Planning Secretary's approval of an ER must be sought no later than one month before the commencement of works, or within another timeframe agreed with the Planning Secretary.
- A41. The proposed ER must be a suitably qualified and experienced person who was not involved in the preparation of the EIS, Amendment Report, Response to Submissions or any documentation associated with the proposal, and is independent from the design and construction personnel for the development.
- A42. The Proponent may engage more than one ER for the development, in which case the functions to be exercised by an ER under the terms of this approval may be carried out by any ER that is approved by the Planning Secretary for the purposes of the development.
- A43. For the duration of the works until the commencement of operation or as agreed with the Planning Secretary, the approved ER must:
- (a) receive and respond to communication from the Planning Secretary in relation to the environmental performance of the development;
 - (b) consider and inform the Planning Secretary on matters specified in the terms of this approval;
 - (c) consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;
 - (d) review documents identified in this approval and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so:
 - (i) make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary); or
 - (ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary/Department for information or are not required to be submitted to the Planning Secretary/Department);
 - (e) regularly monitor the implementation of the documents identified in this approval to ensure implementation is being carried out in accordance with the document and the terms of this approval;
 - (f) as may be requested by the Planning Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping audits, programming audits, briefings, and site visits, but not independent environmental audits required under this approval;
 - (g) as may be requested by the Planning Secretary, assist the Department in the resolution of community complaints;
 - (h) prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an **Environmental Representative Monthly Report** providing the information set out in the Environmental Representative Protocol under the heading "Environmental Representative Monthly Reports." The **Environmental Representative Monthly Report** must be submitted within seven calendar days following the end of each month for the duration of the ER's engagement for the development, or as otherwise agreed with the Planning Secretary.
- A44. The Proponent must provide the ER with all documentation requested by the ER in order for the ER to perform their functions specified in condition A43 (including preparation of the ER monthly report), as well as:
- (a) the complaints register (to be provided on a daily basis); and
 - (b) a copy of any assessment carried out by the Proponent of whether proposed work is consistent with the approval (which must be provided to the ER before the commencement of the subject work).
- A45. The Planning Secretary may at any time commission an audit of an ER's exercise of its functions under condition D37. The Proponent must:
- (a) facilitate and assist the Planning Secretary in any such audit; and
 - (b) make it a term of their engagement of an ER that the ER facilitate and assist the Planning Secretary in any such audit.

PART B COMMUNITY INFORMATION AND REPORTING

COMMUNITY CONSULTATIVE COMMITTEE

- B1. Before the commencement of construction, a Community Consultative Committee (CCC) must be established for the development in accordance with the Department's *Community Consultative Committee Guidelines: State Significant Projects* (2016). The CCC must begin to exercise functions in accordance with such Guidelines before the commencement of construction and continue to do so for the duration of construction, the first year operation and for at least six months following the completion of decommissioning.

Note:

- The CCC is an advisory committee only.
- In accordance with the Guidelines, the Committee should comprise an independent chair and appropriate representation from the Proponent, Council and the local community.

COMMUNITY COMMUNICATION STRATEGY

- B2. No later than one month before the commencement of construction, a Community Communication Strategy must be prepared and submitted to the Planning Secretary for approval. The Community Communication Strategy is to provide mechanisms to facilitate communication between the Proponent, the Council and the community (including adjoining affected landowners and businesses, and others directly impacted by the development), during the design and construction of the development. The Community Communication Strategy must:
- assign a central contact person to keep the nearby sensitive receivers regularly informed throughout the development;
 - detail the mechanisms for regularly consulting with the local community throughout the development, such as holding regular meetings to inform the community of the progress of the development and report on environmental monitoring results;
 - detail a procedure for consulting with nearby sensitive receivers to schedule high noise generating works, vibration intensive activities or manage traffic disruptions;
 - include contact details for key community groups, relevant regulatory authorities, Registered Aboriginal Parties and other interested stakeholders; and
 - include a complaints procedure for recording, responding to and managing complaints, including:
 - email, toll-free telephone number and postal addresses for receiving complaints;
 - advertising the contact details for complaints before and during operation, via the local newspaper and through on-site signage;
 - a complaints register to record the date, time and nature of the complaint, details of the complainant and any actions taken to address the complaint; and
 - procedures for the resolution of any disputes that may arise during the course of the development.
- B3. The Proponent must
- not commence Construction until the Community Communication Strategy has been approved by the Planning Secretary.
 - implement for the Community Communication Strategy for the duration of the development and for 12 months following the completion of operation.

COMPLAINTS MANAGEMENT SYSTEM

- B4. A Complaints Management System must be prepared and implemented before the commencement of any work and maintained for the duration of construction and for a minimum for 12 months following completion of construction of the SSI.
- B5. The following information must be available to facilitate community enquiries and manage complaints before the commencement of work and for 12 months following the completion of construction:
- a 24- hour telephone number for the registration of complaints and enquiries about the SSI;
 - a postal address to which written complaints and enquires may be sent;
 - an email address to which electronic complaints and enquiries may be transmitted; and
 - a process for complaints unable to be resolved.
- This information must be accessible to all in the community regardless of age, ethnicity, disability or literacy level.
- B6. A Complaints Register must be maintained recording information on all complaints received about the SSI during the carrying out of any work and for a minimum of 12 months following the completion of construction. The Complaints Register must record the:
- number of complaints received;
 - number of people in the household affected in relation to a complaint;

- (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; and
- (d) means by which the complaint was addressed and whether resolution was reached, with or without mediation.

B7. The Complaints Register must be provided to the Planning Secretary upon request, within the timeframe stated in the request. Personal details of complainants must be provided where this is consistent with the Proponent's privacy statement, notice or policy.

Note: Complainants must be advised that the Complaints Register may be forwarded to Government agencies to allow them to undertake their regulatory duties.

PROVISION OF ELECTRONIC INFORMATION

B8. A website or webpage providing information in relation to the SSI must be established prior to the commencement of work and maintained for the duration of construction, and for a minimum of three years following the commencement of operation. Up-to-date information (excluding confidential, private and/or commercial information or other documents as agreed to by the Planning Secretary) must be published before the relevant work commencing and maintained on the website or dedicated pages including:

- (a) information on the current implementation status of the SSI;
- (b) a copy of the documents listed in Condition A2 and A3 of this approval, and any documentation relating to any modifications made to the SSI or the terms of this approval;
- (c) a copy of this approval in its original form, a current consolidated copy of this approval (that is, including any approved modifications to its terms), and copies of any approval granted by the Minister or delegate, to a modification of the terms of this approval, or links to the referenced documents where available;
- (d) a copy of each statutory approval, licence or permit required and obtained in relation to the SSI, or where the issuing agency maintains a website of approvals, licences or permits, a link to that website;
- (e) a current copy of each document required under the terms of this approval, which must be published within one week of its approval or before the commencement of any work to which they relate or before their implementation, as the case may be; and
- (f) a copy of the compliance and audit reports required under this approval.

ENGAGEMENT

B9. Before the commencement of construction, the Proponent must establish an engagement arrangement with NSW Health. The purpose of the engagement is to consult with NSW throughout the life of the proposal, with consultation commencing prior to the commencement of construction and continuing for the duration of operation and for at least six months following the completion of mothballing and/or decommissioning. The engagement arrangement may cease at any time, subject to the agreement of both the Proponent and NSW Health.

PART C CONSTRUCTION ENVIRONMENTAL MANAGEMENT

CERTIFIED DRAWINGS AND PLANS

- C1. Prior to the commencement of construction, the Proponent must submit certified drawings to the Planning Secretary that have been prepared and signed by a suitably qualified practising Structural Engineer and that demonstrate compliance with the conditions of this approval.

Note:

- *The conditions of this approval include the requirement that the development must be carried out in accordance with the documentation specified at Condition A2(c).*

- C2. The Proponent must ensure the development includes a bund planted with native vegetation on the western side of the proposed development, adjacent to Ocean Park Road and the bund is established prior to the commencement of operation. Details of the bund must be shown in the certified drawings specified in Condition C1.

- C3. Prior to the commencement of operation, works-as-executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved, must be submitted to the Planning Secretary.

EXTERNAL WALLS AND CLADDING

- C4. Prior to the commencement of construction, the Proponent must provide the Planning Secretary with documented evidence that the products and systems proposed for use or used in the construction of external walls, including finishes and claddings such as synthetic or aluminium composite panels, comply with the requirements of the BCA.

PROTECTION OF PUBLIC INFRASTRUCTURE

- C5. Prior to the commencement of construction, the Proponent must:
- (a) consult with the relevant owner and provider of services that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure;
 - (b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and
 - (c) submit a copy of the dilapidation report to the Planning Secretary and Council.

PRE-CONSTRUCTION DILAPIDATION REPORT

- C6. Prior to the commencement of construction, the Proponent must submit a pre-commencement dilapidation report to Council. The report must provide an accurate record of the existing condition of adjoining private properties, and Council assets that are likely to be impacted by the proposed works.

ECOLOGICALLY SUSTAINABLE DEVELOPMENT

- C7. Prior to the commencement of construction, unless otherwise agreed by the Planning Secretary, the Proponent must demonstrate that ESD is being achieved by either:
- (a) registering for a minimum rating with the Infrastructure Sustainability Council of Australia's (ISCA) *Infrastructure Sustainability (IS) rating* scheme and submit evidence of registration to the Planning Secretary; or
 - (b) seeking approval from the Planning Secretary for an alternative certification process.

OUTDOOR LIGHTING

- C8. Prior to commencement of lighting installation, evidence must be submitted to the satisfaction of the Certifier that all outdoor lighting within the site has been designed to comply with AS 1158.3.1:2005 Lighting for roads and public spaces – Pedestrian area (Category P) lighting – Performance and design requirements and AS 4282-2019 Control of the obtrusive effects of outdoor lighting.

DEMOLITION

- C9. Prior to the commencement of construction, demolition work plans required by *AS2601-2001 The demolition of structures* (Standards Australia, 2001) must be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans and the statement of compliance must be submitted to the Certifier.

ENVIRONMENTAL MANAGEMENT PLAN REQUIREMENTS

- C10. Management plans required under this approval must be prepared having regard to the relevant guidelines, including but not limited to the *Environmental Management Plan Guideline: Guideline for Infrastructure Projects* (DPIE April 2020).

Note:

- *The Environmental Management Plan Guideline is available on the Planning Portal at: <https://www.planningportal.nsw.gov.au/major-projects/assessment/post-approval>*

- *The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- C11. Prior to the commencement of construction, the Proponent must submit a Construction Environmental Management Plan (CEMP) to the to the Planning Secretary for approval. The CEMP must include, but not be limited to, the following:
- (a) Details of:
 - (i) hours of work;
 - (ii) 24-hour contact details of site manager;
 - (iii) management of dust and odour to protect the amenity of the neighbourhood;
 - (iv) groundwater management plan including measures to prevent groundwater contamination;
 - (v) external lighting in compliance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting;
 - (vi) management of public access to the surrounding areas during construction, including details of no-go zones and how these will be implemented;
 - (vii) community consultation and complaints handling as set out in the Community Communication Strategy required by condition B2;
 - (viii) local sourcing of marine vessels;
 - (b) an unexpected finds protocol for Aboriginal and non-Aboriginal heritage and associated communications procedure;
 - (c) Offshore Construction Works Management Sub-Plan (see condition C13);
 - (d) Biodiversity Management Sub-Plan (see condition C14);
 - (e) Construction Soil and Water Management Sub-Plan (see condition C15);
 - (f) Flood Emergency Response (see condition C16);
 - (g) Aboriginal Cultural Heritage Management Sub-Plan (see condition C17);
 - (h) Construction Traffic and Pedestrian Management Sub-Plan (see condition C18);
 - (i) Construction Noise and Vibration Management Sub-Plan (see condition C19);
 - (j) Construction Waste Management Sub-Plan (see condition C20);
- C12. The Proponent must:
- (a) not commence construction of the development until the CEMP is approved by the Planning Secretary; and
 - (b) carry out the construction of the development in accordance with the CEMP approved by the Planning Secretary and as revised and approved by the Planning Secretary from time to time.
- C13. The Proponent must prepare an Offshore Construction Works Management Sub-Plan and the plan must address, but not be limited to the following:
- (a) be prepared by a suitably qualified expert;
 - (b) detail measures that will be implemented to ensure that drilling speeds are minimised for the duration of works;
 - (c) describe all measures that will be implemented to minimise any impacts of offshore works, including the ongoing appointment of a fauna observer and vessel maintenance in accordance with legislative requirements;
 - (d) include a program to monitor and report on the impacts and environmental performance of the offshore works and the effectiveness of the implemented management measures in accordance with the requirements;
 - (e) provide a detailed Emergency Management Plan for offshore works that provides specifications for the management and ongoing mitigation of emergency situations to both personnel and the environment in all potential emergency situations.
- C14. The Proponent must prepare a Biodiversity Management Sub-Plan (BMSP) that must address, but not be limited to, the following:
- (a) a native vegetation rehabilitation management plan for the land west of Ocean Park Road as shown at **Appendix 3**). This should include:
 - (i) details of weed removal,
 - (ii) management of potential groundwater drawdown impacts and how these will be monitored and managed;
 - (iii) a plan to minimise weed invasion as a result of hydrological changes;

