Department of State Development, Manufacturing, Infrastructure and Planning

Statement of reasons for application 1808-6670 SRA
(Given under section 56 of the Planning Act 2016)

Departmental role: Referral agency

Applicant details
Applicant name: Torres Shire Council
c/- RPS Australia East Pty Ltd
Applicant contact details: 135 Abbott Street
Cairns QLD 4870
ian.doust@rpsgroup.com.au

Location details
Street address: Esplanade, Prince of Wales
Real property description: Adjacent to Lot 10 on SP148784 and Lot 73 on TS263
Local government area: Torres Shire Council

Development details
Development permit Material change of use for major utility (public transport facility) and Environmentally Relevant Activity (ERA16(1a)) dredging 1,000-10,000t/yr) and Operational work for prescribed tidal works

Assessment matters

<table>
<thead>
<tr>
<th>Aspect of development requiring code assessment</th>
<th>Applicable codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Material change of use</td>
<td>State Development Assessment Provisions, version 2.3, effective 2 July 2018 -</td>
</tr>
<tr>
<td></td>
<td>• State code 11: Removal, destruction or damage of marine plants</td>
</tr>
<tr>
<td></td>
<td>• State code 22: Environmentally relevant activities</td>
</tr>
<tr>
<td>2. Operational work</td>
<td>State Development Assessment Provisions, version 2.3, effective 2 July 2018 -</td>
</tr>
<tr>
<td></td>
<td>• State code 8: Coastal development and tidal works</td>
</tr>
</tbody>
</table>

Reasons for the department's decision
The reasons for the decision are:
• The department carried out an assessment of the development application against State code 11, State code 8 and and State code 22 and with conditions the proposal complies with the relevant performance outcomes.
- The proposal is a public facility and is located in the vicinity of an existing boat channel that includes an existing breakwater and is in a location where siltation is expected to be minimal.
- There is a demonstrated need for the proposed development and a functional requirement to be located on tidal land.
- The proposed development is coastal dependent development and is unlikely to impact the coastal processes in the area.
- The proposed development has been suitably designed to mitigate risks of coastal erosion and will not significantly increase the potential for coastal erosion.
- The proposed development avoids extensive seagrass beds to the north and south of the site.
- Construction methodology and location of works will minimise impacts on marine plants.
- Environmental controls will be installed and site rehabilitation where possible will be undertaken to mitigate impacts.
- Where marine plant disturbance is not reasonably possible, an offset for significant residual impacts on marine plants is to be provided.
- The proposed environmentally relevant activity is located and designed to avoid or mitigate environmental harm on environmental values of the natural environment and sensitive receptors.
- It is not expected that the dredge material proposed to be removed from the active coastal system during the dredging campaign is required to maintain coastal processes in the area.
- The proposed development is not proposing to dispose of material at sea and therefore avoids adverse impacts on receiving coastal environments.
- The land based disposal of dredge spoil within the local refuse disposal site is appropriate for the proposed development as it minimises impacts to receiving coastal environments.

### Decision

<table>
<thead>
<tr>
<th>Nature of Approval</th>
<th>Nature of response</th>
<th>Date of decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concurrence agency response</td>
<td>Attach conditions to any approval</td>
<td>8 January 2019</td>
</tr>
</tbody>
</table>

### Relevant material

- Development application material
- Information request response
- State Development Assessment Provisions published by the Department of State Development, Manufacturing, Infrastructure and Planning (v2.3)
- *Planning Act 2016*
- Planning Regulation 2017
- Development Assessment Rules
- SARA Development Assessment Mapping
8 January 2019

Chief Executive Officer
Torres Shire Council
PO Box 171
Thursday Island    Qld  4875
admin@torres.qld.gov.au

Attention:    Helena Charlton

Dear Sir/Madam

Referral agency response—with conditions
(Given under section 56 of the Planning Act 2016)

The development application described below was properly referred to the Department of State Development, Manufacturing, Infrastructure and Planning on 22 August 2018.

