

Other Controls

Pile driving and underwater blasting

1. Pile driving and underwater blasting may only be conducted during daylight hours (nominally 6 am to 9 pm in summer).
2. Establish a direct line of communication between the pile driving supervisor and the operations manager of the Van Diemen aquaculture facility.
3. Advise the operations manager of the Van Diemen aquaculture facility of planned pile driving dates and times, and of any variations to those plans.
4. Drive piles to refusal using a hydraulic hammer with noise insulation and hammer cushion.
5. Monitor turbidity during pile installations.
6. If turbidity monitoring indicates suspended solids concentrations above 50 mg/L for more than 30 minutes after cessation of pile installation, confine pile driving to first two-thirds of outgoing tides or use silt curtains.
7. No night construction or underwater blasting is permitted.
8. During pile driving, monitor underwater noise in the vicinity of the Van Diemen aquaculture facility.
9. If underwater noise exceeds background noise in the vicinity of the Van Diemen aquaculture facility or any other location identified in an Australian Grayling impact study, by more than 2 dB during pile driving, air bubble curtains will be used to reduce transmission of underwater noise.

Marine mammal watch

1. A marine mammal observer will be on duty at the wharf site at all times during pile driving and any other activity that could generate significant underwater noise.
2. If **whales or dolphins** are observed within their 2 km alert zone, the observer will advise the construction superintendent (construction activities may continue).
3. If **whales and dolphins** are observed within their 1 km exclusion zone, the observer will advise the construction superintendent, who will halt construction activities until those animals leave the exclusion zone.
4. If **seals or turtles** are observed within their 1 km alert zone, the observer will advise the construction superintendent (construction activities may continue).
5. If **seals or turtles** are observed within their 0.5 km exclusion zone, the observer will advise the construction superintendent, who will halt construction activities until those animals leave the exclusion zone.

Vessel movements

1. Any tugs or tender boats used to assist wharf construction must be sourced from within the Tamar Estuary as a first preference.
2. The maximum allowed vessel speed during construction manoeuvres is 2 knots.
3. The maximum allowed vessel speed when transiting the Tamar Estuary is 5 knots.
4. Vessel skippers and also deck officers must keep watch for marine mammals and take avoidance action when necessary (deviation or stopping), aiming to leave a minimum separation distance of 500 m.

Sedimentation controls during construction

1. Silt fences or equivalent will be installed wherever the drainage of a work area's catchment enters a drainage line.
2. Intermediary silt fences or equivalent will be installed within a work area wherever soil appears to be particularly vulnerable to erosion or wherever the distance to the main drainage line exceeds 50 m.
3. Topsoil stockpiles will be covered with vegetation chippings to minimise erosion and they will be bordered on the downslope side by a silt fence.
4. Sedimentation basins will be batch flocculated to ensure that discharged suspended solids concentrations do not exceed 50 mg/L. A turbidity meter may be used to measure this once a sound relationship between suspended solids and turbidity has been established.
5. Sedimentation monitoring during construction will include daily inspections. If sedimentation basins appear likely to overflow within the next 24 hours turbidity measurements will be made. If turbidity measurements indicates a suspended solid concentration greater than 40mg/L flocculation will be used unless downstream filtration systems (e.g. filtersocks) are in place.

Spill management

1. During any refuelling activities, including for vessels, at least 2 operators will be in attendance at all times.
2. Spill response equipment described in Attachment 1 of BBA-OCO-1000-1400-0016 will be stored at a site convenient to the wharf area and readily able to be loaded onto a spill response vessel.
3. The Spill Response Coordinator will confirm communication protocols with the Port of Launceston's spill response officer prior to construction commencing.
4. The Spill Response Coordinator will determine a spill response plan in consultation with the spill response officer of the Port of Launceston, which will include as a minimum the response procedures described in Attachment 1 of BBA-OCO-1000-1400-0016.
5. In the event of a spill to surface waters the Spill Response Coordinator will as soon as practicable advise the State Oil Pollution Control Officer, telephone 1800 005 171.
6. The use of dispersants for spill response is prohibited unless directed to do so by the State Oil Pollution Control Officer.