- (b) a detailed Chytrid fungus management plan that includes procedures to minimise and monitor the spread of the fungus;
 - (c) a monitoring and management plan for the bund required under Condition C2. The monitoring and management of the bund is to occur for a period of three years from the establishment of the bund. This should include wind fencing to prevent sand blowing on the road and into the adjacent wetland area;
 - (d) detail of the installation of permanent post and cable fencing on the western side of Ocean Park Road of the area of impact shown at **Appendix 3**, to restrict access and damage to native vegetation;
- C15. The Proponent must prepare a Construction Soil and Water Management Sub-Plan (CSWMSP) and the plan must address, but not be limited to the following:
- (a) be prepared by a suitably qualified expert, in consultation with Council;
 - (b) a detailed plan for the containment of all runoff from the site on the site and detail of the management of any overflows;
 - (c) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;
 - (d) describe all erosion and sediment controls to be implemented prior to the commencement of construction, including as a minimum, measures in accordance with the publication *Managing Urban Stormwater: Soils & Construction* (4th edition, Landcom 2004) commonly referred to as the 'Blue Book';
 - (e) include an Acid Sulfate Soils Management Plan, if required, including measures for the management, handling, treatment and disposal of acid sulfate soils, including monitoring of water quality at acid sulfate soils treatment areas;
 - (f) prevent cross-contamination of clean and sediment laden water.
 - (g) provide a plan of how all construction works will be managed in a wet-weather events (i.e. storage of equipment, stabilisation of the Site);
 - (h) detail all off-Site flows from the Site; and
 - (i) describe the measures that must be implemented to manage stormwater and flood flows for small and large sized events, including, but not limited to 1 in 5-year ARI and 1 in 100-year ARI.
- C16. The Flood Emergency Response Sub-Plan (FERSP) must address, but not be limited to, the following:
- (a) be prepared by a suitably qualified and experienced person(s);
 - (b) address the provisions of the *Floodplain Risk Management Guidelines* (EESG);
 - (c) include details of:
 - (i) the flood emergency responses for both construction phases of the development;
 - (ii) predicted flood levels;
 - (iii) flood warning time and flood notification;
 - (iv) assembly points and evacuation routes;
 - (v) evacuation and refuge protocols; and
 - (vi) awareness training for employees and contractors, and users/visitors.
- C17. The Aboriginal Cultural Heritage Management Sub-Plan (ACHMSP) must address, but not be limited to, the following:
- (a) be prepared by a suitably qualified and experienced expert in consultation with the Registered Aboriginal Parties and ACH prior to ground disturbing works;
 - (b) include register of consultation with Registered Aboriginal Parties to determine specific requirements and management measures to be used on site during construction, including protection of any objects or items in perpetuity;
 - (c) include detail of re-survey plans following removal of vegetation;
 - (d) include detail of the implementation of all protocols adopted within the *Aboriginal Cultural Heritage Assessment Report* prepared by RPS Group dated 23 October 2019.
- C18. The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must be prepared to achieve the objective of ensuring safety and efficiency of the road network and address, but not be limited to, the following:
- (a) be prepared by a suitably qualified and experienced person(s);
 - (b) be prepared in consultation with Council and TfNSW;
 - (c) detail the measures that are to be implemented to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services; and

- (d) detail heavy vehicle routes, access and parking arrangements that must include sufficient parking facilities on-site to ensure that construction traffic associated with the development does not utilise public and residential streets or public parking facilities.
- (e) A Driver Code of Conduct must be prepared and communicated by the Proponent to heavy vehicle drivers and must address the following:
 - (i) minimise the impacts of earthworks and construction on the local and regional road network;
 - (ii) minimise conflicts with other road users;
 - (iii) minimise road traffic noise; and
 - (iv) ensure truck drivers use specified routes.

C19. The Construction Noise and Vibration Management Sub-Plan must address, but not be limited to, the following:

- (a) be prepared by a suitably qualified and experienced noise expert;
- (b) describe procedures for achieving the noise management levels in EPA's *Interim Construction Noise Guideline* (DECC, 2009);
- (c) describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers;
- (d) describe peak migration months for marine species that have the potential to be impacted by noise generating works and how works will be timed to avoid these periods;
- (e) include detail of sound deterrent devices that would be used to provide opportunities for marine fauna to relocate prior to works commencing;
- (f) detail how interactions with cetaceans and sharks will comply with EPBC Regulations and Australian Guidelines;
- (g) include strategies that have been developed with the community for managing high noise generating works;
- (h) describe the community consultation undertaken to develop the strategies in condition C16(g);
- (i) include a complaints management system that would be implemented for the duration of the construction; and
- (j) include a program to monitor and report on the impacts and environmental performance of the development and the effectiveness of the implemented management measures in accordance with the requirements of condition C11.

C20. The Construction Waste Management Sub-Plan (CWMS) must address, but not be limited to, the procedures for the management of waste including the following:

- (a) the recording of quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed use;
- (b) information regarding the recycling and disposal locations and the types of materials that can be deposited into recycling bins and general garbage bins; and
- (c) confirmation of the contamination status of the development areas of the site based on the validation results.

LANDSCAPING PROGRAM

C21. Prior to the commencement of construction, a landscaping plan must be submitted to the Planning Secretary for approval. The plan:

- (a) must include a monitoring program for the revegetation of the dunal system (eastern boundary of the site), southern perimeter, and identify planting opportunities along the northern and western site boundaries; and
- (b) should maximise opportunities for visual fragmentation and/or screening of the site from the east and west.

C22. Within three months of the commencement of construction, evidence of the commencement of the works specified in Condition C21 is to be provided to the Planning Secretary and updates provided on the Proponent's website. The landscaping shall be maintained by the Proponent thereafter into perpetuity.

UNEXPECTED CONTAMINATION PROCEDURE

C23. Prior to the commencement of earthworks, the Proponent must prepare an unexpected contamination procedure to ensure that potentially contaminated material is appropriately managed. Where any material identified as contaminated is to be disposed off-site, the disposal location and results of testing submitted to the Planning Secretary prior to its removal from the site.

OPERATIONAL NOISE – DESIGN OF MECHANICAL PLANT AND EQUIPMENT

C24. Prior to installation of mechanical plant and equipment:

- (a) a detailed assessment of mechanical plant and equipment with compliance with the relevant project noise trigger levels in accordance with the Noise Policy for Industry (EPA, 2017) must be undertaken by a suitably qualified person; and
- (b) evidence must be submitted to the Planning Secretary that any noise mitigation recommendations identified in the assessment carried out under (a) above have been incorporated into the design to ensure the development will not exceed the relevant project noise trigger levels in accordance with the Noise Policy for Industry (EPA, 2017).

BIODIVERSITY

- C25. Prior to the commencement of vegetation clearing, the class and number of ecosystem credits in the table below at Condition C26 must be retired to offset the residual biodiversity impacts of the development. The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Scheme and can be achieved by:
- (a) acquiring or retiring 'biodiversity credits' within the meaning of the *Biodiversity Conservation Act 2016*;
 - (b) making payments into an offset fund that has been developed by the NSW Government; or
 - (c) funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the biodiversity offset scheme.
- C26. Evidence of the retirement of credits or payment to the Biodiversity Conservation Fund in satisfaction of condition C25 must be provided to the Planning Secretary prior to carrying out development that will impact on biodiversity values.

A PCT as specified below	Number of Credits	In the below IBRA subregions
772 – Coastal foredune wattle scrub	1	Wyong, Hunter, Pittwater and Yengo. or Any IBRA subregion that is within 100 kilometres of the outer edge of the impacted site.
1071 – <i>Phragmites australis</i> and <i>Typha orientalis</i> coastal freshwater wetlands of the Sydney Basin Bioregion	4	Wyong, Hunter, Pittwater and Yengo. or Any IBRA subregion that is within 100 kilometres of the outer edge of the impacted site.
783 – Coastal freshwater swamps of the Sydney Basin Bioregion	1	Wyong, Hunter, Pittwater and Yengo. or Any IBRA subregion that is within 100 kilometres of the outer edge of the impacted site.

OPERATIONAL WASTE STORAGE AND PROCESSING

- C27. Prior to the commencement of construction of waste storage and processing areas, the Proponent must obtain agreement from Council for the design of the operational waste storage area (where waste removal will be undertaken by Council). Where waste removal will be undertaken by a third party, evidence must be maintained that the design of the operational waste storage area:
- (a) is constructed using solid non-combustible materials;
 - (b) is designed to ensure the door/gate to the waste storage area is vermin proof and can be openable from both inside and outside the storage area at all times;
 - (c) includes a hot and cold water supply with a hose through a centralised mixing valve; and
 - (d) is naturally ventilated or an air handling exhaust system must be in place.

SITE CONTAMINATION

- C28. Prior to the commencement of construction, the Proponent must engage a NSW EPA-accredited Site Auditor to provide advice throughout the duration of works in relation to disturbance of A-horizon soils (as shown at **Appendix 3**) in the south of the site that have not been subject to disturbance to ensure that any work required in relation to soil or groundwater contamination is appropriately managed.

PART D DURING CONSTRUCTION

SITE NOTICE

- D1. A site notice(s):
- (a) must be prominently displayed at the boundaries of the site during construction for the purposes of informing the public of project details including, but not limited to the details of the Builder and Structural Engineer is to satisfy the following requirements;
 - (b) minimum dimensions of the notice must measure 841 mm x 594 mm (A1) with any text on the notice to be a minimum of 30-point type size;
 - (c) the notice is to be durable and weatherproof and is to be displayed throughout the works period;
 - (d) the approved hours of work, the name of the site/ project manager, the responsible managing company (if any), its address and 24-hour contact phone number for any inquiries, including construction/ noise complaint must be displayed on the site notice; and
 - (e) the notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted.

DEMOLITION

- D2. Demolition work must comply with the demolition work plans required by *Australian Standard AS2601-2001 The demolition of structures* (Standards Australia, 2001) and endorsed by a suitably qualified person as required by condition C9.

CONSTRUCTION HOURS

- D3. Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:
- (a) between 7am and 6pm, Mondays to Fridays inclusive; and
 - (b) between 8am and 1pm, Saturdays.
- No work may be carried out on Sundays or public holidays.
- D4. Notwithstanding condition D3, provided noise levels do not exceed the existing background noise level plus 5dB, works may also be undertaken during the following hours:
- (a) between 6pm and 7pm, Mondays to Fridays inclusive; and
 - (b) between 1pm and 4pm, Saturdays.
- D5. Construction activities may be undertaken outside of the hours in condition D3 and D4 if required:
- (a) by the Police or a public authority for the delivery of vehicles, plant or materials; or
 - (b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or
 - (c) where the works are inaudible at the nearest sensitive receivers; or
 - (d) where a variation is approved in advance in writing by the Planning Secretary or his nominee if appropriate justification is provided for the works.
- D6. Notification of such construction activities as referenced in condition D5 must be given to affected residents before undertaking the activities or as soon as is practical afterwards.
- D7. Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours:
- (a) 9am to 12pm, Monday to Friday;
 - (b) 2pm to 5pm Monday to Friday; and
 - (c) 9am to 12pm, Saturday.

IMPLEMENTATION OF MANAGEMENT PLANS

- D8. The Proponent must carry out the construction of the development in accordance with the most recent version of the approved CEMP (including Sub-Plans).

CONSTRUCTION TRAFFIC

- D9. All construction vehicles are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site or an approved on-street work zone before stopping.

HOARDING REQUIREMENTS

- D10. The following hoarding requirements must be complied with:
- (a) no third-party advertising is permitted to be displayed on the subject hoarding/fencing; and

- (b) the construction site manager must be responsible for the removal of all graffiti from any construction hoardings or the like within the construction area within 48 hours of its application.

NO OBSTRUCTION OF PUBLIC WAY

- D11. The public way (outside of any approved construction works zone) must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances.

CONSTRUCTION NOISE LIMITS

- D12. The development must be constructed to achieve the construction noise management levels detailed in *the Interim Construction Noise Guideline* (DECC, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures identified in the approved Construction Noise and Vibration Management Plan.
- D13. The Proponent must ensure construction vehicles (including concrete agitator trucks) do not arrive at the site outside of the construction hours of work outlined under condition D3.
- D14. The Proponent must implement, where practicable and without compromising the safety of construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised.

VIBRATION CRITERIA

- D15. Vibration caused by construction at any residence or structure outside the site must be limited to:
- (a) for structural damage, the latest version of *DIN 4150-3 (1992-02) Structural vibration - Effects of vibration on structures* (German Institute for Standardisation, 1999); and
 - (b) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: a technical guideline* (DEC, 2006) (as may be updated or replaced from time to time).
- D16. Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in condition D15.
- D17. The limits in conditions D15 and D16 apply unless otherwise outlined in a Construction Noise and Vibration Management Plan, approved as part of the CEMP required by condition C19 of this approval.