Applicant details

Applicant name:    Torres Shire Council
c/- RPS Australia East Pty Ltd
Applicant contact details:  135 Abbott Street
Cairns QLD 4870
ian.doust@rpsgroup.com.au

Location details

Street address:    Esplanade, Prince of Wales
Real property description: Adjacent to Lot 10 on SP148784 and Lot 73 on TS263
Local government area:    Torres Shire Council

Application details

Development permit   Material change of use for major utility (public transport facility) and Environmentally Relevant Activity (ERA16(1a)) dredging 1,000-10,000t/yr) and Operational work for prescribed tidal works
Referral triggers

The development application was referred to the department under the following provisions of the Planning Regulation 2017:

- 10.17.3.1.1 Tidal works or work in a coastal management district
- 10.5.4.2.1 Environmentally relevant activities (only if ERA has not been devolved to a local government)
- 10.6.3.3.2.1 Fisheries - marine plants

Conditions

Under section 56(1)(b)(i) of the Planning Act 2016 (the Act), the conditions set out in Attachment 1 must be attached to any development approval.

Reasons for decision to impose conditions

The department must provide reasons for the decision to impose conditions. These reasons are set out in Attachment 2.

Advice to the applicant

The department offers advice about the application to the applicant —see Attachment 3.

Approved plans and specifications

The department requires that the plans and specifications set out below and enclosed must be attached to any development approval.

<table>
<thead>
<tr>
<th>Drawing/report title</th>
<th>Prepared by</th>
<th>Date</th>
<th>Reference no.</th>
<th>Version/issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect of development: Material change of use (involving operational work)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prince of Wales Island – Harbour Marine Plant Disturbance</td>
<td>RPS</td>
<td>11/10/2018</td>
<td>PR137851</td>
<td>B</td>
</tr>
<tr>
<td>Prince of Wales Safe Harbour – Environment Management Plan Section 5.2</td>
<td>RPS</td>
<td>17 December 2018</td>
<td>PR137851/R77592</td>
<td>1</td>
</tr>
<tr>
<td>Aspect of development: Operational work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Layout Plan</td>
<td>SMEC</td>
<td>20/11/2018</td>
<td>16575-C05</td>
<td>F</td>
</tr>
<tr>
<td>Concept Site Sections</td>
<td>SMEC</td>
<td>20/11/2018</td>
<td>16575-C06</td>
<td>A</td>
</tr>
<tr>
<td>Esplanade Long, Sections and Details</td>
<td>SMEC</td>
<td>20/11/2018</td>
<td>16575-C07</td>
<td>E</td>
</tr>
<tr>
<td>Esplanade Cross Sections SH 1 of 4</td>
<td>SMEC</td>
<td>20/11/2018</td>
<td>16575-C08</td>
<td>E</td>
</tr>
<tr>
<td>Esplanade Cross Sections SH 2 of 4</td>
<td>SMEC</td>
<td>20/11/2018</td>
<td>16575-C09</td>
<td>E</td>
</tr>
<tr>
<td>Esplanade Cross Sections SH 3 of 4</td>
<td>SMEC</td>
<td>20/11/2018</td>
<td>16575-C10</td>
<td>E</td>
</tr>
<tr>
<td>Esplanade Cross Sections SH 4 of 4</td>
<td>SMEC</td>
<td>20/11/2018</td>
<td>16575-C11</td>
<td>E</td>
</tr>
<tr>
<td>Northern Breakwater Sections</td>
<td>SMEC</td>
<td>20/11/2018</td>
<td>16575-C12</td>
<td>E</td>
</tr>
</tbody>
</table>
A copy of this response has been sent to the applicant for their information.

For further information please contact Joanne Manson, Principal Planning Officer, SARA Far North QLD on 40373228 or via email CairnsSARA@dsdmip.qld.gov.au who will be pleased to assist.

Yours sincerely

Brett Nancarrow
Manager (Planning)

cc Torres Shire Council, c/- RPS Australia (East) Pty Ltd, ian.doust@rpsgroup.com.au

enc Attachment 1—Conditions to be imposed
Attachment 2—Reasons for decision to impose conditions
Attachment 3 —Advice to the applicant
Approved plans and specifications
## Attachment 1—Conditions to be imposed