Bilge and ballast water

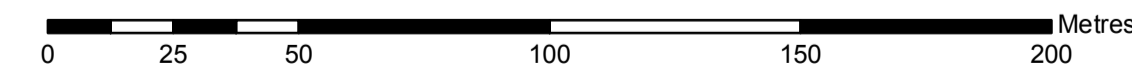
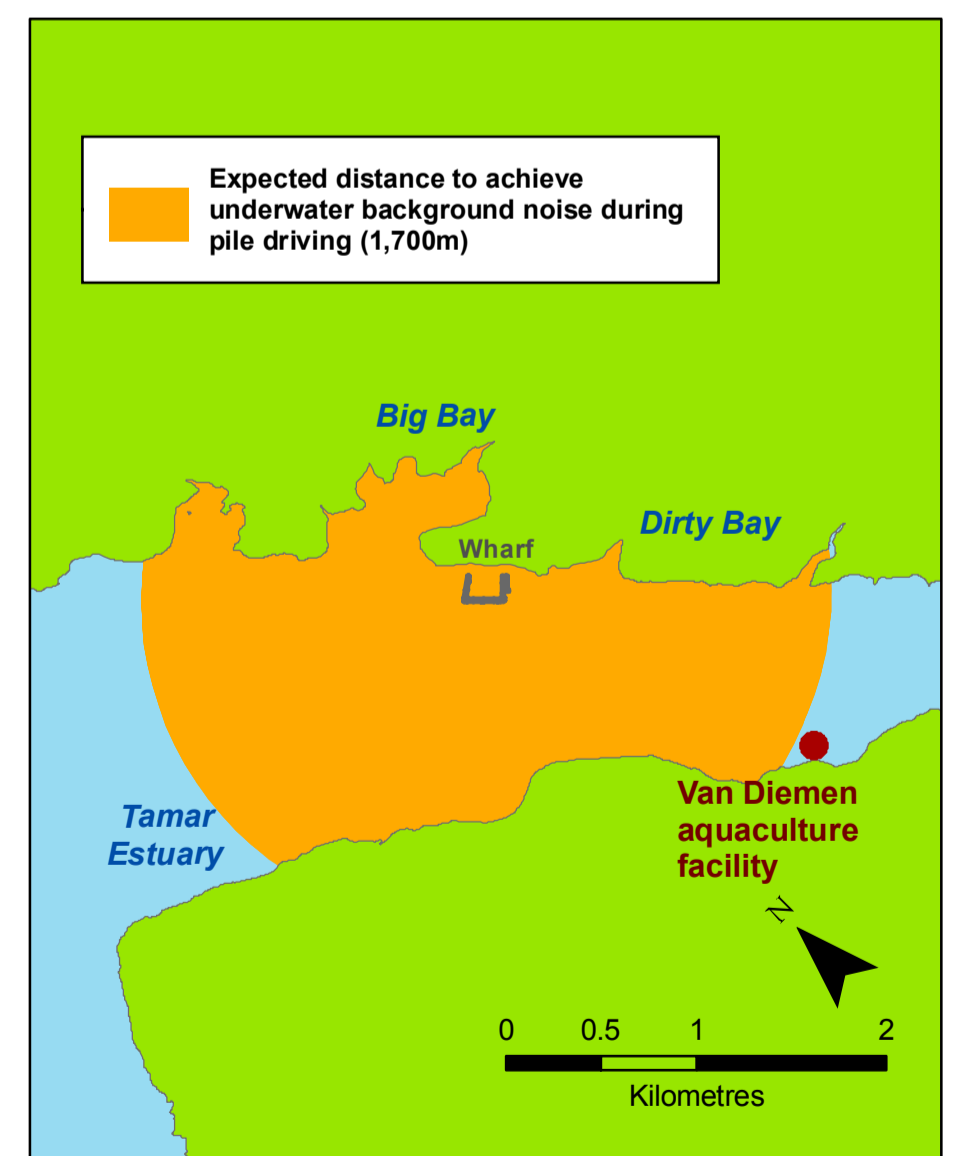
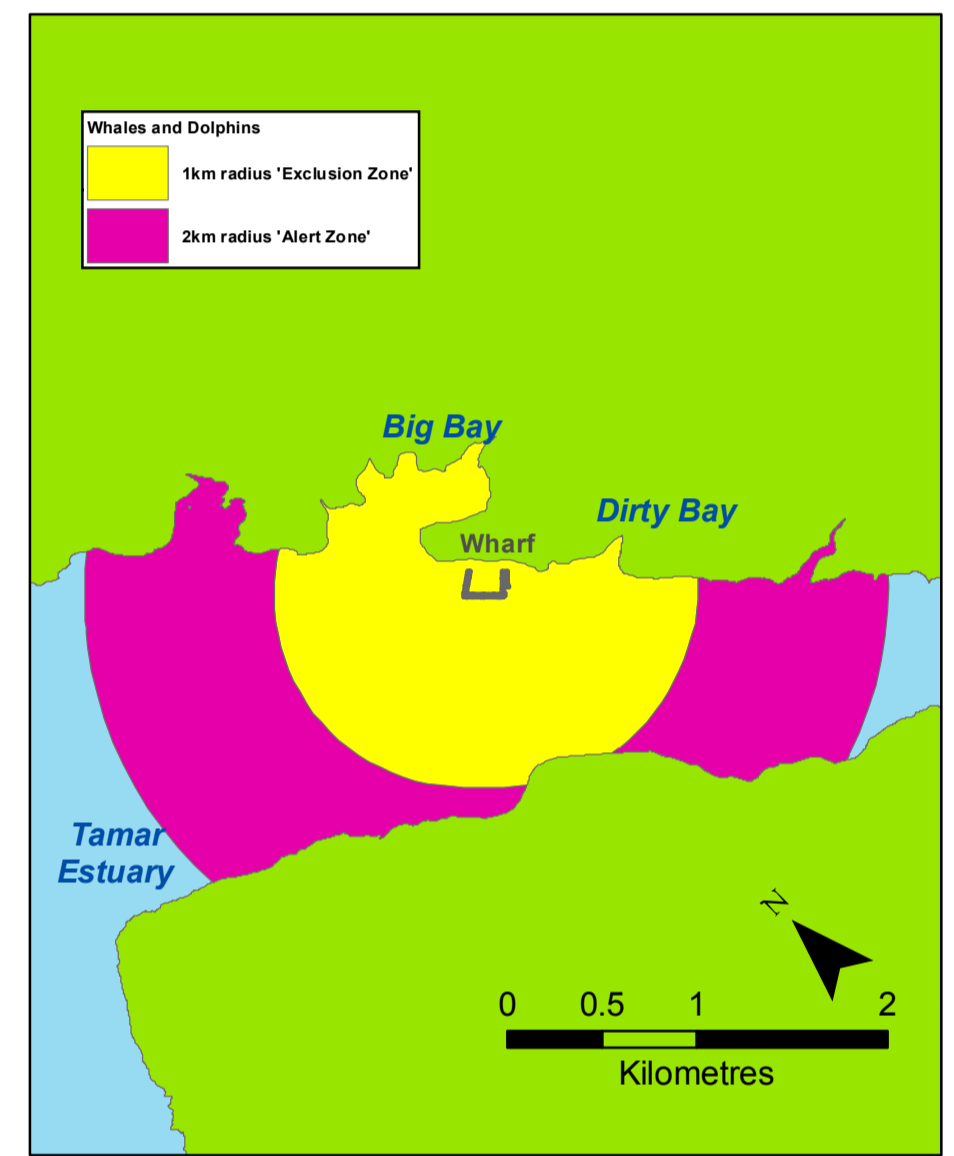
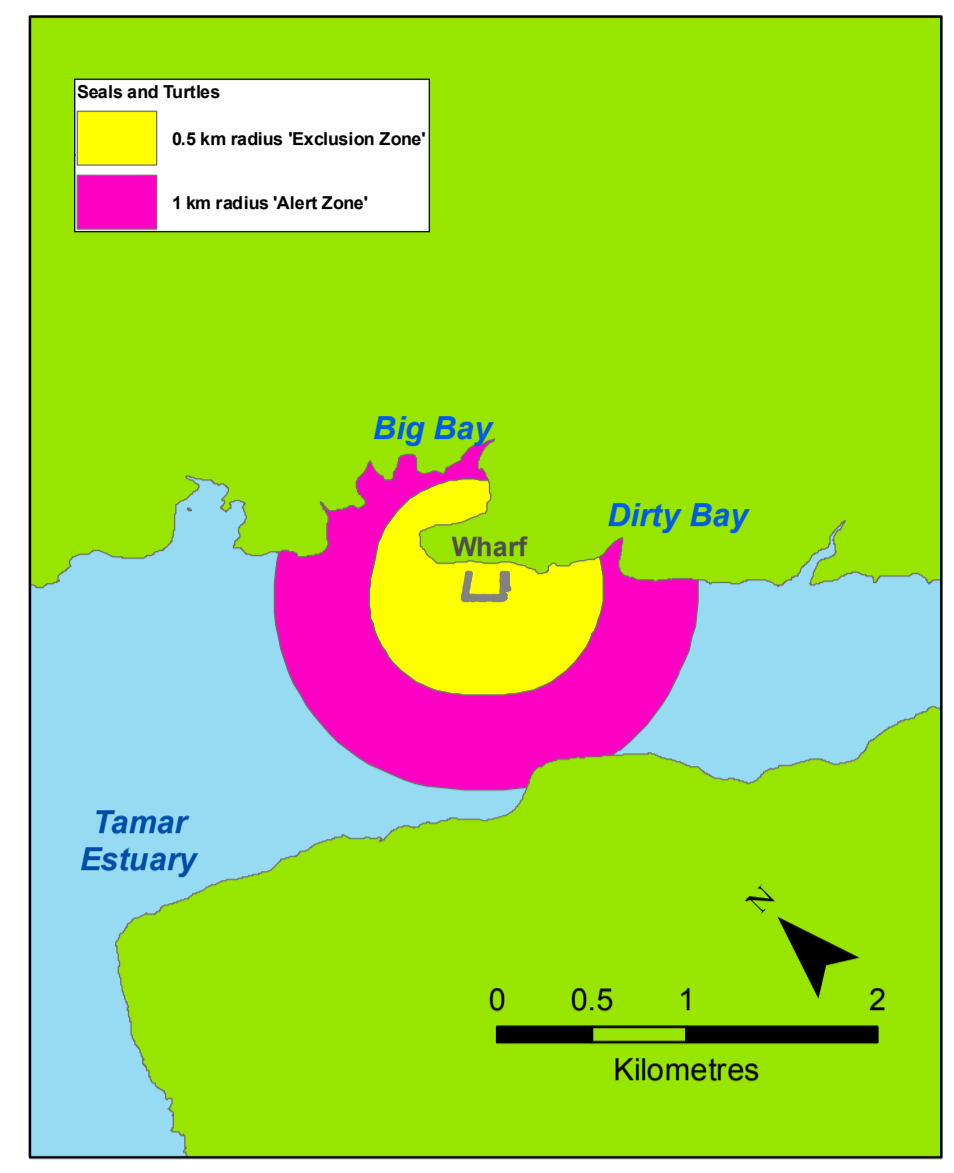