TREE PROTECTION

- D18. For the duration of the construction works:
- (a) street trees must not be trimmed or removed unless it forms a part of this development approval or prior written approval from Council is obtained or is required in an emergency to avoid the loss of life or damage to property;
 - (b) all street trees immediately adjacent to the property boundary must be protected at all times during construction in accordance with Council's tree protection requirements. Any street tree, which is damaged or removed during construction due to an emergency, must be replaced, to the satisfaction of Council;
 - (c) all trees on the site that are not approved for removal must be suitably protected during construction; and
 - (d) if access to the area within any protective barrier is required during the works, it must be carried out under the supervision of a qualified arborist. Alternative tree protection measures must be installed, as required. The removal of tree protection measures, following completion of the works, must be carried out under the supervision of a qualified arborist and must avoid both direct mechanical injury to the structure of the tree and soil compaction within the canopy or the limit of the former protective fencing, whichever is the greater.

AIR QUALITY

- D19. The Proponent must take all reasonable steps to minimise dust generated during all works authorised by this approval.
- D20. During construction, the Proponent must ensure that:
- (a) exposed surfaces and stockpiles are suppressed by regular watering;
 - (b) all trucks entering or leaving the site with loads have their loads covered;
 - (c) trucks associated with the development do not track dirt onto the public road network;
 - (d) public roads used by these trucks are kept clean; and
 - (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.

IMPORTED SOIL

- D21. The Proponent must:
- (a) ensure that only VENM, ENM, or other material approved in writing by EPA is brought onto the site;

- (b) keep accurate records of the volume and type of fill to be used; and
- (c) make these records available to the Planning Secretary upon request.

DISPOSAL OF SEEPAGE AND STORMWATER

D22. Adequate provisions must be made to collect and discharge stormwater drainage during construction. The prior written approval of Council must be obtained to connect or discharge site stormwater to Council's stormwater drainage system or street gutter.

EMERGENCY MANAGEMENT

D23. The Proponent must prepare and implement awareness training for employees and contractors, including locations of the assembly points and evacuation routes, for the duration of construction

STORMWATER MANAGEMENT SYSTEM

D24. Within three months of the commencement of construction, the Proponent must design an operational stormwater management system for the development. The system must:

- (a) be designed by a suitably qualified and experienced person(s);
- (b) be generally in accordance with the conceptual design in the documentation specified in Condition A2(c);
- (c) be in accordance with applicable Australian Standards; and
- (d) ensure that the system capacity has been designed in accordance with *Australian Rainfall and Runoff* (Engineers Australia, 2016) and *Managing Urban Stormwater: Council Handbook* (EPA, 1997) guidelines.

UNEXPECTED FINDS PROTOCOL – ABORIGINAL HERITAGE

D25. In the event that surface disturbance identifies a new Aboriginal object, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and the registered Aboriginal representatives must be contacted to determine the significance of the objects. The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) which is managed by Heritage NSW under Department of Premier and Cabinet and the management outcome for the site included in the information provided to AHIMS. The Proponent must consult with the Aboriginal community representatives, the archaeologists and Heritage NSW to develop and implement management strategies for all objects/sites. Works shall only recommence with the written approval of Heritage NSW.

UNEXPECTED FINDS PROTOCOL – HISTORIC HERITAGE

D26. If any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the Heritage NSW contacted. Depending on the possible significance of the relics, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of the Heritage NSW.

WASTE STORAGE AND PROCESSING

- D27. All waste generated during construction must be secured and maintained within designated waste storage areas at all times and must not leave the site onto neighbouring public or private properties.
- D28. All waste generated during construction must be assess, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).
- D29. The Proponent must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse.
- D30. The Proponent must record the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations for the duration of construction.
- D31. The Proponent must ensure that the removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility is in accordance with the requirements of the relevant legislation, codes, standards and guidelines.

OUTDOOR LIGHTING

D32. The Proponent must ensure that all external lighting is constructed and maintained in accordance with AS 4282 - 2019 Control of the obtrusive effects of outdoor lighting.

SITE CONTAMINATION

D33. The Proponent must conduct site investigations to confirm the full nature and extent of the contamination in relation to disturbance of A-horizon soils (as shown at **Appendix 3**) in the south of the site that have not been subject to disturbance, and comply with the following requirements:

- (a) the site investigations must be undertaken, and the subsequent report(s), must be prepared in accordance with relevant guidelines made or approved by the EPA under section 105 of the *Contaminated Land Management Act 1997*;

- (b) the reports must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme; and
- (c) the recommendations of the any Remedial Action Plan and the unexpected finds procedure must be updated following results of further site investigations and implemented throughout duration of project work.

D34. The Proponent must ensure the proposed development does not result in a change of risk in relation to any pre-existing contamination on the site that would result in significant contamination.

INDEPENDENT ENVIRONMENTAL AUDIT

- D35. Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the or commencement of an Independent Audit.
- D36. Independent Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements.
- D37. The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified above, upon giving at least 4 week's notice to the Proponent of the date or timing upon which the audit must be commenced.
- D38. In accordance with the specific requirements in the Independent Audit Post Approval Requirements, the Proponent must:
- (a) review and respond to each Independent Audit Report prepared under condition D36 of this approval, or condition D37 where notice is given;
 - (b) submit the response to the Planning Secretary; and
 - (c) make each Independent Audit Report and response to it publicly available within 60 days after submission to the Planning Secretary.
- D39. Independent Audit Reports and the Proponent/proponent's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approval Requirements unless otherwise agreed by the Planning Secretary.
- D40. Notwithstanding the requirements of the Independent Audit Post Approval Requirements, the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an audit has demonstrated operational compliance.

PART E OPERATIONAL ENVIRONMENTAL MANAGEMENT

NOTIFICATION OF OCCUPATION

- E1. At least one month before commencement of operation, the date of commencement of the operation of the development must be notified to the Planning Secretary in writing. If the operation of the development is to be staged, the Planning Secretary must be notified in writing at least one month before the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

EXTERNAL WALLS AND CLADDING

- E2. Prior to commencement of operation, the Proponent must provide the Planning Secretary with documented evidence that the products and systems used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the requirements of the BCA.

WORKS AS EXECUTED PLANS

- E3. Prior to the commencement of operation, works-as-executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved, must be submitted to the Planning Secretary.

OUTDOOR LIGHTING

- E4. Prior to the commencement of operation, the Proponent must submit evidence from a suitably qualified practitioner to the Certifier that demonstrates that installed lighting associated with the development achieves the objective of minimising light spillage to any adjoining or adjacent sensitive receivers and:
- (a) complies with the latest version of AS 4282-2019 - *Control of the obtrusive effects of outdoor lighting* (Standards Australia, 1997); and
 - (b) has been mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

OPERATIONAL NOISE – DESIGN OF MECHANICAL PLANT AND EQUIPMENT

- E5. Prior to the commencement of operation, the Proponent must submit evidence to the Certifier that the noise mitigation recommendations in the assessment undertaken under condition C24 have been incorporated into the design of mechanical plant and equipment to ensure the development will not exceed the recommended operational noise levels as specified within the *Noise Policy for Industry* (2017).

FIRE SAFETY CERTIFICATION

- E6. Prior to commencement of occupation, a Fire Safety Certificate must be obtained for all the Essential Fire or Other Safety Measures forming part of this approval. A copy of the Fire Safety Certificate must be submitted to the relevant authority and Council. The Fire Safety Certificate must be prominently displayed in the building.

STRUCTURAL INSPECTION CERTIFICATE

- E7. Prior to the commencement of occupation of the relevant parts of any new or refurbished buildings, a Structural Inspection Certificate or a Compliance Certificate must be submitted to the ER. A copy of the Certificate with an electronic set of final drawings (contact approval authority for specific electronic format) must be submitted to the approval authority and the Council after:
- (a) the site has been periodically inspected and the Certifier is satisfied that the structural works is deemed to comply with the final design drawings; and
 - (b) the drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.

POST-CONSTRUCTION DILAPIDATION REPORT

- E8. Prior to commencement of operation, the Proponent must engage a suitably qualified person to prepare a post-construction dilapidation report at the completion of construction. This report is:
- (a) to ascertain whether the construction created any structural damage to adjoining buildings or infrastructure;
 - (b) to be submitted to the ER. In ascertaining whether adverse structural damage has occurred to adjoining buildings or infrastructure, the Certifier must:
 - (i) compare the post-construction dilapidation report with the pre-construction dilapidation report required by these conditions; and
 - (ii) have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.
 - (c) to be forwarded to Council for information.

PROTECTION OF PUBLIC INFRASTRUCTURE

- E9. Unless the Proponent and the applicable authority agree otherwise, the Proponent must:

- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the development; and
- (b) relocate, or pay the full costs associated with relocating any infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to any damage to roads caused as a result of general road usage.

ROAD DAMAGE

- E10. Prior to the commencement of operation, the cost of repairing any damage caused to Council or other Public Authority's assets in the vicinity of the Subject Site as a result of construction works associated with the approved development must be met in full by the Proponent.

PROTECTION OF PROPERTY

- E11. Unless the Proponent and the applicable owner agree otherwise, the Proponent must repair, or pay the full costs associated with repairing any property that is damaged by carrying out the development.

OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN

- E12. The Proponent must prepare an Operational Environmental Management Plan (OEMP) in accordance with the requirements of condition C10 and to the satisfaction of the Planning Secretary.
- E13. As part of the OEMP required under Condition E12 of this approval, the Proponent must include the following:
- (a) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (b) describe the procedures that would be implemented to:
 - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - (ii) receive, handle, respond to, and record complaints;
 - (iii) resolve any disputes that may arise;
 - (iv) respond to any non-compliance;
 - (v) respond to emergencies; and
 - (c) include the following environmental management plans:
 - (i) Ecosystem Monitoring Program (see Condition E15);
 - (ii) Water Quality Monitoring Program (see Condition E16).
- E14. The Proponent must:
- (a) not commence operation until the OEMP is approved by the Planning Secretary; and
 - (b) operate the development in accordance with the OEMP approved by the Planning Secretary (and as revised and approved by the Planning Secretary from time to time).¹
- E15. The Proponent must prepare an Ecosystem Monitoring Program that:
- (a) must be implemented prior to the commencement of commissioning to ascertain pre commissioning baseline data;
 - (b) must continue for at least three years after the commencement of operation, after which time, the Proponent may establish on-going monitoring requirements commensurate of the findings to that time;
 - (c) the program shall be developed in consultation with EESG and EPA and shall include, but not necessarily be limited to:
 - (i) a sampling, data collection and assessment regime to monitor ecological impacts resulting from the project, with specific reference to marine fauna, larvae, juvenile fish and invertebrates;
 - (ii) identification and establishment of ecological monitoring sites linked to both the sea water intake infrastructure and the existing ocean outfall to take into account spatial variability in species types and distribution;
 - (iii) monitor salinity and temperature at established ecological monitoring sites;
 - (iv) include baseline monitoring of ecological health during at least two seasons (summer and winter) and at least twice in each season, with monitoring locations to include representative locations around the sea water intake and representative locations predicted to be outside the near field mixing zone;
 - (v) consider deployment of instrumentation necessary to gain an understanding of the ambient oceanographic conditions (e.g. spatial and temporal variation in currents and density structure (temperature and salinity), winds, waves) in an area encompassing the inlet structure and ocean outfall as well as other significant regional features, for example flows associated with the Belmont WWTPW ocean outfall;

- (vi) include a mechanism for the supply of data and results from the program on request to the EESG, EPA and Planning Secretary;
- (vii) include a program for the review of results and for the implementation of corrective actions, where required. Where corrective actions are required, a copy of the report and recommendations are to be provided to the Planning Secretary for approval prior to implementation. The Proponent is to implement the corrective actions as approved by the Planning Secretary.

E16. The Proponent must prepare a Water Quality Monitoring Program that:

- (a) must include a program that must continue for at least three years that details the aims, objectives and measurable performance criteria to track the impacts of the additional brine discharge via the existing ocean outfall on the near field and far field receiving environment;
 - (i) the program must include consideration of variables in the performance optimisation of the outfall, including, but not necessarily limited to the number of ports, orientation of ports, configuration of ports, length of transfer pipeline, discharge exit velocity and depth and location of the outfall;
- (b) must achieve water quality discharge standards, in both the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC, 2000) and the EPL for the adjoining wastewater treatment works;
- (c) must detail strategies to monitor and minimise impacts upon the water quality and ecology as far as practicable;
- (d) include a program for the review of results and program for the implementation of corrective actions, where required. Where corrective actions are required, a copy of the report and recommendations are to be provided to the Planning Secretary for approval prior to implementation. The Proponent is to implement the corrective actions as approved by the Planning Secretary.