<table>
<thead>
<tr>
<th>No.</th>
<th>Conditions</th>
<th>Condition timing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Material change of use (involving operational work)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.6.3.2.1 – Removal, destruction or damage or marine plants — The chief executive administering the Planning Act 2016 nominates the Director-General of the Department of Agriculture and Fisheries to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Development authorised under this approval is limited as follows:</td>
<td>At all times</td>
</tr>
<tr>
<td></td>
<td>- To remove, damage, destroy marine plants being limited to a total of 4793m², including 233m² of seagrass, 4560m² of algae, and one mangrove (being the permanent disturbance of 663m² and temporary disturbance of 4130m²) and shown in Prince of Wales Island – Harbour Marine Plant Disturbance, RPS, 11/10/2018, PR137851, version B.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The dredging must be carried out generally in accordance with Section 5.2 Surface Water Management of the Prince of Wales Safe Harbour Environmental Management Plan prepared by RPS Australia East Pty Ltd, dated 17 December 2018, reference PR137851/R77592, revision 1.</td>
<td>For the duration of the works the subject of this approval</td>
</tr>
<tr>
<td>3.</td>
<td>Provide written notice to <a href="mailto:notifications@daf.qld.gov.au">notifications@daf.qld.gov.au</a>, when the development authorised under this approval:</td>
<td>At least 5 business days but no greater than 20 business days prior to the commencement of the works.</td>
</tr>
<tr>
<td></td>
<td>(a) will start, and</td>
<td>Within 15 business days of the completion of the fisheries development works.</td>
</tr>
<tr>
<td></td>
<td>(b) when it has been completed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>These notices must state this permit number 1808-6670 SRA.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Spoil is not disposed of, or temporarily placed, on tidal lands or within waterways and is managed to prevent acid soil development.</td>
<td>At all times</td>
</tr>
<tr>
<td>5.</td>
<td>This fisheries development (as defined by the Fisheries Act 1994) constitutes a place that is required to be open for inspection by an inspector at all times, pursuant to section 145 of the Fisheries Act 1994.</td>
<td>At all times</td>
</tr>
<tr>
<td>6.</td>
<td>Marine plants authorised for removal and other material used in the development (e.g. debris, construction material, soil, etc.) are to be promptly removed from the intertidal zone.</td>
<td>For the duration of the works the subject of this approval and to be maintained.</td>
</tr>
<tr>
<td>7.</td>
<td>Enter into an agreed delivery arrangement to deliver an environmental offset in accordance with the Environmental Offsets Act 2014 to counterbalance the significant residual impacts on the matter/s of state environmental significance being 663m² of marine plants.</td>
<td>Prior to commencing any works that impact on marine plants.</td>
</tr>
</tbody>
</table>

## Operational work

**10.17.3.1.1 – Tidal works or work in a coastal management district** — The chief executive administering the Planning Act 2016 nominates the Director-General of the Department of Agriculture and Fisheries to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:

### Tidal works or work in a coastal management district

- **10.6.3.1.2**—The chief executive administering the Planning Act 2016 nominates the Director-General of the Department of Agriculture and Fisheries to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:

#### Material change of use (involving operational work)

- **10.6.3.2.1**—The chief executive administering the Planning Act 2016 nominates the Director-General of the Department of Agriculture and Fisheries to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:

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Environment and Science to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:

