Permit

Environmental Protection Act 1994

Environmental authority P-EA-100232409

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Environmental authority number: P-EA-100232409

Environmental authority takes effect on the date that your related development approval (2103-21744 SRA) takes effect. This is the take effect date.

Environmental authority holder(s)

Name(s)	Registered address
Noosa Shire Council	Level 1, 9 Pelican St, Tewantin QLD

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 16 - Extraction and Screening 1: Dredging, in a year, the following quantity of material (b) more than 10,000t but not more than 100,000t	Lot 114 on MCH839107; and Unallocated State Land adjacent to Lot 114 on MCH839107.

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Queensland Government

Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days);

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or

b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

c) otherwise-on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

Amanda Gray
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 08 September 2022

Amanda Gray

Enquiries:
Coastal and Marine Assessment
Department of Environment and Science

Phone: 1300 130 372
Email: palm@des.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Location: Lot 114 on MCH839107; and Unallocated State Land adjacent to Lot 114 on MCH839107

Activity: ERA 16-(1b) Dredging more than 10,000t, but not more than 100,000t, in a year.

The environmentally relevant activitie(s) conducted at the location(s) as described above must be conducted in accordance with the following site-specific conditions of the approval.

Agency interest: General	
Condition number	**Condition**
G1	The quantity of material removed under this permit must not exceed 30,000 tonnes per year.
G2	The activity under this environmental authority must be undertaken between the months of April and September.
G3	The **activity** under this environmental authority must be conducted within the bounds and specifications of the following approved plans: • General Arrangement, prepared by BMT, dated 26/05/2021, Drawing Number A10342-02-02, revision C. • Typical Sections and Volumes, prepared by BMT, dated 29/01/2021, Drawing Number A10342-02-03, revision B.
G4	Dredge material is authorised for placement on Lot 114 on MCH839107 (Dog Beach) and the Unallocated State Land directly adjacent to Lot 114 on MCH839107, as per General Arrangement, prepared by BMT, dated 26/05/2021, Drawing Number A10342-02-02, revision C.
G5	All reasonable and practicable **measures** must be taken to prevent or minimise environmental harm caused by the **activity**.
G6	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable within 24 hours of becoming aware of the breach. **Records** must be kept including full details of the breach and any subsequent actions taken.
G7	Other than as permitted by this environmental authority, the **release of a contaminant into the environment** must not occur.
G8	Environmental monitoring results must be kept until surrender of this environmental authority. All other information and **records** that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. All information and **records** required by the conditions of this environmental authority must be provided to the **administering authority, or nominated delegate** upon request**,** within the required timeframe and in the specified format.
G9	An **appropriately qualified person(s)** must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.

G10	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (**NATA**) certification, or an equivalent certification, for such analyses. The only exception to this condition is for *in situ* monitoring of water quality parameters.
G11	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority**, to investigate a complaint of environmental nuisance arising from the activity. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
G12	At least five (5) business days prior to commencing a **dredge** operation, written notification must be provided to the **administering authority** of the following: 1. Commencement date of the **dredge operation**. 2. Expected end date of the **dredge operation**.
G13	The characterisation of sediments and suitability for **land**-based disposal of **dredged material** must be submitted to the **administering authority** in accordance with methodology provided in the latest edition of the: • *National Environment Protection (Assessment of Site Contamination) Amendment Measure*; and • *Queensland Acid Sulfate Soil Technical Manual* …and any other relevant guideline specified by the **administering authority**, at 20 business days prior to the commencement of the dredging **activity**. ***Note**: It is the responsibility of the operator to determine whether previous characterisation of sediments are suitable for assessing risks to **environmental values** associated with the **dredging** campaign to which this environmental authority relates.*
G14	Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system
G15	Any containment area specified in condition G14 must be certified by **appropriately qualified person(s)** (e.g. registered professional engineer of Queensland) and maintained to that condition.