STORMWATER OPERATION AND MAINTENANCE PLAN

E17. Prior to the commencement of operation, an Stormwater Operation and Maintenance Plan (SOMP) is to be provided to the Certifier. The SOMP must ensure the proposed stormwater quality measures remain effective and contain the following:

- (a) maintenance schedule of all stormwater quality treatment devices;
- (b) record and reporting details;
- (c) relevant contact information; and
- (d) Work Health and Safety requirements.

OPERATIONAL WASTE MANAGEMENT PLAN

E18. Prior to the commencement of operation, the Proponent must prepare a Waste Management Plan for the development and submit it to the ER. The Waste Management Plan must:

- (a) detail the type and quantity of waste to be generated during operation of the development;
- (b) describe the handling, storage and disposal of all waste streams generated on site, consistent with the *Protection of the Environment Operations Act 1997*, *Protection of the Environment Operations (Waste) Regulation 2014* and the *Waste Classification Guideline* (Department of Environment, Climate Change and Water, 2009);
- (c) detail the materials to be reused or recycled, either on or off site; and
- (d) include the Management and Mitigation Measures included in **Appendix 2**.

SITE CONTAMINATION

E19. If, based on further site investigations undertaken in accordance with condition D33, it is determined that ongoing on-site management of soil or groundwater contamination is required, then the following requirements must be satisfied:

- (a) the Proponent must engage a NSW EPA-accredited Site Auditor to confirm the appropriateness of the site for the proposed use. The Proponent must obtain from a NSW EPA-accredited Site Auditor a Section A2 Site Audit Statement accompanied by an Environmental Management Plan prepared by a certified consultant and submit it to the Planning Secretary, Certifier and relevant Council for information no later than one month before the commencement of operation.
- (b) the development must not be used for the purpose approved under the terms of this approval until a Site Audit Statement determines the land is suitable for that purpose and any conditions on the Site Audit Statement have been complied with.

HAZARDS AND RISK

E20. Prior to commissioning, the Proponent shall develop and implement the plans and systems set out under the following:

- (a) Emergency Plan – a comprehensive Emergency Plan and detailed emergency procedures for the proposed development. The plan shall be consistent with the Department of Planning’s *Hazardous Industry Planning Advisory Paper No. 1 ‘Emergency Planning’*.
- (b) Safety Management System – A comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. The Safety Management System shall be consistent with the Department of Planning’s *Hazardous Industry Planning Advisory Paper No. 9 ‘Safety Management’*.

DANGEROUS GOODS

- E21. Dangerous goods, as defined by the Australian Dangerous Goods Code, must 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).
- E22. In the event of an inconsistency between the requirements E21(a) to E21(c), the most stringent requirement must prevail to the extent of the inconsistency.

OPERATIONAL FLOOD EMERGENCY MANAGEMENT PLAN

- E23. Prior the commencement of the operation, a Flood Emergency Management Plan must be submitted to the Planning Secretary that:
- (a) is prepared by a suitably qualified and experienced person(s);
 - (b) addresses the provisions of the *Floodplain Risk Management Guidelines* (EESG);
 - (c) includes details of:
 - (i) the flood emergency responses for operational phase of the development;
 - (ii) predicted flood levels;
 - (iii) flood warning time and flood notification;
 - (iv) assembly points and evacuation routes;
 - (v) evacuation and refuge protocols; and
 - (d) awareness training for employees and contractors, and visitors.

OUTDOOR LIGHTING

- E24. Notwithstanding condition E4, should outdoor lighting result in any residual impacts on the amenity of surrounding sensitive receivers, the Proponent must provide mitigation measures in consultation with affected landowners to reduce the impacts to an acceptable level.

APPENDIX 1 WRITTEN INCIDENT AND NOTIFICATION REQUIREMENTS

1. A written incident notification addressing the requirements set out below must be emailed to the Department via the Major Projects Website within seven days after the Proponent becomes aware of an incident. Notification is required to be given under this condition even if the Proponent fails to give the notification required under condition A26 or, having given such notification, subsequently forms the view that an incident has not occurred.
2. Written notification of an incident must:
 - a. identify the development and application number;
 - b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
 - c. identify how the incident was detected;
 - d. identify when the Proponent became aware of the incident;
 - e. identify any actual or potential non-compliance with conditions of approval;
 - f. describe what immediate steps were taken in relation to the incident;
 - g. identify further action(s) that will be taken in relation to the incident; and
 - h. identify a project contact for further communication regarding the incident.
3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Proponent must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4. The Incident Report must include:
 - a. a summary of the incident;
 - b. outcomes of an incident investigation, including identification of the cause of the incident;
 - c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - d. details of any communication with other stakeholders regarding the incident.

APPENDIX 2 MANAGEMENT AND MITIGATION MEASURES

Impact	Measure	Timing
Soils, Geology and Contamination		
Consultation with Subsidence Advisory NSW	Further consultation with Subsidence Advisory NSW, including review of the subsidence risk and any relevant design considerations, will be undertaken during detailed design.	Detailed design
Mobilisation and spread of contamination in soils	Hunter Water commits to undertaking a DSI prior to Project determination. The scope of the DSI will include analysis for heavy metals, TRH, BTEXN, PAHs, OCPs, PCBs and asbestos and has been based on existing contamination data and the low potential for significant contamination to be present on Project area. Hunter Water will also undertake a focused investigation within the area of TP204 to further assess potential asbestos impacts prior to construction. This assessment, and the outcomes of the DSI will inform the management measures in the Contaminated Site Management Plan (CSMP) and if remediation is required.	Pre-construction
	<p>Include contamination mitigation measures in an overall Contaminated Soil Management Plan (CSMP) for the construction to describe excavation, validation and disposal requirements for potentially contaminated soils. The CSMP must be prepared by appropriately qualified specialists and form a sub plan to the CEMP and will include the following as a minimum:</p> <ul style="list-style-type: none"> • Method of identification, separation, management and tracking of contaminated soils • Stockpile any contaminated soil as far away from waterways/drainage lines as possible • Keep contaminated and non-contaminated soils separate at all times • Testing of soils to assess suitability if they are to be placed near sensitive receptors 	Pre-construction
Exposure to Asbestos Containing Materials	<p>Include an asbestos finds procedure in the overall CSMP. The asbestos finds procedure will be prepared by suitably qualified person or a competent person as determined under the Work Health and Safety Regulation (2017), and include:</p> <ul style="list-style-type: none"> • Guidance on the identification of asbestos containing materials (ACM) • Steps to be undertaken if ACM is identified during works • Management and remediation/removal procedures • Required health and safety controls • Waste disposal requirements • Ongoing site management 	Pre-construction
UXO procedures	Management and safe guarding procedures for UXO waste to be included in construction safety documentation.	Pre-construction
Acid sulphate soils	<p>Conduct ASS testing within the Project area to confirm presence of ASS. If the ASSMAC Assessment Guidelines action criteria are triggered an Acid Sulphate Soil Management Plan (ASSMP) will be prepared as part of the CEMP in accordance with the Acid Sulphate Soil Laboratory Methods and Manual (ASSMAC, 1998). Include the following as a minimum:</p> <ul style="list-style-type: none"> • Method for spoil material testing to confirm presence of ASS during construction and prior to excavation in an area • Conduct laboratory testing to calculate and verify treatment of ASS spoil material if it is to be treated on-site • Locate ASS treatment area within the Project area, which is already disturbed and is outside of flood liable land • Measures to manage any stockpiles of ASS materials, including bunding and cover to minimise leachate • Supervision and certification of treatment prior to removal from treatment areas for re-use 	Pre-construction

Impact	Measure	Timing
Exposure of soil to erosion	<p>Prepare an Erosion and Sediment Control Plan (ESCP) as part of a SWMP in accordance with <i>Blue Book - Managing Urban Stormwater: Soils and Construction</i> (4th ed, Landcom, March 2004), which must include the following:</p> <ul style="list-style-type: none"> • Establish all erosion and sediment control measures before ground disturbance work commences and these are to remain in place until all surfaces have been fully restored and/or stabilised • Outline the process for stabilisation and progressive revegetation of all disturbed area which will include species consistent with the dune restoration project to be undertaken within the greater Belmont WWTW site • Maintenance and inspection program and checklist including: <ul style="list-style-type: none"> – Conditions that would trigger watering of exposed and revegetated areas – Requirements for maintenance of revegetated areas – Maintenance of erosion and sediment controls including clean out before 30% capacity remaining • Limiting traffic movements on disturbed areas • Exposed areas that is susceptible to wind generated dust particles, shall be progressively vegetated or watered. Where vegetation is not yet possible, dust suppression by watering shall be provided • Install a 40% porous, open weave barrier fence as a wind-break on the eastern side of the Project area in accordance with Standard Drawing SD6-15 (Blue Book) • Provide a clean water diversion around disturbed areas • Procedures for how any sediment laden water will be treated prior to leaving the Project area <p>The ESCP must be prepared by appropriately qualified specialists (e.g. <i>completed an International Erosion Control Association (IECA) endorsed course, or passed the examination for Certified Professional in Erosion and Sediment Control (CPESC)</i>) as a coordinated sub plan to the SWMP.</p>	Pre-construction
Spoil Management	<p>Include the management of material movements in the Soil and Water Management Plan, as follows:</p> <ul style="list-style-type: none"> • Identification of materials during excavations including contaminated, ASS, ENM/VENM • Stockpiling and tracking of all materials throughout construction • Validation and certification of material stockpiles prior to re-use • Tracking of materials incoming and outgoing from site (e.g. as waste, quality of imported material) • Method of soil testing including number of samples and how samples will be taken to confirm any soil amelioration requirements. Testing to include as a minimum fertility, sodicity and aluminium toxicity • Waste classification of soils that require offsite disposal using the six-step process and criteria detailed in Waste Classification Guidelines – Part 1: Classification of Waste (NSW EPA 2014) 	Pre-construction

Impact	Measure	Timing
Accidental contamination from leaks or spills of fuels / chemicals etc.	<p>Prepare an incident emergency spill plan as part of the CEMP to be implemented during construction. Include procedures for the storage and handling of hazardous materials including fuel and chemicals within the CEMP, including:</p> <ul style="list-style-type: none"> No refuelling to occur on-site unless an appropriate bunded area is available Storage of hazardous materials on-site to be kept to a minimum and will be in accordance with national guidelines and the Safety Data Sheets relating to bunding, coverage, storage of incompatible materials, etc. Construct the bunded hazardous materials storage area within the desalination plant as early as possible within the construction schedule so that this area could be used for storage of any hazardous materials required during construction 	Pre-construction
	<ul style="list-style-type: none"> Locate chemical storage and delivery areas within bunded areas with a capacity of 110 per cent of chemical storage volume Store chemicals in accordance with Australian Standards and maintain in accordance to equipment supplier recommendations Implement safe work procedures for the handling of all chemicals including transfer, storage, spill prevention and clean up requirements Develop an emergency response plan that includes dangerous goods spill scenarios 	Operation
Unexpected discovery of contaminated soils	<ul style="list-style-type: none"> Should unexpected contaminated soils be identified during any ground works, seek advice from a suitably qualified environmental consultant and notify the Hunter Water Project Manager. Complete any additional investigations/abatement in general accordance with guidelines developed or endorsed by NSW EPA. Include contingency plans for unexpected finds protocols for contaminated soils in the CSMP. 	Construction
Water Resources		
Sedimentation of waterways during construction	Vehicle wash down and/or cement truck washout will occur in a designated bunded area or offsite.	Construction
	Include provision in the ESCP for visual inspections of nearby waterways and drainage lines following rainfall events and corrective actions in the event of impacts.	Construction
	Revegetation will be undertaken in all areas subject to ground disturbance, in accordance with the requirements listed in Table 7-2 of the EIS. Sediment and erosion controls (including dust) will be maintained until vegetation cover is established.	Construction
Flooding	The soil and water management plan will include procedures to ensure that machinery, stockpiles, equipment, fuels and chemicals, and other facilities are not stored or left within areas subject to flooding.	Pre-construction
	An emergency response plan will be prepared to include a procedure for managing flooding due to natural events. This will include an emergency procedure for ensuring the health and safety of construction workers.	Pre-construction
Increased WWTW overflows	Manage operation of the desalination plant, including shutting down in extreme wet weather if necessary.	Operation
Groundwater take	<p>Metering of fresh groundwater removed from excavations for all construction methods. Use of sheet piling, or similar, to support excavations and reduce groundwater inflow for all construction methods will be investigated during detailed design. This applies to all construction methods.</p> <p>The infiltration area will be set up with bund walls, or similar, around the entire perimeter to ensure no discharge of groundwater outside the area.</p> <p>Only fresh groundwater (EC less than 1,500 μS/cm) to be sent to the infiltration area.</p>	Detailed design, Construction