<p>| | |</p>
<table>
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<tr>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>8.</td>
<td>The development must be undertaken generally in accordance with the following plans:</td>
</tr>
<tr>
<td></td>
<td>- Overall Layout Plan, prepared by SMEC, dated 20/11/2018, reference 16575-C05 and revision F.</td>
</tr>
<tr>
<td></td>
<td>- Concept Site Sections, prepared by SMEC, dated 19/02/2018, reference 16575-C06 and revision A.</td>
</tr>
<tr>
<td></td>
<td>- Esplanade Long, Sections and Details, prepared by SMEC, dated 20/11/2018, reference 16575-C07 and revision E.</td>
</tr>
<tr>
<td></td>
<td>- Esplanade Cross Sections SH 1 of 4, prepared by SMEC, dated 20/11/2018, reference 16575-C08 and revision E.</td>
</tr>
<tr>
<td></td>
<td>- Esplanade Cross Sections SH 2 of 4, prepared by SMEC, dated 20/11/2018, reference 16575-C09 and revision E.</td>
</tr>
<tr>
<td></td>
<td>- Esplanade Cross Sections SH 3 of 4, prepared by SMEC, dated 20/11/2018, reference 16575-C10 and revision E.</td>
</tr>
<tr>
<td></td>
<td>- Esplanade Cross Sections SH 4 of 4, prepared by SMEC, dated 20/11/2018, reference 16575-C11 and revision E.</td>
</tr>
<tr>
<td></td>
<td>- Northern Breakwater Sections, prepared by SMEC, dated 20/11/2018, reference 16575-C12 and revision E.</td>
</tr>
<tr>
<td></td>
<td>- Barge Ramp Sections SH 1 of 2, prepared by SMEC, dated 20/11/2018 reference 16575-C13 and revision D.</td>
</tr>
<tr>
<td></td>
<td>- Barge Ramp Sections SH 2 of 2, prepared by SMEC, dated 20/11/2018 reference 16575-C14 and revision D.</td>
</tr>
<tr>
<td></td>
<td>- Southern Breakwater Sections SH 1 of 2, prepared by SMEC, dated 20/11/2018, reference 16575-C15 and revision E.</td>
</tr>
<tr>
<td></td>
<td>- Southern Breakwater Sections SH 1 of 2, prepared by SMEC, dated 20/11/2018, reference 16575-C16 and revision E.</td>
</tr>
<tr>
<td>9.</td>
<td>For the proposed works, only use clean materials and ensure that the works do not cause contamination.</td>
</tr>
<tr>
<td></td>
<td>For the duration of work.</td>
</tr>
<tr>
<td>10.</td>
<td>(a) An erosion and sediment control plan must be prepared by a suitably qualified person, in accordance with Best Practice Erosion and Sediment Control (BPESC) guidelines for Australia (International Erosion Control Association),</td>
</tr>
<tr>
<td></td>
<td>(b) Provide the erosion and sediment control plan to <a href="mailto:palm@des.qld.gov.au">palm@des.qld.gov.au</a> or mailed to: Department of Environment and Science Permit and License Management Implementation and Support Unit GPO Box 2454 Brisbane Qld 4001</td>
</tr>
<tr>
<td></td>
<td>(c) Undertake the development generally in accordance with the erosion and sediment control plan; and</td>
</tr>
<tr>
<td></td>
<td>(d) Provide written evidence from a suitably qualified person that all elements of this condition have been complied with.</td>
</tr>
<tr>
<td></td>
<td>(a) Prior to works occurring</td>
</tr>
<tr>
<td></td>
<td>(b) Prior to works occurring</td>
</tr>
<tr>
<td></td>
<td>(c) While works are occurring</td>
</tr>
<tr>
<td></td>
<td>(d) Upon completion of works.</td>
</tr>
</tbody>
</table>
11. Should the structures collapse, fail or otherwise suffer structural consequences which impact their integrity or ability to function as intended, the works must be:
   (a) Reinstated in accordance with this development approval; or
   (b) Removed and disposed of at an appropriately licensed facility.

   As soon as reasonable practicable subsequent to the damage.

12. (a) In the event that the works causes disturbance or oxidation of acid sulfate soil, the affected soil must be treated and thereafter managed (until the affected soil has been neutralised or contained) in accordance with the current *Queensland Acid Sulfate Soil Technical Manual: Soil management guidelines*, prepared by the Department of Science, Information Technology and Innovation (DSITI), 2014.

   (b) Certification by an appropriately qualified persons, confirming that the affected soil has been neutralised of contained, in accordance with (a) above is to be provided to palm@des.qld.gov.au or mailed to:
   Department of Environment and Science
   Permit and Licence Management
   Implementation and Support Unit
   GPO Box 2454
   Brisbane QLD 4001

   (a) Upon disturbance or oxidation until the affected soil has been neutralised or contained.

   (b) At the time the soils have been neutralised or contained.
Attachment 2—Reasons for decision to impose conditions

The reasons for this decision are:

- To ensure the development is carried out in the location and to the extent specified on the approved plans of development.
- To ensure impacts on marine plants are minimised and mitigated.
- To facilitate the monitoring of the development works for compliance purposes.
- To ensure the disturbance of acid sulfate soil is managed to prevent impacts on fisheries resources and fish habitats.
- To ensure the development will not increase the risk of mortality, disease or injury, or compromise the health and productivity of fisheries resources.
- To ensure a conservation outcome is achieved where a significant residual impact is occurring on a prescribed environmental matter.
- To ensure the development is carried out generally in accordance with the plans of development submitted with the application.
- To ensure the development avoids or minimises adverse impacts on coastal resources and their values.
- To ensure landowners are aware they must take responsibility for their damaged property as they can impact on coastal resources and public safety.
- To ensure any disturbance to acid sulfate soils is managed to prevent impacts to coastal environments.
## General advice – Further permits