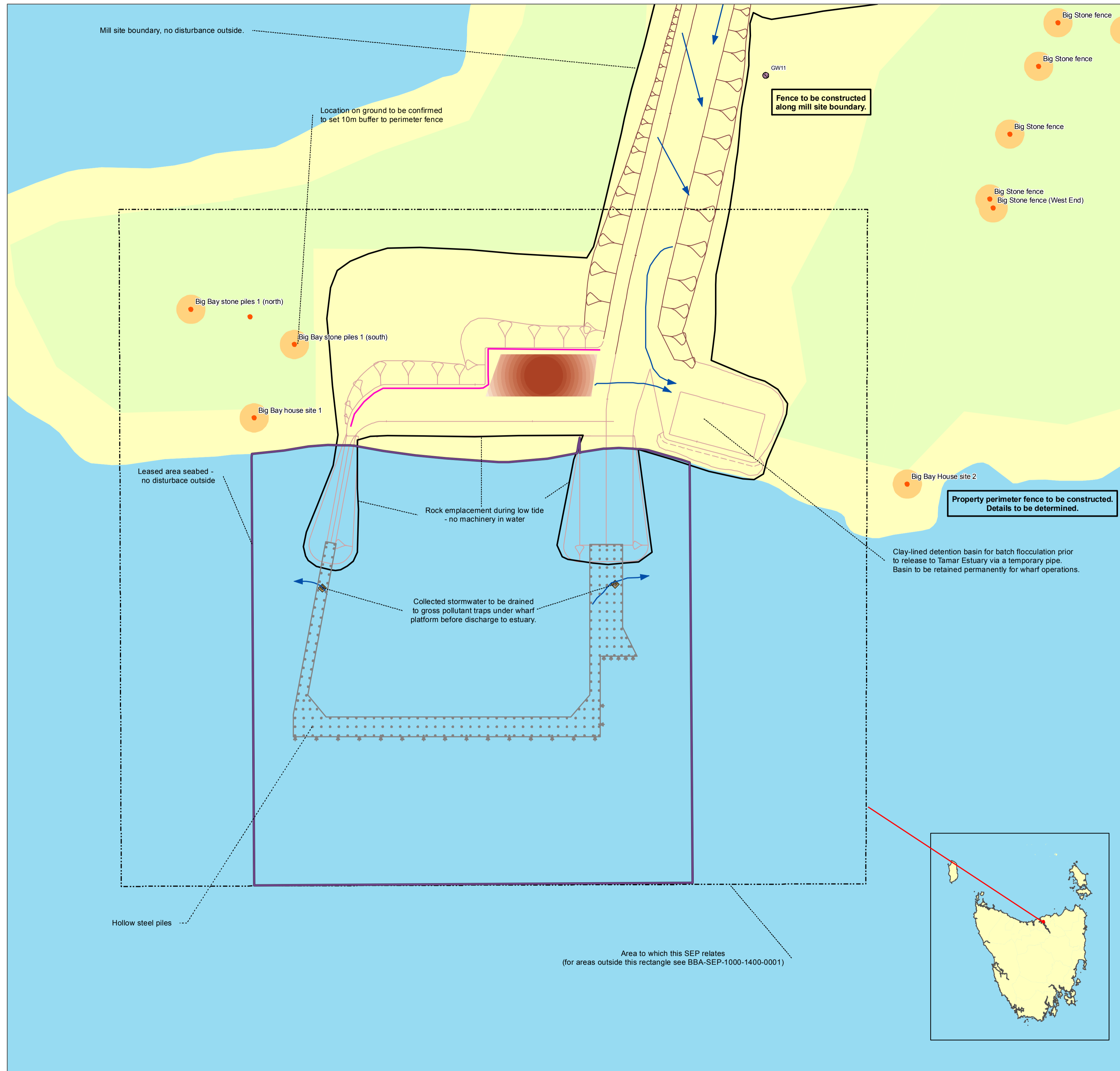
1. All vessels will comply with current Australian Quarantine Inspection Service (AQIS) procedures and the Australian Ballast Water Management Requirements.
2. No vessels may discharge bilge or waste waters other than to an approved reception facility.
3. No vessels may discharge ballast water.
4. No vessel hull cleaning may be undertaken.