Impact	Measure	Timing
Groundwater monitoring	Groundwater monitoring at sites GW105 and GW108. The monitoring program will include continuous monitoring of groundwater levels and routine sampling for groundwater quality, in particular the change in EC associated with the fresh/saline groundwater interface. Groundwater level and quality triggers will be established based on baseline monitoring data.	Construction
Groundwater drawdown	Use of sheet piling, or similar, to support excavation and reduce groundwater inflow for all construction methods will be investigated during detailed design.	Construction
Groundwater quality	Undertake additional Acid Sulphate Soil (ASS) sampling within the zone of groundwater drawdown during detailed design phase to confirm the risk of exposure of ASS due to drawdown.	Detailed Design
	Biodegradable drilling fluids will be used during drilling works for CM 1 (HDD). Undertake an ASS investigation in the vicinity of each excavation as part of the detailed design phase to determine the risk of exposure of PASS and prepare and implement an ASSMP if necessary. This is a modification of the mitigation measure identified in the EIS.	Construction
Discharge of dewatered groundwater and brine	Prior to construction, either a new EPL will be obtained or EPL 1771 will be modified to authorise the discharge of dewatered groundwater during construction and additional proposed discharges from the Project to the Belmont WWTW outfall during operation.	Detailed design
Terrestrial and Freshwater Biodiversity		
General	Site induction: All workers will be provided with an environmental induction prior to starting working on-site. This will include information on the ecological values of the area surrounding the Project area, key weed threats and measures to be implemented to protect biodiversity, particularly focussing on erosion management, and potential weed and pathogen spread.	Pre-construction, Construction
	Biodiversity offsetting would be undertaken in accordance with the findings of the BDAR.	Pre-construction
Proximity of adjacent native vegetation	Limit disturbance of vegetation to the minimum necessary to undertake the works.	Pre-construction
	Prior to the commencement of any work adjoining areas of native vegetation, clearly delineate the construction area marking the limits of clearing to avoid unintended clearing of adjacent native vegetation. Fencing and signage must be maintained for the duration of the construction period. Fencing will be designed to allow fauna to exit the site during clearing activities.	Pre-construction, Construction (daily inspections of exclusion zones during works in area)
	Install appropriate temporary fencing during the construction phase to exclude native ground fauna from adjacent native habitat entering construction areas (whether they are recorded during pre-construction survey or not). Fencing will remain in place until the completion of all construction activities including revegetation.	After completion of clearing activities/construction works
	Stockpiles of fill or vegetation will be placed within existing cleared areas (and not within areas of adjoining native vegetation).	Pre-construction, Construction
Soil erosion, sedimentation and runoff	Erosion and sediment controls will be installed and maintained in accordance with the measures outlined for soils, geology and contamination in this table.	Pre-construction, Construction, Operation

Impact	Measure	Timing
Soil erosion, sedimentation and runoff	A protocol for accidental spills will be developed and implemented in accordance with the measures outlined for soils, geology and contamination in this table.	Pre-construction, Construction, Operation
Acid sulphate soils	Additional Acid Sulphate Soil sampling would be completed during the detailed design phase to confirm the risk of exposure of acid sulphate soils due to drawdown. If this sampling identifies that there is a risk associated with an acid sulphate soil a management plan will be prepared in accordance with the measures outlined for soils, geology and contamination in this table.	Detailed Design
Introduction and/or spread of weeds and pathogens	Develop a weed species management sub-plan as part of Project CEMP to manage weeds and pathogens during the construction phase of the Project.	Pre-construction, Construction
	The location and extent of any priority and/or high threat environmental weeds within the site will be identified by a suitably qualified ecologist during pre-clearance surveys. The introduction and spread of weed species will be minimised by restricting access to areas of native vegetation and communicating the responsibilities of all Project personnel at site inductions and during regular toolbox meetings. All priority weeds identified on the Project area will be controlled and removed in accordance with the requirements of the <i>Biosecurity Act 2015</i> and Council's relevant Weed Control Manuals: Appropriate pesticides will be applied if required and a record of such application made in the pesticide application register. All noxious and environmental weeds will be cleared and stockpiled separately to all other vegetation, removed from site and disposed of at an appropriately licenced disposal facility. When transporting weed waste from the site to the waste facility, trucks must be covered to avoid the spread of weed-contaminated material. Disposal must be documented, and evidence of appropriate disposal must be kept.	Pre-construction, Construction
	All machinery entering the Project area must be appropriately inspected, and washed down and disinfected as required prior to work on site to prevent the potential spread of weeds, Cinnamon Fungus (<i>Phytophthora cinnamomi</i>) and Myrtle Rust (<i>Pucciniales fungi</i>) in accordance with the national best practice guidelines for Phytophthora (O'Gara et al, 2005) and the Myrtle Rust factsheet (DPI, 2015b) for hygiene control.	Pre-construction, Construction
	Incorporate control measures in the design of the Project to limit the spread of weed propagules off site. Sediment control devices, such as sediment fences, will assist in reducing the potential for spreading weeds.	Pre-construction, Construction
	All machinery entering the Project area must be appropriately inspected, and washed down and disinfected to prevent introduction or spread of Chytrid fungus as per the Office of Environment and Heritage Hygiene protocol for the control of disease in frogs (DECC, 2008b).	Pre-construction, Construction
Wind erosion	Erosion and sediment controls will be implemented in accordance with Table 7-2 of the EIS before commencement of ground disturbance work and will be retained until all surfaces have been fully restored and stabilised.	Pre-construction, Construction

Impact	Measure	Timing
Fauna encounters during vegetation clearing	The construction contractor is to contact the Project ecologist for advice if any unexpected fauna are found during the construction period (i.e. before, during or following clearing of native vegetation where the Project ecologist is not on site).	Construction
	A procedure to manage unexpected threatened species finds will be included in the CEMP and is to be implemented in the event of any unexpected threatened species finds during clearing.	Pre-construction, Construction
	A post-clearing report will be prepared by the construction contractor and provided to Hunter Water documenting all animals that are handled, or otherwise managed, within the site. Data to be recorded includes: <ul style="list-style-type: none"> • Date and time of the sighting and details of the observer • Species • Number of individuals recorded • Adult/juvenile • Condition of the animal (living/dead/injured/sick) • Management action undertaken (e.g. captured, handled, taken to vet) • Results of any management actions (e.g. released, euthanised, placed with carer) 	Construction
Native vegetation	Hunter Water would prepare a Native Vegetation Management Plan prior to works starting. The plan would outline the replacement planting required to compensate for the removal of native vegetation along the proposed pipeline route. The plan would include vegetation types and densities as well as locations of planting or other biodiversity improvement works (such as weed management).	Pre-construction
	The construction contractor must engage a suitably qualified bush regenerator with demonstrated experience in native revegetation in coastal areas. The bush regenerator must undertake progressive rehabilitation of the disturbance footprint (including laydown and compound areas) to maximise potential for re-establishment of native vegetation and to minimise the potential for long-term weed issues post-construction. Areas where native vegetation or invasive weeds are removed must be revegetated with species identified in the Native Vegetation Management Plan prepared separately by Hunter Water. The CEMP must detail the bush regeneration contractor to be engaged, stabilisation timeframes and species.	Construction
Marine Biodiversity		
Seawater	Standard industry obligations such as spill prevention and management measures and the implementation of standard guidelines for the onshore storage and management of waste and hazardous materials.	Construction, Operation and Decommissioning
Benthic and sediment	Continuation of the Ocean Outfall Monitoring Program (EPL 1771) throughout operation of the Project including benthic infauna and sediment quality testing.	Operation
Increased brine discharge	<ul style="list-style-type: none"> • Integration of pipeline ecology and fish assemblage monitoring into the Ocean Outfall Benthic Monitoring Program for better understanding of potential changes in the species abundance and diversity. • Water quality monitoring program will be developed and implemented to identify long-term impacts from the discharge of brine concentrate on water quality or the marine environment. 	Operation

Impact	Measure	Timing
Seabed disturbance	Construction method will consider option with least disturbance to seabed area and break out of drilling fluids.	Detailed design
	Speed of drilling will be reduced prior to breakthrough to surface to minimise the volume of drilling fluids released into the marine environment.	Construction
	Visual observations during drilling for signs of increased turbidity and sedimentation.	
	Emergency Management Plan in place to support drilling activities.	
Artificial light emissions	<ul style="list-style-type: none"> Employ Best Practice Lighting Design for infrastructure such as vessels and barges that require to be lit at night in accordance with DoEE (2020) National Light Pollution Guidelines. Measures could include modification of light wavelengths, prevention of upward light spill and limiting light intensity for seabirds and maintaining a dark zone between any turtle nesting beach and infrastructure, avoiding direct lighting onto nesting beach or screen barriers for marine turtles (DoEE, 2020). Light spill from the nearshore vessel operations will be minimised where possible using directional lighting. Light shields could be considered to avoid spill if sensitive receptors (i.e. shorebirds, turtles) are determined during activities to be negatively affected. Lighting on vessel decks will be managed to reduce direct light spill onto marine waters, unless such actions do not comply with navigation and vessel safety standards (AMSA Marine Orders Part 30: Prevention of Collisions; AMSA Marine Orders Part 21: Safety and Emergency Arrangements). 	Construction
Artificial noise emissions	<ul style="list-style-type: none"> Where activities that generate underwater noise cannot be timed to occur outside of peak migration months the following mitigation measures and controls may be implemented. Where this is not possible, the need for Marine Fauna Observers will be determined on the basis of construction timeframes. Acoustic harassment/deterrent devices could be sounded prior to commencement of any underwater activity to provide opportunity for sensitive marine fauna to relocate temporarily. Vessel machinery will be maintained in accordance with the manufacturer specifications to reduce noise emissions. The interaction of all vessels with cetaceans and whale sharks will be compliant with Part 8 of the <i>Environment Protection and Biodiversity Conservation (EPBC) Regulations (2000)</i>. The Australian Guidelines for Whale and Dolphin Watching (Commonwealth of Australia, 2017)) for sea-faring activities will be implemented across the entire Project. 	Construction
Atmospheric emissions	<ul style="list-style-type: none"> Compliance with MARPOL Annex VI (as implemented in Commonwealth waters by the Commonwealth Protection of the Sea (Prevention of Pollution from Ships) Act 1983 (PSPPS Act); and Marine Order 97: Marine pollution prevention - air pollution). 	Construction
Pest introduction and proliferation	<ul style="list-style-type: none"> Vessels will be sourced locally wherever possible. All vessels working on the Project, whether internationally or locally sourced will adhere to Australian quarantine requirements. The management of ballast water prior to entry to Australian waters must follow AQIS guidelines and compliance requirements in relation to marine pest introduction risk management for any internationally sourced vessel. 	Pre-construction, Construction

Impact	Measure	Timing
Accidental release of solid wastes	<ul style="list-style-type: none"> • Appropriate waste containment facilities will be included on the vessel as well as onshore and managed to avoid overflow or accidental release to the environment. • No waste materials will be disposed of overboard; all non-biodegradable and hazardous wastes will be collected, stored, processed and disposed of in accordance with Regulation 9 of MARPOL Annex V. • Hazardous wastes will be separated, labelled and retained in storage onboard within secondary containment (e.g. bin located in a bund). • All recyclable and general wastes to be collected in labelled, covered bins (and compacted where possible) for appropriate disposal at regulated waste facility. • Solid non-biodegradable and hazardous wastes will be collected and disposed of onshore at a suitable waste facility or to a carrier licensed to receive the waste if required by legislation. • Intake pipe design is such that in the unlikely event of contact damage, the pipe does not break apart into segments or fragments, instead remaining intact to support recovery and repair of the affected segment. 	Construction
Dropped objects	<ul style="list-style-type: none"> • All equipment and gear on the vessels will be securely fastened during mobilisation/demobilisation. • Lifting is to be carried out by competent personnel using equipment that is suitable, certified and maintained. • Waste management controls are to remain effective to reduce risk of release of wastes that could be ingested or cause entanglement. • During the activities, detailed records of equipment lost overboard or dropped will be maintained and reviews will be undertaken to reflect on methods to mitigate repetition of the incident. 	Construction
Marine fauna collision and entanglement	<ul style="list-style-type: none"> • Operations of vessels will be commensurate with Part 8 of the EPBC Regulations (Interacting with Cetaceans and Whale Watching), DoEE (2016) National Strategy for Mitigating Vessel Strike of Marine Mega Fauna, NSW (2016) Marine Safety Regulation, and NSW (2017) Biodiversity Conservation Regulation. • A member of the vessel crew will act as a marine fauna observer (MFO) at all times during daylight works and will maintain vigilant watch in support of Part 8 of the EPBC Regulations to manage risk of vessel collision with any other vessels or marine fauna. The MFOs will be trained and experienced in whale identification and behaviour, distance estimation, and be capable of making accurate identifications and observations of whales in Australian waters. The MFO will provide advice on appropriate actions to be taken to mitigate risks should whales be encountered. • The Australian Guidelines for Whale and Dolphin Watching (Commonwealth of Australia, 2017) for sea-faring activities will be implemented across the entire Project. 	Construction