<table>
<thead>
<tr>
<th>Protected flora and fauna - <em>Nature Conservation Act 1992</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> The development site is within a high risk area on the protected plants flora survey trigger map (<a href="http://www.ehp.qld.gov.au/licences-permits/plants-animals/protected-plants/map-request.php">http://www.ehp.qld.gov.au/licences-permits/plants-animals/protected-plants/map-request.php</a>). High risk areas are where endangered, vulnerable or near threatened plants are known to exist or are likely to exist. If the site of the proposed development is mapped within the high risk area you will need to conduct a flora survey in accordance with the Flora Survey Guidelines – Protected Plants (<a href="http://www.ehp.qld.gov.au/licences-permits/plants-animals/documents/gl-wl-pp-flora-survey.pdf">http://www.ehp.qld.gov.au/licences-permits/plants-animals/documents/gl-wl-pp-flora-survey.pdf</a>) to determine if there are any protected plants on site. If protected plants are found on site you will likely require a clearing permit under the <em>Nature Conservation Act 1992</em>. More information on the clearing of protected plants can be found on the following site <a href="http://www.ehp.qld.gov.au/licences-permits/plants-animals/protected-plants/index.html">http://www.ehp.qld.gov.au/licences-permits/plants-animals/protected-plants/index.html</a>.</td>
</tr>
</tbody>
</table>
Approved plans and specifications
5.2 Surface Water Management

The proposed dredge spoil area has a gentle slope across grading to the west of the site. Conceptual Erosion and Sediment control plan has been prepared to identify the likely ESC required to ensure compliance with EA conditions.

- Soils are described as low erosion risk.
- Dredged soils may be dispersive.
- Dredged soils have been assessed as low risk for Potential Acid Sulfate Soils.
- Continuous visual monitoring will be undertaken for dredging sediment plume.
- Water quality monitoring will be undertaken downstream of dredge spoil disposal area during or after rainfall events that create runoff.

<table>
<thead>
<tr>
<th>Erosion and Sediment Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Criteria</td>
</tr>
<tr>
<td>No downstream impact from dredging or dredge spoil storage area (visual monitoring of sediment in waters).</td>
</tr>
<tr>
<td>Controls</td>
</tr>
<tr>
<td>All long term (greater than 3 months) stockpiles during the wet season will be covered or sediment fences installed on the low side to prevent materials washing away into adjacent environments.</td>
</tr>
<tr>
<td>Minimise vegetation clearing and retain ground cover where practicable.</td>
</tr>
<tr>
<td>Where possible install controls to segregate ‘clean’ and dirty water i.e. bund around dredge spoil storage area.</td>
</tr>
<tr>
<td>For any changes in drainage direct all uncontaminated (clean) stormwater to stable land, ensuring that water is dispersed/diffused to prevent erosion.</td>
</tr>
<tr>
<td>Minimise the area and duration of soil exposure.</td>
</tr>
<tr>
<td>Encourage rehabilitation through spreading of topsoil and natural revegetation of disturbed areas as soon as possible.</td>
</tr>
</tbody>
</table>

Routine Monitoring

- Inspect ESC controls to determine their adequacy and maintenance requirements at dredge spoil storage area.
- Continuously visually monitor sediment plume during dredging.
- Spot check (weekly and even-based concern site monitoring with control site-based checking).

<table>
<thead>
<tr>
<th>Corrective Actions</th>
<th>Site Supervisor</th>
<th>Weekly / prior to and following rain events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fix defective erosion and sediment controls to ensure they are performing their intended purpose.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If the dredging plume extends more than 100m install sit fence around dredging area.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reporting

- Record ESC inspection findings and maintenance undertaken in diary.