G16	Prior to the commencement of the **dredging activity**, a **Dredge Management Plan** (**DMP**)[1] for the **activity** must be developed and implemented, and the **DMP** must contain the following: 1. Clearly stated aims and objectives. 2. Description of **dredging** operation including: a. type of equipment to be used in **dredging**; b. b) volume of **dredged material** to be removed, and duration and timing of the **dredging** campaign; c. methods to be utilised for transporting **dredged material**; and d. **dredged material** disposal methods. 3. Maps or plans showing: a. legend, north arrow and scale; b. b) boundaries of **dredging** operation; c. estimated or modelled **zone of influence** of sediment plumes; d. location of designated disposal sites; e. location of **sensitive receptors**; and f. f) all monitoring locations. 4. A detailed description of **sediment plume-associated monitoring** program including: a. sampling regime and methods; and b. b) monitoring sites. c. A detailed description of the assessment methodology to provide data in relation to **trigger values** that will define **alert levels**. d. Clearly set out data handling and evaluation procedures that demonstrate how exceedance of **alert levels** will be determined. 5. Management actions to be initiated if **alert levels** are exceeded. 6. Measures to ensure no permanent impacts to seagrasses outside the approved **dredge footprint**.
G17	The **Dredge Management Plan** must not be implemented or amended in a way that contravenes or is inconsistent with any condition of this authority.
G18	The **Dredge Management Plan (DMP)** must be provided to the **administering authority** at either of the addresses below: PALM@DES.qld.gov.au; or Department of Environment and Science Permit and License Management Implementation and Support Unit GPO Box 2454 Brisbane Qld 4001

Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.

Agency interest: Water	
Condition number	**Condition**
WT1	The only contaminants to be released to surface **waters** are: 1. Sediment necessarily disturbed during **dredging** at locations indicated in condition G3.
WT2	Where the **zone of influence** of a sediment plume generated by the **activity** encroaches upon a **sensitive receptor**, **slightly disturbed** or **high ecological value waters**, **sediment plume associated monitoring** (SPAM) is to be undertaken as follows: 1. **continuous visual monitoring**[2]; and 2. **spot-checking** (weekly and **event-based concern site** monitoring with **control** site-based checking).
WT3	Monitoring of contaminant releases to **waters** must be undertaken in accordance with condition WT2 and **records** of the results must be kept.
WT4	In addition to WT1, the release to **waters** must not: 1. Have any other properties at a concentration that is capable of causing environmental harm. 2. Produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.
WT5	Dredging must cease if the plume from the removal of material extends beyond the limits of the sand extraction zone as per **General Arrangement**, prepared by **BMT**, dated **26/05/2021**, Drawing Number **A10342-02-02**, revision **C**.
Agency interest: Land	
Condition number	**Condition**
L1	Other than as permitted within this environmental authority, contaminants must not be released to land.
L2	Treatment and management of acid sulfate soils must comply with the guidance provided in the current edition of the *Queensland Acid Sulfate Soil Technical Manual.*
Agency interest: Noise	
Condition number	**Condition**
N1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.

Agency interest: Waste	
Condition number	**Condition**
W1	All waste generated in carrying out the **activity** must be reused, recycled or removed to a facility that can lawfully accept the waste.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Science or its successor or predecessors.

Alert levels represent tiers in a hierarchy of increasing environmental risk and are defined by ***trigger values***. Three **alert levels** (low, moderate, and high) are typically used in a management action framework to indicate adverse conditions and guide management responses that aim to prevent and minimise environmental harm.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Completion of dredging means **dredged material** has been removed from the dredged basin in accordance with the plans outlined in condition G3.

Concern site means a site where a **sensitive receptor** occurs within the **zone of influence** of a sediment plume.

Continuous visual monitoring means visual appraisal of the sediment plume extent and intensity as performed by the dredge crew throughout the day on an ad hoc basis (i.e. whenever it is safe and nondisruptive to do so). The **continuous visual monitoring** requirement is intended to facilitate an early response feature in the dredge management plan, so that the dredge operator remains cognisant of the extent and intensity of the sediment plume being generated and reacts according to the dredge management plan accordingly. This requirement must be supplemented with empirical data (e.g. photography, when water quality instruments are not in use) taken at key indicative points in the tidal cycle (where applicable) to demonstrate the extent and intensity of the sediment plume**.**

Control site refers to a monitoring site located beyond the anticipated **zone of influence** of sediment plumes and has **site pairing** with one or more **test sites** or **sentinel sites**. In monitoring programs, **control sites** serve the same role as do **reference sites** but only for a defined subset of parameters.