Impact	Measure	Timing
Hydrocarbon, chemicals and other liquid waste	<p>Chemicals and hydrocarbons will be packaged, marked, labelled and stowed in accordance with MARPOL Annex I, II and III regulations. These include provisions for all chemicals (environmentally hazardous) and hydrocarbons will be stored in closed, secure and appropriately bunded areas.</p> <p>A Material Safety Data Sheet (MSDS) will be available for all chemicals and hydrocarbons in locations nearby to where the chemicals/wastes are stored.</p> <p>Vessel operators will have an up to date Shipboard Oil Pollution Emergency Plan (SOPEP) and Shipboard Marine Pollution Emergency Plan (SMPEP). All shipboard chemical and hydrocarbon spills will be managed in accordance with these plans by trained and competent crew. On board oily water disposal will be managed in accordance with the Marine Pollution Regulation 2006. The vessel operator will record the quantity, time and onshore location of the oily water disposal in the vessel Oil Record Book.</p> <p>If vessels are equipped with an oily water filter system, they may discharge oily water after treatment to 15 ppm in an oily water filter system (providing they have a current calibration certificate for the bilge alarm) as required by MARPOL Annex I Regulations (for the prevention of pollution by oil). To discharge, the vessels will require a current IOPP certificate for oily water filtering equipment, and a current calibration certificate for the bilge alarm.</p>	Construction
Damaged fuel tank associated with vessel collision	<p>Visual observations will be maintained by watch keepers on all vessels.</p> <p>Regular notification to the following Australian Government agencies before and during operations:</p> <ul style="list-style-type: none"> • The AMSA RCC of proposed activity, location and commencement date to enable an AusCoast warning to be issued. • The Australian Hydrographic Office of proposed activity, location and commencement date to enable a 'Notice to Mariners' to be issued. • In the event of a spill resulting in notification to AMSA, other sea users (e.g. fishing industry) will be informed of the incident via Marine Notices to prevent vessels entering an area where hydrocarbons have been released. • Vessel will operate in compliance with all marine navigation and vessel safety requirements in the International Convention of the SOLAS 1974 and the Navigation Act 2012. This includes the requirement for all equipment and procedures to comply with the following AMSA Marine Orders: <ul style="list-style-type: none"> - Marine Order 30: Prevention of Collisions. - Marine Order 21: Safety and Emergency Arrangements. - Marine Order 27: Safety of Navigation and Radio Equipment: sets out ship requirements regarding radio installations, equipment, watch keeping arrangements, sources of energy, performance standards, maintenance requirements, personnel and recordkeeping. - Vessels will be equipped with appropriate navigational systems which may include an automatic identification system (AIS) and an automatic radar plotting aid (ARPA) system capable of identifying, tracking and projecting the closest approach for any vessel (time and location) within the operational area and radar range (up to approximately 70 km). - Marine diesel oil compliant with sulphur content of maximum 0.5% m/m is the only engine fuel to be used by the vessels, compliant with MARPOL Annex VI. <p>Oil spill responses will be executed in accordance with the vessel's SOPEP, as required under MARPOL.</p>	Pre-construction, Construction

Impact	Measure	Timing
Maintenance activities	Design considerations such as burial of pipeline, sizing of the pipe and dosing of the intake structure are to be considered to reduce the need for maintenance activities.	Detailed design
	The pipe and intake structure will be inspected prior to undertaking any maintenance activities particularly for those slow moving species such as syngnathids. In the event that syngnathids are confirmed, syngnathids and the substrate they are attached to will need to be safely relocated away from the maintenance area prior to maintenance activities commencing.	Operation
Habitat creation	The pipe may be buried to reduce the area of exposure for encrusting communities, where possible.	Detailed design
	The pipe will be inspected during scheduled maintenance activities for any slow moving species such as syngnathids.	Operation
Species abundance and diversity	Continuation of the Ocean Outfall Benthic Monitoring Program (as part of EPL 1771) throughout operation of the Project. Integration of pipeline ecology and fish assemblage monitoring into the Ocean Outfall Benthic Monitoring Program for better understanding of potential changes in the species abundance and diversity.	Operation
Water quality	Water quality monitoring program will be developed and implemented to identify long-term impacts from the discharge of brine concentrate on water quality or the marine environment. Volume of chemicals in the aggregate, concentrations and discharge regimes (frequency) (inclusive of chlorine) that will be used during the desalination process will need to be adjusted and dosed in a manner so as to achieve desalination objectives and minimise harm to the marine environment to as low as reasonably practicable and/or as required by regulators.	Operation
Coastal Processes		
Disruption to dune vegetation systems, aeolian processes and associated dune stability leading to a potential increased rate of erosion	Implement a coordinated erosion monitoring and mitigation program in conjunction with the existing strategies and dune restoration project implemented for the adjacent WWTW, including: <ul style="list-style-type: none"> • Site profiling and revegetation following completion of civil works in accordance with the final design which is to comply with the Lake Macquarie Coastal Zone Management Plan (CZMP) (2015) and DLWC (2001). • Monitoring of recession and implementation of mitigation measures below as needed: <ul style="list-style-type: none"> - Beach management works such as beach scraping to reshape dunes and increase dune volume/recovery after storms if necessary. - Stabilisation of the frontal dune system by removing invasive species and replacing with locally indigenous dune vegetation. - Installation of sediment fences to minimise the movement of sands during construction. - Control offroad vehicle access and surface runoff. - Potential positive cumulative impact to align these works with Hunter Water's proposed dune protection and restoration project between the Belmont Golf Course and WWTW. • Ensure the public are prevented from entering works areas and potential areas of impact. 	Construction, Operation

Impact	Measure	Timing
Consolidating or 'locking up' of coastal dunes by built infrastructure, removing the buffer for coastal erosion and increasing the risk of inland erosion	The amended design situates the desalination plant behind the foredunes. Avoid locating the water treatment process plant and intake structures more seaward than is currently proposed in the concept design and minimise hardstand areas or structures that would consolidate the coastal dunes.	Detailed Design
Exposure of the subsurface transfer pipeline by coastal processes including beach level fluctuation and storm bite	Ensure that infrastructure installed within the active portion of the beach profile is of sufficient depth such that it is below the limit of scour. Alternatively, modify the infrastructure design such that it can be exposed to wave action during extreme events, or ensure plant is decommissioned prior to risk levels increasing under future scenarios.	Detailed Design
	Monitor weather forecasts when working on the intake infrastructure and halt works when extreme coastal warnings are issued by the Bureau of Meteorology. Prepare and implement a Natural Event Response Plan as part of the Construction Environment Management Plan (CEMP).	Construction
Risk of coastal erosion impacting the plant and associated pipelines under long term future or rare events	Ensure that infrastructure does not extend into areas of present day erosion and recession risk without appropriate design measures and that the future risk level applied allows for the most conservative operational and decommissioning timeframes.	Detailed Design, Construction and Operation
	Conduct consistency reviews at major design milestones against the EIS, AR, approval conditions and latest available literature including the Lake Macquarie CZMP (2015). It is understood that the EIS will have a 10 year validity period if approved, and as such it is likely that updated sea level rise guidance and coastal risk maps will be available in the interval between concept design and Project implementation. The review is required to ensure that the Project area remains acceptable from a coastal erosion risk perspective.	
Aeolian sand ingress into the plant leading to operational maintenance issues	Implement a coordinated erosion monitoring and mitigation program and update if required.	Operation
Wave overtopping impacting the desalination plant	Design infrastructure and landscaping to minimise the likelihood and extent of wave overtopping. Minimise the impact on the plant should wave overtopping occur by maintaining appropriate drainage and designing the plant to withstand an overtopping event.	Detailed Design

Impact	Measure	Timing
Localised scour and modified nearshore wave transformation behaviour due to seabed infrastructure	<p>Adopt pipeline and intake designs which minimise impacts to wave reflection and transformation, generation of localised eddy currents and obstructions to longshore transport.</p> <p>Where risks cannot be mitigated through design, implement a coordinated erosion monitoring and management program and update if required in conjunction with the adjacent WWTW and the existing approaches outlined within the Lake Macquarie CZMP (2015).</p>	Detailed Design, Operation
Social		
Amenity and character	<p>Ongoing consultation will be undertaken with key stakeholders prior to and during construction and operation of the Project to identify potential issues as they arise. This will include:</p> <ul style="list-style-type: none"> • Notifying affected residents about planned Project activities, duration of activities, and expected impacts. Consultation will target vulnerable community members, who may include older residents and people experiencing disability. Notification will be provided to users of Nine Mile Beach and Belmont Cemetery as well as residents including those living along: <ul style="list-style-type: none"> - Williams Street - Marriot Street - Hudson Street • Maintain a register of stakeholders who would like to receive updates about the Project and email/write to these stakeholders at appropriate intervals. • Communicate Project information to relevant stakeholders previously identified, including local businesses and community groups. • Communicating Project information through Hunter Water’s communication channels, such as a Project website and community update. • Providing a feedback mechanism for residents to contact the Project. 	Pre-construction, Construction, Operation
Access and connectivity	As part of ongoing community engagement, the heavy vehicle movements will be communicated in community information materials along local residential streets such as Beach Street, Ocean Park Road and Hudson Street.	Construction, Operation
	Intake structure – As a minimum to consider public safety, an Access Management Plan for navigable waters would be prepared to address access to the waterway for construction and recreational use, in consultation with Roads and Maritime.	Pre-construction, Construction
Sustainability		
Management systems and Procurement and purchasing	<p>Develop and implement a Sustainability Management Plan (SMP) which establishes governance, structures, processes and systems to ensure integration of all sustainability considerations, initiatives, monitoring and reporting during the detailed design and construction phases of the Project. The SMP will include the following:</p> <ul style="list-style-type: none"> • Sustainability objectives and targets • Roles and responsibilities for sustainability management, including adequate resourcing of sustainability • Inspection, monitoring and auditing requirements • Provisions for sustainability reporting and review by senior management • Provisions for the assessment and management of supplier sustainability performance 	Detailed design

Impact	Measure	Timing
Energy and carbon	Incorporate the following measures into future stages of design to improve sustainability performance: <ul style="list-style-type: none"> • Adopt a target of 10 per cent energy reduction compared to business as usual for a desalination plant, as per the NSW GREP, and integrate this target into Project contracts, in accordance with the Hunter Water GEMP • Procure a desalination module which incorporates energy recovery • Procure a minimum 6 per cent GreenPower for operation of the Project, in alignment with the requirements of the NSW GREP. • Consider offsite renewable energy procurement as part of the procurement process to contribute to meeting the requirements of the NSW GREP • Incorporate all financially viable measures to reduce greenhouse gas emissions and energy use into detailed design, in accordance with the Hunter Water GEMP • Design operational lighting in accordance with AS 4282 – Control of the obtrusive effects of outdoor lighting 	Detailed design
	Incorporate the following measures into construction and operation in alignment with the requirements of the Hunter Water GEMP: <ul style="list-style-type: none"> • Develop an energy management plan for Project operation • Monitor and report within Hunter Water energy consumption and greenhouse gas emissions • Communicate energy and greenhouse gas management objectives and performance internally and externally • Provide training and raise awareness of energy and greenhouse gas emissions procedures, initiatives and conservation opportunities to employees responsible for operation of the plant 	Construction Operation
Water	Monitor water use throughout construction and operation and report as part of Project sustainability reporting, in accordance with the NSW GREP.	Construction Operation
Materials	Incorporate the following measures into future stages of design to improve sustainability performance: <ul style="list-style-type: none"> • Consider selection of concrete mixes with low carbon cementitious materials to achieve a reduction in imbedded carbon • Source steel which has an accompanying Environmental Product Declaration (EPD) and has been produced using an energy-reducing production process, such as polymer-injection technology • Undertake value engineering exercises during detailed design to identify opportunities to reduce construction materials use • Incorporate materials reduction initiatives into the sustainability 'lessons learned' for the Project 	Detailed design
Discharges to air, land and water	Incorporate the following measures into procurement to improve sustainability performance and comply with the requirements of the NSW GREP: <ul style="list-style-type: none"> • Consider EU or US EPA standards when purchasing or leasing non-road diesel plant and equipment • Consider air emissions from contractor-supplied non-road diesel plant and equipment 	Pre-construction
	Monitor the quality of brine discharge against water quality objectives as recommended in Table 7-9 of the EIS.	Operation
Land	Implement the contamination measures recommended in Table 7-2 of the EIS.	Detailed design