European historic heritage sites

1. A minimum 10m exclusion zone will be established around the Big Stone Fence, the Big Bay Stone Piles and the Big Bay House Sites.
2. Management measures are required if blasting is to occur within 50m of historic heritage places.

Waste management

1. Recyclable and non-recyclable waste will be stored in separate bins prior to transport to the centralised waste storage facility (see BBA-OCO-1000-1400-0016).



Sources: Historic heritage (Gunn's)
 Mill site boundary (Gunn's)
 Mill site earth works (Gunn's)
 Reserves (Gunn's)
 Base data from theLIST, (C) State of Tasmania
 Water monitoring points (Pitt&Sherry)
 Gross pollutant trap (Pitt&Sherry)
 Water controls (Pitt&Sherry)
 Storage and laydown areas (Pitt&Sherry)
 Historic heritage exclusion zones (Pitt&Sherry)
 Datum: GDA94 Projection: MGA94 zone 55
 Produced by Pitt&Sherry (LMD) 22/01/2008
 File Ref: J:\HOB\2007\101 - 150\H07118\GIS\H07118_WharfSEP_n001_v004.mxd

Legend

- Leased area seabed
- Wharf SEP
- Wharf layout
- Silt fencing
- Direction of overland flow drainage paths
- Ground water monitoring point
- Gross Pollutant Trap with oil interceptor
- Mill site boundary - no disturbance outside
- Earth works inside wharf site SEP
- Earth works outside wharf site SEP
- Historic heritage sites
- Historic heritage exclusion zone
- Rock stockpile
- Gunn's Reserve network
- Land
- Tamar Estuary

Wharf SEP - Construction

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