Dredge Management Plan (DMP) is an environmental management plan for the dredging activity. It defines and describes the:

- scope, timing and duration of the dredging operation
- sediment plume-associated monitoring programs
- assessment of data, trigger values and alert levels, and
- management actions that may be required in response to adverse monitoring results.

The DMP includes an aim to prevent and minimise environmental harm to sensitive receptors as a result of the dredging activity.

Dredged material means mud, sand, coral, shingle, gravel, clay, earth and other material removed by dredging. Dredged material includes dredge spoil and extracted quarry material.

Dredge footprint is the area being dredged including batters.

Dredging includes extraction of mud, sand, coral, ballast, shingle, gravel, clay, earth and other material from the bed of Queensland tidal and non-tidal **waters**. **Dredging** does not include the banks of a waterway.

Environmental harm as defined in Chapter 1 of the Environmental Protection Act 1994

Environmental Nuisance as defined in Chapter 1 of the *Environmental Protection Act 1994*.

Environmental value means

- a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- another quality of the environment identified and declared to be an **environmental value** under an environmental protection policy or regulation.

High ecological value (HEV) is the 'management intent' for the 'ecosystem condition' as defined in Schedule 1 of the Environmental Protection Policy (Water) 2019 for scheduled waters, or the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (ANZECC & ARMCANZ 2000) for non-scheduled waters. HEV ecosystems are intact and typically exhibit relatively insignificant levels of anthropogenic impacts.

Land means any land, whether above or below the ordinary high-water mark at spring tides (i.e. includes **tidal land**).

Measures has the broadest interpretation and includes:

- Procedural **measures** such as standard operating procedures for **dredging** operations, environmental risk assessment, management actions, departmental direction and competency expectations under relevant guidelines
- Physical **measures** such as plant, equipment, physical objects (such as bunding, containment systems etc.), ecosystem monitoring and bathymetric surveys.

NATA means National Association of Testing Authorities.

Nominated delegate means another government agency that provides services to the **administering authority**.

Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

Reference site refers to a monitoring site located not only beyond the anticipated **zone of influence** of a sediment plume, but also beyond other sources of environmental impacts, and has **site pairing** with one or more **test sites** or **sentinel sites**. In monitoring programs, **reference sites** serve the same role as do **control sites** but can generally be suitable for a broader set of parameters.

Release of a contaminant into the environment means to:

- deposit, discharge, emit or disturb the contaminant
- cause or allow the contaminant to be deposited, discharged, emitted or disturbed
- fail to prevent the contaminant from being deposited, discharged emitted or disturbed
- allow the contaminant to escape
- fail to prevent the contaminant from escaping.

Sediment plume-associated monitoring (SPAM) means environmental monitoring associated with risk management of **sediment plume-associated impacts.**

Sediment plume-associated impacts are impacts associated with sediment plumes including turbidity and suspended solids concentrations, light attenuation or sedimentation rates elevated above either **control site** or **reference site** readings or baseline conditions for an equivalent time of year. Where **dredge material** possesses acid sulfate soil-related properties, sediment plume-associated impacts may also include pH, dissolved oxygen and metal and metalloid-related toxicity impacts.

Sentinel site is a **test site** that is situated between the disturbance source and the **sensitive receptor** and serves to provide earlier warning of developing adverse conditions than does a **test site.**

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the Nature Conservation Act 1992, the Marine Parks Act 2004 or a World Heritage Area; or
- a public park or garden; or
- for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.

Sensitive receptor includes biological **sensitive receptors** together with other **environmental values** sensitive to the effects of dredge-generated **sediment plume-associated impacts**.

Site pairing refers to monitoring sites that have a functional control-impact relationship, for example, **Control site** A is referenced to assess monitoring data collected from Concern Sites AA and AB, thus, Concern Sites AA and AB share site pairing with **Control Site** A.

Slightly disturbed is the 'management intent' for the 'ecosystem condition' as defined in Schedule 1 of the Environmental Protection (Water and Wetland Biodiversity) Policy 2019. Slightly disturbed ecosystems should generally be regarded as **high ecological value** ecosystems in all respects except for some relatively minor disturbances (usually water-quality related e.g. nutrient concentrations exceeding the water quality objective).