Impact	Measure	Timing
Waste	Incorporate the following measures into future stages of design to improve sustainability performance: <ul style="list-style-type: none"> Develop a plan for waste management, including targets for waste avoidance, waste handling and disposal requirements, monitoring requirements, and reporting of the top three waste streams as per the NSW GREP Develop a plan for decommissioning and deconstruction which considers the principles of Designing for Deconstruction (DfD; Guy, 2006) 	Detailed design
Community health, wellbeing and safety	Incorporate the Crime Prevention Through Environmental Design (CPTED) principles into detailed design.	Detailed design
Hazards and Risk		
General hazards and risk	Review proposed transport of dangerous goods logistics. If notable differences to what was assessed are proposed, repeat the screening process to determine if a route evaluation is required.	Detailed design and construction
	Review the proposed types and quantities of dangerous goods to be stored on site. If notable differences to what was assessed are proposed, repeat the screening process to determine if the changes affect the PHA and outcome.	Detailed design and construction
	Conduct an independent review of the hazardous chemical elements associated with the proposal, including location of storages, compatibility of adjacent chemicals and bunding requirements. The review will be undertaken by an expert in hazardous chemical storage. Any recommendations will be incorporated into the detail design.	Detailed design
Dangerous goods spill	<ul style="list-style-type: none"> Locate chemical storage and delivery areas within bunded areas with a capacity of 110 percent of chemical storage volume. Store chemicals in accordance with Australian Standards and maintain in accordance to equipment supplier recommendations. Appropriately label, separate and dispose of each chemical in accordance with Australian Standards. Provide access to the Material Safety Data Sheet (MSDS) register of all chemicals that are located on-site for worker and emergency services reference. Implement safe work procedures for the handling of all chemicals including transfer, storage, spill prevention and clean up requirements. Spill kits to be available on-site in appropriate areas. Develop an emergency response plan that includes dangerous goods spill scenarios. 	Operation
Delivery of dangerous goods	<ul style="list-style-type: none"> Develop and implement a traffic management plan including standard traffic rules, site speed limits, signage and designated pedestrian areas. Ensure transport of dangerous goods complies with the Australian Dangerous Goods (ADG) code, including driver competency. Develop a construction management plan. 	Construction, Operation
Fuel spill	<ul style="list-style-type: none"> Fuel store to be designed to appropriate standards. Fuel to be stored in an intrinsically safe hazardous area as per appropriate standards. Implement appropriate fire protection systems. 	Construction, Operation
Natural hazards	<ul style="list-style-type: none"> Appropriately design site drainage for the site. Develop a fire prevention vegetation management procedure for the site. 	Detailed design, Construction, Operation

Impact	Measure	Timing
Aboriginal Heritage		
Salvage of artefacts	Hunter Water will develop a care agreement in consultation with Aboriginal parties for the long-term care of Aboriginal objects. This will be integrated into the ACHMP.	Pre-construction, Construction
Unexpected Finds Procedure	An unexpected finds procedure will be prepared to provide a method to manage potential heritage constraints and unexpected finds during construction. If suspected Aboriginal objects are identified during construction, work should stop immediately and Bahtabah Local Aboriginal Land Council, DPIE and an archaeologist contacted to identify and record the objects. This procedure will be made accessible to all relevant employees and contractors working within the Project area via toolbox talks and display in break out rooms/ sites offices.	Pre-construction, Construction
Aboriginal Cultural Heritage Management Plan (ACHMP)	An Aboriginal Cultural Heritage Management Plan (ACHMP) will be formulated following approval of the Project to provide management and protection process for known and unknown Aboriginal objects and places.	Pre-construction, Construction
ACHMP Provisions	The ACHMP will include provision for the completion of the following activities. Additional inspection described within this Recommendation is referring to either further site inspection of A horizon soils after vegetation clearance or the monitoring of ground disturbance works during the works: <ul style="list-style-type: none"> • Surface collection of AHIMS #45-7-0397 (RPS BEL IF01) and AHIMS #45-7-0402 (RPS_IF2). • Additional inspection and surface collection of any artefacts exposed in the area mapped in Figure 5 of Appendix O as containing A horizon soils in a disturbed context. The opportunity to undertake the additional inspection and surface collection should be provided to an archaeologist and Aboriginal party representatives following vegetation clearance and respreading of A horizon soils currently within the bunds and adjoining area. • Additional inspection of the areas with the potential for intact A horizon soils mapped in Figure 5 of Appendix O, with the opportunity to undertake the additional inspection to be provided to an archaeologist and Aboriginal party representative following vegetation clearance and during earthworks (where the earthworks will occur within A horizon soils). Methodologies should be included for collection of surface artefacts. 	Pre-construction, Construction
Site induction	All Hunter Water personnel and subcontractors involved in the proposed works will be advised of the requirements of the NPWS Act 1974 that it is an offence for any person to knowingly destroy, deface, damage or permit destruction, or defacement to an Aboriginal object or place without a relevant approval.	Pre-construction, Construction
Human Remains Protocol	In the event that skeletal remains are identified, work must cease immediately in the vicinity of the remains and the area must be cordoned off. The proponent must contact the local NSW Police who will make an initial assessment as to whether the remains are part of a crime scene or possible Aboriginal remains. If the remains are thought to be Aboriginal, DPIE must be contacted on Enviroline 131 555. A DPIE officer will determine if the remains are Aboriginal or not; and a management plan must be developed in consultation with the relevant Aboriginal stakeholders before works recommence.	Construction
Non-Aboriginal Heritage		
Unexpected finds	If, during the course of the works, unexpected archaeological items or relics, as defined by the Heritage Act 1977 (as amended), are uncovered, work will cease in that area immediately. The Heritage Branch, Office of Environment and Heritage (Enviroline 131 555) will be notified and works only recommence when an approved management strategy developed.	Construction
Remnant tank traps	The exact location of the tank traps would be identified during detailed design to ensure potential impacts during construction are appropriately mitigated including provision of buffer zones.	Detailed design

Impact	Measure	Timing
Traffic and Transport		
Additional traffic generation due to Project construction	In consultation with Lake Macquarie City Council, a Construction Traffic Management Plan (CTMP) will be prepared and include detail with respect to: <ul style="list-style-type: none"> • Appropriate Traffic Control Plans • Traffic control measures in works areas • Controls associated with the delivery of heavy plant and materials to site during peak traffic periods • Appropriate entry/exclusion points for the proposed construction compound areas • Advising motorists of the change in traffic conditions associated with the work 	Pre-construction
Traffic control	Appropriate exclusion barriers, signage and site supervision is to be employed so that the Project site is controlled and that unauthorised vehicles and pedestrians are excluded from the works area.	Construction
	All traffic control devices are to be in accordance with AS 1742.3-2009 – Manual of uniform traffic control Devices: Traffic control for works on roads and Roads and Maritime Traffic control at worksites manual.	Construction
	Hunter Water would ensure relevant requirements of AS 2890.2-2002 <i>Parking facilities - Off-street commercial vehicle facilities</i> are considered and documented in the CEMP for the Project	Construction
Creation of additional roads or access tracks	Only existing roads and access roads are to be utilised.	Construction
Misinformation or an uninformed community	The community is to be kept informed about the Project through appropriate means such as advertisements in the local media, Hunter Water website, notices and/or signs.	Pre-construction, Construction
Maritime traffic	<p>Pipe-laying related activities will be undertaken in accordance with all marine navigation and vessel safety requirements under the International Convention of the Safety of Life at Sea (SOLAS) 1974 and <i>Navigation Act 2012</i>. For the vessels, this requires equipment and procedures to comply with AMSA Marine Order - Part 30: Prevention of Collisions, and Marine Order - Part 21: Safety of Navigation and Emergency Procedures.</p> <p>Stakeholder consultation (local councils, fishing bodies, etc.).</p> <p>Notification to the following Australian Government agencies will be made prior to moving the pipe laying vessel on location:</p> <ul style="list-style-type: none"> • The Australian Hydrographic Office of proposed activity, location (i.e. vessel location) and commencement date to enable a Notice to Mariners' to be issued. • The Australian Maritime Safety Authority (AMSA) Rescue Coordination Centre (RCC) of proposed activities, location (i.e. vessel location) and commencement date to enable an AusCoast warning to be issued. <p>Vessels will also be equipped with all navigational and safety requirements for operation in Australian waters. These may include an automatic identification system (AIS) and an automatic radar plotting aid (ARPA) system capable of identifying, tracking and projecting the closest approach for any vessel (time and location) within radar range (up to approximately 70 km).</p> <p>Visual observations will be conducted by trained watch keepers on all vessels 24 hours per day to support management of collision risk or entanglement/interference with other users.</p>	Pre-construction, Construction

Impact	Measure	Timing
Noise and vibration		
Noise and vibration – Site inductions	All employees, contractors and subcontractors will receive an environmental induction. The induction will include: <ul style="list-style-type: none"> • All relevant Project specific and standard noise and vibration mitigation measures • Relevant licence and approval conditions • Permissible hours of work • Location of nearest sensitive receivers • Employee parking areas • Designated loading/unloading areas and procedures • Site opening/closing times (including deliveries) • Environmental incident procedures 	Pre-construction, Construction
Noise and vibration – Behavioural practices	No swearing or unnecessary shouting or loud stereos/radios on site. No dropping of materials from height, throwing of metal items and slamming of doors.	Pre-construction, Construction
Equipment selection	Use quieter and less vibration emitting construction methods where reasonable and feasible.	Pre-construction, Construction
Noise and vibration – Community consultation	Ongoing stakeholder consultation will occur including: <ul style="list-style-type: none"> • Establishing contact with local residents and the construction program and progress communicated on a regular basis, particularly when noisy activities are planned. • Notifying affected receivers of the intended work, its duration and times of occurrence. This may include a local community update letters for specific construction activities and a Project info line. • Specific notifications will be provided to receivers where the highly noise affected level of 75 dB(A) is predicted to be exceeded. 	Pre-construction, Construction
Use and siting of plant	Simultaneous operation of noisy plant within discernible range of a sensitive receiver is to be avoided. The offset distance between noisy plant and adjacent sensitive receivers is to be maximised. Plant used intermittently to be throttled down or shut down. Noise-emitting plant to be directed away from sensitive receivers.	Construction
Noise and vibration – Traffic noise	<ul style="list-style-type: none"> • Comply with the recommended standard construction hours. • Plan traffic flow, parking and loading unloading areas to minimise reversing movements within the site. • Loading and unloading of materials/deliveries is to occur during standard construction hours. • Contractors are to avoid dropping materials from height where practicable, during loading and unloading. • Delivery vehicles to be fitted with straps rather than chains for unloading, wherever possible. • No truck movements before 7.00 am or after 6.00 pm. 	Construction
Noise and vibration – Vibration monitoring	Vibration monitoring will be undertaken where equipment is being used within the safe working distances detailed in Table 7-41 of the EIS or when a complaint is received. Vibration monitoring will be conducted during these activities at the most susceptible buildings close to the construction sites. Any vibration measurement will be undertaken by a qualified professional and with consideration to the ICNG guidelines.	Construction

Impact	Measure	Timing
Noise and vibration – Complaints management	<p>Complaints will be managed in accordance with the CEMP and the procedure outlined below. Signage will clearly and visibly provide a contact number and name to receive complaints and enquiries about construction. Potential complaints specific to these works could include:</p> <ul style="list-style-type: none"> • Vibration impacts from works that significantly affect structures or dwellings • A cluster of noise and/or vibration complaints <p>Works have the potential to cause noise complaints from nearby receivers. The response will be to:</p> <ul style="list-style-type: none"> • Verbally respond to complainant • Provide a written response within seven calendar days if the complaint cannot be resolved verbally • Log the complaint, and any actions taken with regards to the complaint within a complaints register • Undertake monitoring at the complainant's residence(s) • Investigate the nature and reasons of the impact • Investigate and implement further mitigation measures to minimise the impact 	Construction
Noise and vibration – high noise intensive works	Hours for highly noise intensive works will be undertaken in accordance with the EPA's requirements detailed in Section 2.4.8.5.	Construction
Noise and vibration – conditions of approval	Hunter Water will commit to undertaking the required Noise and Vibration specifications in the conditions of approval.	Design
Noise – Respite periods	<p>High noise generating activities may only be carried out in continuous blocks, not exceeding three hours each, with a minimum respite period of one hour between each block.</p> <p>High noise refers to construction noise impacts which exceed the highly affected noise management level of 75 dB(A) LAeq(15-min) during standard construction hours.</p>	Construction
Sleep disturbance – Annoying characteristics	Any annoying characteristics (such as tonality, low frequency, impulsiveness, etc.) generated by the site will need to have corrections factors applied, as per the NPI. This will need to be assessed as part of the detailed design stage where specific operational equipment are selected.	Detailed design
Operational noise – Detailed design	<p>The following design strategies will be incorporated into the detailed design of the desalination plant:</p> <ul style="list-style-type: none"> • Selection of equipment and plant items to limit noise emissions. Where practical and feasible, motor drives, gear boxes, pumps, etc. will be specified and selected to achieve a noise level of less than 85 dB(A) at a distance of one metre, consistent with occupational health and safety requirements. • Purpose built acoustic enclosures to be provided where required for large plant items in order to achieve noise levels of less than 85 dB(A) at one metre. 	Detailed design