Spot-checking refers to a non-continuous monitoring approach performed at a fixed distance and direction from a mobile impact source (in the context of this guidance, **dredging** vessels) or at other key points of interest. Spot-checking may be routine or event-based, and may also include monitoring at fixed monitoring sites, such as **reference sites** or **control sites** and **test sites** or **sentinel sites**, although the same sites need not necessarily be monitored on every sampling event.

Test site is a **concern site** that functions as a test point for compliance, is a monitoring site situated within the area where a **sensitive receptor** occurs and where environmental monitoring-related assessment criteria (e.g. **trigger values**) apply.

Tidal land means land that is submerged at any time by tidal water.

Trigger values are physicochemical, parameter-specific measurement values used to indicate a condition where an **environmental value** or sensitive receptor may be at low, moderate or high risk, or some other risk related indicator.

Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

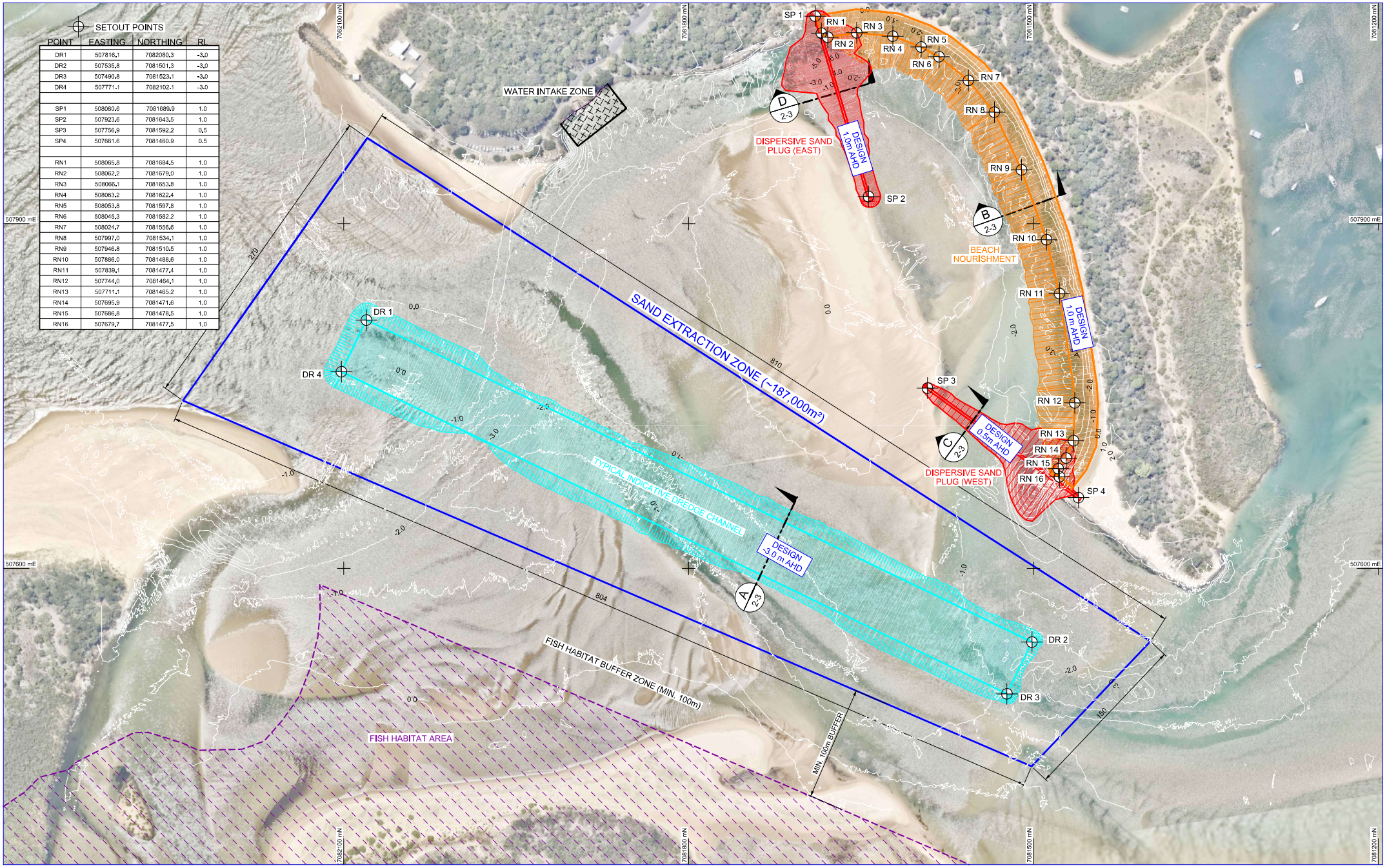
Zone of Influence of a sediment plume is, in its broadest application, defined by the **dredge footprint** and the area beyond the **dredge footprint** where at least some level of **sediment plume-associated impacts** are expected to occur. The overall zone of influence may be broken down into more risk-relevant sub-categories, such as the Zone of Unavoidable Loss (the **dredge footprint** and immediately adjacent areas), the Zone of Moderate Impact, or the Zone of Marginal Impact, with each zone being defined according to its purpose or role in environmental management.

Attachments

General Arrangement, prepared by BMT, dated 26/05/2021, Drawing Number A10342-02-02, revision C.

Typical Sections and Volumes, prepared by BMT, dated 29/01/2021, Drawing Number A10342-02-03, revision B.

END OF PERMIT



REV	DATE	AMENDMENT	DRN	APP
C	26/05/21	FISH BUFFER ZONE AMENDED TO MIN 100m	GKB	
B	29/01/21	ISSUE FOR TENDER	GKB	
A	14/01/21	INITIAL ISSUE	GKB	

ORIG SIZE A3 | ARCHIVE A10342-02-02C.DGN

NOTES

ISSUED FOR TENDER
NOT FOR CONSTRUCTION

SCALE 1 : 3000 @ A3

50 0 100 METRES

DATUM
VERTICAL AHD

HORIZONTAL MAP GRID OF AUSTRALIA BASED ON GDA 94, ZONE 56

GDA

BebbCart

BMT

ENGINEER	S.ROSS	
DRAWN	G.BEBBINGTON	14/01/2021
DRAFTING CHECK	S.MOUCHEMORE	15/01/2021
ENGINEERING CHECK	T.GREEN	
APPROVED PROJECT MGR	M.BARNES	

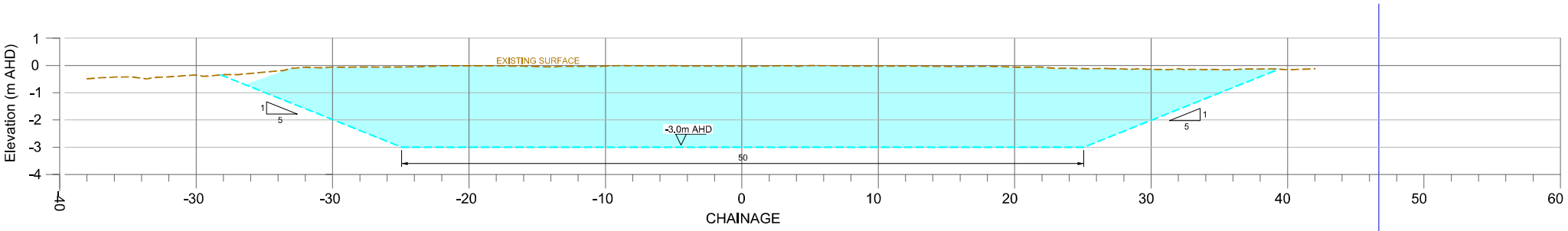
CLIENT NOOSA SHIRE COUNCIL

PROJECT NOOSA SPIT NOURISHMENT PROJECT

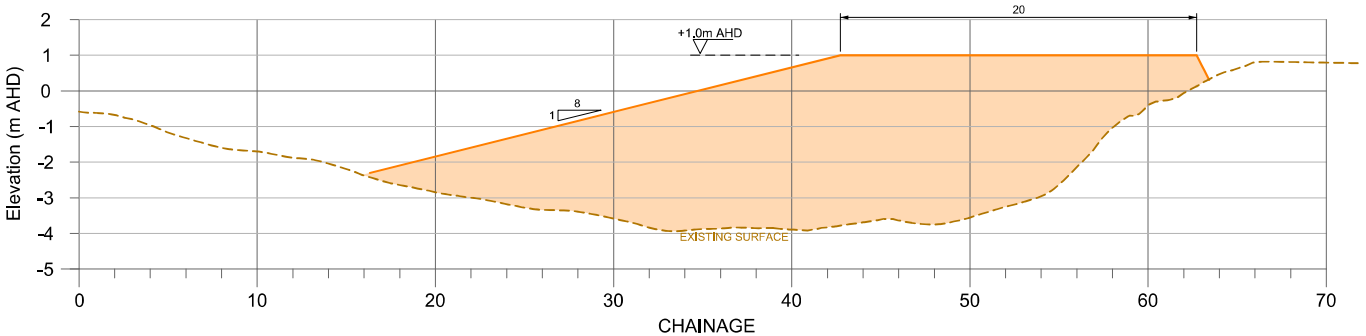
TITLE GENERAL ARRANGEMENT

DRAWING NUMBER A10342-02-02

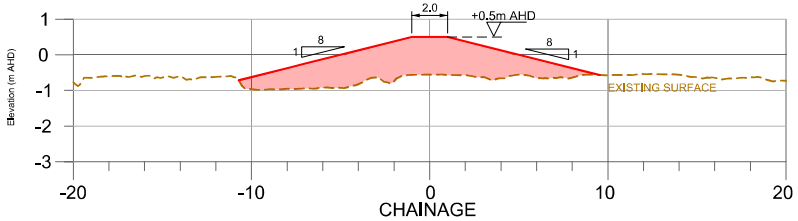
REV C



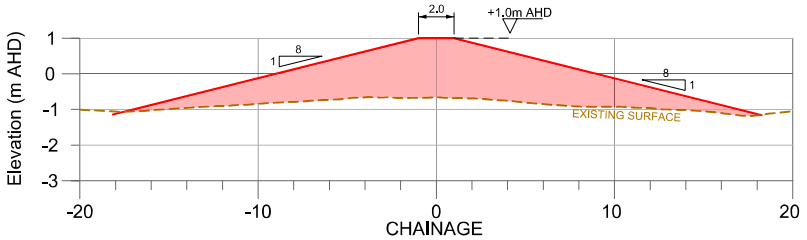
SECTION A
SCALE HORIZONTAL - 1:300
SCALE VERTICAL - 1:150 -
TYPICAL INDICATIVE DREDGE CHANNEL SECTION