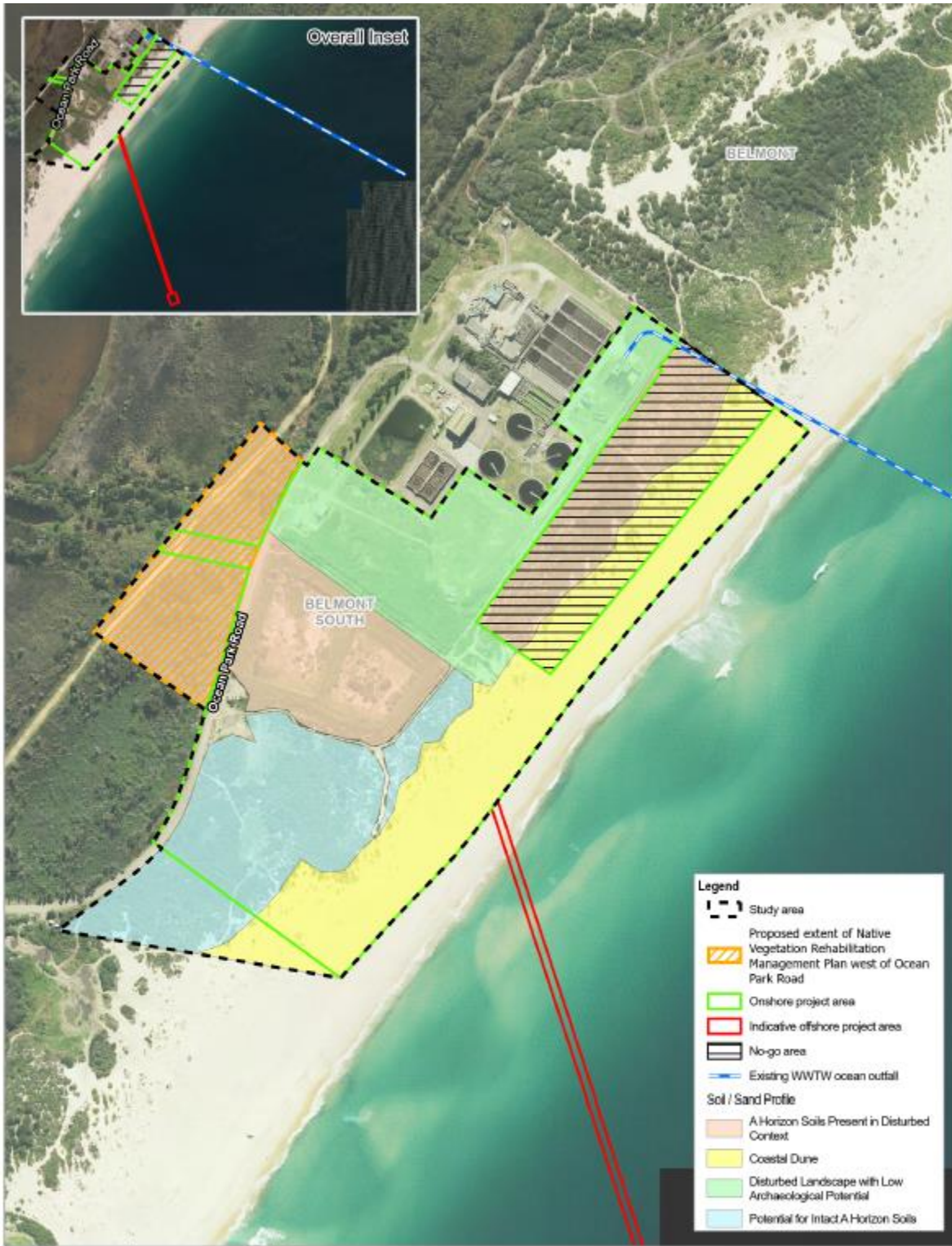
Impact	Measure	Timing
Waste Management		
General	Obtain modification to EPL 1771 to provide for discharge of brine, commissioning flows and dewatered groundwater (if applicable) via the Belmont WWTW HCS.	Pre-construction
	Follow the resource management hierarchy principles: <ul style="list-style-type: none"> • Avoid unnecessary resource consumption as a priority • Re-use materials, reprocess, recycle and recover energy • Dispose as a last resort (in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i>) 	Throughout the Project duration
	Manage all waste material in accordance with the POEO Act and Waste Classification Guidelines (EPA 2014) and the Waste Avoidance Resource Recovery Strategy for NSW (NSW EPA).	Throughout the Project duration
	Manage and track waste in accordance with Hunter Water specifications, including recording of the total waste generated per month and the percentage recycled.	Throughout the Project duration
	Tracking of vehicles transporting waste will be undertaken, including the origin and destination of the waste. Records will be kept for a minimum of four years.	Throughout the Project duration
Spread of contamination through inappropriate waste management	Include waste classification, sampling and analysis in the Contaminated Soil Management Plan.	Construction
	Manage materials in accordance with the Contaminated Soil Management Plan.	
	Dispose of waste to an appropriately licensed facility with supporting waste classification documentation.	
Generation of general construction waste	Provide labelled waste receptacles to promote the segregation of waste and recycle materials where appropriate.	Construction
	Conduct and record site inductions as specified in the CEMP to ensure staff are aware of waste disposal protocols.	Construction
	Preferentially procure materials with no or minimal packaging, or those where packaging is recyclable or able to be returned for re-use to the supplier.	Construction
	Maintain all working areas by keeping free of rubbish and cleaning up at the end of each working day.	Construction
	Do not accept waste from outside of the Project site.	Construction
	Follow mitigation measures for weed disposal as defined in Section Table 7-7 of the EIS.	Construction
Generation of wastewater from dewatering	Provide portable toilets for construction workers and manage to ensure the appropriate disposal of sewage (i.e. removed by a licensed supplier). Portable toilets will be located away from drainage lines.	Construction
	Collection and testing of dewatered groundwater to be included in the CEMP. If of suitable quality, reinject, use for dust suppression or discharge in the vicinity of the works. If unsuitable for reuse or reinjection, or discharge dispose of via the Belmont WWTW HCS in accordance with conditions of EPL 1771.	Construction
Generation of wastewater during commissioning of intake and desalination plant	During commissioning, test any wastewater that is to be disposed of to the WWTW or to the outfall to ensure that parameters will not exceed the conditions of EPL 1771 or relevant marine water quality guidelines. Calculations will need to reflect dilution with the existing WWTW effluent.	Commissioning
	Treat chlorinated water prior to release into the HCS to prevent chlorine impacts to fauna.	Commissioning
	Release commissioning wastewater as slowly as possible to minimise the impact on the WWTW effluent quality and quantity.	Commissioning

Impact	Measure	Timing
Generation of brine	Dispose of brine via the Belmont WWTW HCS in accordance with the conditions of EPL 1771.	Operation
Generation of pre-treatment sludge waste	Dispose of pre-treatment sludge waste via the Belmont WWTW in accordance with the conditions of EPL 1771.	Operation
Decommissioning	Where possible sell or repurpose components and materials for use on other projects. Where reuse is not possible, recycle materials at an appropriately licenced facility. Dispose to a licenced landfill only after re-use and recycling options have been exhausted.	Decommissioning
Visual Amenity		
Minimise visual impact for receptors	Existing large trees and vegetation will be maintained and protected wherever possible.	Operation
Minimise light spill into any adjoining landholding or dwelling	During operation, lighting will be provided at the desalination plant, given that it will be operational on a continuous basis. Lighting will be provided in accordance with AS 4282 – Control of the obtrusive effects of outdoor lighting.	Operation
	Lighting of the temporary barge for intake pipeline and intake structure construction methods will be required as per NSW Roads and Maritime Night Safety guidelines. This is required as to mitigate issues out at sea, ensuring that other vessels/water activity are able to clearly identify the equipment's location.	Construction
Minimise visual impact on residential areas	Following completion of the minor upgrade to the power connection at the intersection of Hudson Street and Marriot Street, Belmont South, the existing footpaths and road surfaces will be reinstated to original condition prior to the works.	Construction
Minimising visual impact on the adjoining dwellings	During construction of the Project, the works area will be kept tidy and any lighting during night time will be used over a short duration and directed to avoid spill into any adjoining properties.	Construction
Contrast of structures against the surrounding vegetation	A muted colour palette will be utilised for the desalination site structures.	Detailed Design

Impact	Measure	Timing
Air quality		
Generation of dust	Include a procedure for effective dust control in the CEMP, including: <ul style="list-style-type: none"> • Limit earthmoving activities during periods of high winds • Implement dust suppression using water carts or binder sprays if required • Specify height and cover of stockpiles • Minimise vehicle movements and limit maximum speed on site to 40 km/h • Cover loads during transport • Assign haulage routes and minimise vehicle and equipment movements outside of sealed roads/areas 	Pre-construction
	Limit the areas of clearing and ground disturbance to the minimum required.	Construction
	Investigate any dust complaints and implement correction as soon as possible. Define the complaint procedure within the CEMP.	Construction
	Stabilise and revegetate disturbed areas progressively where disturbed areas will be left for longer than 21 days. Revegetate in accordance with the mitigation measures provided in Table 7-7 of the EIS.	Construction
	Maintain dust suppression controls including weave barrier fence as wind breaks on up wind of disturbed areas until rehabilitation is completed with appropriate vegetation coverage.	Construction
Exhaust emissions	Turn off plant and machinery when not in use and fit with emission control devices complying with Australian Design Standards.	Construction
	Maintain construction plant and equipment in good working condition in accordance with manufacturer requirements. Stand down any equipment found to be emitting excessive exhaust emissions (such as excessive visible diesel smoke) until repaired.	Construction
Combustion emissions	Prohibit burning of any materials on-site.	Construction
Impact on sensitive receivers	Advise local residents of hours of operation and duration of work and provide a contact name and number for queries regarding air quality.	Pre-construction
Odour	Maintain a clean and tidy site with waste removed frequently, particularly sewage and putrescible waste.	Construction
Greenhouse Gas		
Electricity use	Turn power tools and electrical equipment off when not in use.	Construction
	The operations of the Belmont Desalination Facility will follow the guidelines stated in the Hunter Water Greenhouse Gas and Energy Management Policy. The following measures will be undertaken to minimise/reduce greenhouse gas emissions and energy use during operations: <ul style="list-style-type: none"> • Incorporate specific energy management targets and KPIs • Review and audit energy management systems and their performance 	Operations

Impact	Measure	Timing
Fuel consumption	Develop options during the detailed design for optimising construction and transport activities and minimising fuel usage (e.g. reduce the number of vehicle trips required). Mitigation of greenhouse gas emissions will follow a hierarchical approach: <ul style="list-style-type: none"> • Avoid emissions source • Reduce consumption • Improve energy efficiency • Replace with low emissions alternative • Offset 	Pre-construction
	Develop a fuel management strategy that incorporates project planning, logistics, operator education and maintenance.	Pre-construction
	Investigate use of biodiesel for vehicles, equipment and machinery used during the Project.	Pre-construction
	Adopt sustainable procurement practices where feasible.	Pre-construction
	Maintain construction plant and equipment in good working condition in accordance with manufacturer requirements. Stand down any equipment found to be emitting excessive exhaust emissions (such as excessive visible diesel smoke) until repaired.	Construction
	Turn off plant and machinery when not in use and fit with emission control devices complying with Australian Design Standards.	
	Reduce fuel consumption through the use of efficient plant and vehicles. Modern vehicles, equipment and machinery only will be used. These are more fuel efficient and have better emission controls than older models.	
Human Health		
Encounter contamination during construction.	Should unexpected contaminated soils be identified during any ground works, seek advice from a suitably qualified environmental consultant and notify the Hunter Water Project Manager. Complete any additional investigations/abatement in general accordance with guidelines developed or endorsed by NSW EPA. Include contingency plans for unexpected finds protocols for contaminated soils in the CSMP.	Construction
Exposure to chemicals during operation of the desalination plant	Locate chemical storage and delivery areas within bunded areas with a capacity of 110 per cent of chemical storage volume. Store chemicals in accordance with Australian Standards and maintain in accordance to equipment supplier recommendations. Implement safe work procedures for the handling of all chemicals including transfer, storage, spill prevention and clean up requirements. Develop an emergency response plan that includes dangerous goods spill scenarios.	Operation
Human health impacts at recreational swimming sites	Monitor enterococci levels in the discharge stream and nearby recreational swimming sites once the plant is operational to confirm the predicted low human health risk.	Operation
Potable water quality.	Manage potable water quality in accordance with the requirements of the Australian Drinking Water Guidelines (NHMRC, 2011) and NSW Health.	Operation
Cumulative impacts		
Cumulative impacts	Cumulative impacts will be considered as part of consistency reviews at major design milestones for the Project against the EIS, approval conditions and latest available Project information at the LMCC and DPI&E websites	Construction

APPENDIX 3 AREA OF IMPACT OF THE PROPOSAL
(Orange Hatched Area)



Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56



Hunter Water Corporation
Belmont Drought Response Desalination Plant

Hunter Water Review of Draft
Conditions of Approval

Project No. 22-19573
Revision No. 0
Date 17/03/2021

Attachment A