SECTION B
SCALE HORIZONTAL - 1:300
SCALE VERTICAL - 1:150 -
TYPICAL BEACH NOURISHMENT SECTION



SECTION C
SCALE HORIZONTAL - 1:300
SCALE VERTICAL - 1:150 -
TYPICAL DISPERSIVE SAND PLUG (WEST) SECTION



SECTION D
SCALE HORIZONTAL - 1:300
SCALE VERTICAL - 1:150 -
TYPICAL DISPERSIVE SAND PLUG (EAST) SECTION

VOLUMES

ITEM	VOLUME (m³)
TYPICAL INDICATIVE DREDGE CHANNEL	80,000
DISPERSIVE SAND PLUG (WEST)	11,450
DISPERSIVE SAND PLUG (EAST)	10,850
BEACH NOURISHMENT	62,650
FILL TOTAL	**84,950**

NOTE:
MINIMUM REQUIRED TYPICAL CHANNEL DIMENSIONS SHOWN. ADDITIONAL VOLUME TO ACHIEVE PLACEMENT PROFILES TO BE SOURCED BY WIDENING OF CHANNEL.

REV	DATE	AMENDMENT	DRN	APP
B	29/01/21	ISSUE FOR TENDER	GKB	
A	14/01/21	INITIAL ISSUE	GKB	

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NOTES

ISSUED FOR TENDER
NOT FOR CONSTRUCTION

DATUM
VERTICAL AHD
HORIZONTAL N/A

GDA
BebbCart

BMT

ENGINEER	S.ROSS	
DRAWN	G.BEBBINGTON	14/01/2021
DRAFTING CHECK	S.MOUCHEMORE	15/01/2021
ENGINEERING CHECK	T.GREEN	
APPROVED PROJECT MGR	M.BARNES	

CLIENT NOOSA SHIRE COUNCIL
PROJECT NOOSA SPIT NOURISHMENT PROJECT
TITLE TYPICAL SECTIONS AND VOLUMES
DRAWING NUMBER A10342-02-03
REV A