- Site Supervisor Weekly / prior to and following rain events.
Extensive seagrass beds north of site
Northern breakwater, seagrass patch 230m²
Extensive seagrass beds south of site
Macro & Micro Algae, Coral and soft sponges
Lady carrying child off existing ferry
Extensive seagrass beds north of site
Extensive seagrass beds south of site
Four Mangroves to be untouched by construction
One Mangrove to be removed
Vines along rocky Bank expected to regrow along new rock wall.
Area south of site
Seagrass area 230m²

PLANS AND DOCUMENTS referred to in the REFERRAL AGENCY RESPONSE
SARA ref: 1608-0670 SRA
Date: 8 January 2019

Prince of Wales Island - Harbour
Marine Plant Disturbance

Legend
Landward Limit of Marine Plants
Area of Temporary Disturbance 4130m²
Site Area
Area of Permanent Disturbance 650m²
High Water Mark
Seagrass area 230m²

Datum MGA94 z54 | Scale 1:1,000 @ A3 | Date 11-10-2018 | Drawing PR137651-3 B
### 5.2 Surface Water Management

#### Initial Level of Risk
- The proposed dredge spoil storage area has a gentle slope across grading to the west of the site. Conceptual Erosion and Sediment controls plan has been prepared to identify the likely ESC required to ensure compliance with EA conditions.
- Soils are described as low erosion risk.
- Dredged soils may be dispersive.
- Dredged soils have been assessed as low risk for Potential Acid Sulfate Soils.
- Continuous visual monitoring will be undertaken for dredging sediment plume.
- Water quality monitoring will be undertaken downstream of dredge spoil disposal area during or after rainfall events that create runoff.

#### Medium - High

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Responsibility</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>No downstream impact from dredging or dredge spoil storage area (visual monitoring of sediment in waters).</td>
<td>Site Supervisor</td>
<td>Ongoing during dredging Prior to and post rainfall events downstream of dredge spoil storage area</td>
</tr>
</tbody>
</table>

### Erosion and Sediment Management

#### Controls
- All long term (greater than 3 months) stockpiles during the wet season will be covered or sediment fences installed on the low side to prevent materials washing away into adjacent environments.
- Minimise vegetation clearing and retain ground cover where practicable.
- Where possible install controls to segregate ‘clean’ and dirty water i.e. bund around dredge spoil storage area.
- For any changes in drainage direct all uncontaminated (clean) stormwater to stable land, ensuring that water is dispersed/diffused to prevent erosion.
- Minimise the area and duration of soil exposure.
- Encourage rehabilitation through spreading of topsoil and natural regeneration of disturbed areas as soon as possible.

#### Routine Monitoring
- Inspect ESC controls to determine their adequacy and maintenance requirements at dredge spoil storage area.
- Continuously visually monitor sediment plume during dredging.
- Spot check (weekly and even-based concern site monitoring with control site-based checking).

#### Corrective Actions
- Fix defective erosion and sediment controls to ensure they are performing their intended purpose.
- If the dredging plume extends more than 100m install silt fence around dredging area.

#### Reporting
- Record ESC inspection findings and maintenance undertaken in diary.
PEDESTRIAN RAMP & SHELTER

INVERT IN PAYERS, FALL TO OUTLET
REFGER LEVELS AND SETOUT DRG

105.000
5.285

PEDESTRIAN RAMP & SHELTER

INVERT IN PAYERS, FALL TO OUTLET
REFGER LEVELS AND SETOUT DRG

100.000
5.364

95.571
5.308

PEDESTRIAN RAMP & SHELTER

INVERT IN PAYERS, FALL TO OUTLET
REFGER LEVELS AND SETOUT DRG

95.000
5.281

106.469
5.219

PRIOR TO FILLING

BENCH EXISTING SURFACE
WHERE THE EXISTING SLOPE IS > 10%
**Issue Description**

VARIES MAX. 3m FROM EXISTING SURFACE

**Date**

- 20.11.18
- 08.11.18
- 11.09.18
- 04.09.18
- 25.06.18

**Drawing Title**

- SECTION

**Drawing Status**

- 80

**Scale**

- 1:50

**Drawing Title**

- LEVEL DATUM: ALL SURFACE & DESIGN DECREASED LEVELS ARE TO A H.A.D.

**Project**

- PRINCE OF WALES ISLAND
- LANDING & BARGE FACILITY

**Nature of Work**

- "SEALITE SL-70 2-3NM" SOLAR MARINE LANTERN INSTALLED ON A 3.0m HIGH, 100mm SQUARE MID-HINGED POLE WITH PROVISION OF PADLOCK PROTECTION TO PREVENT ACCESS TO THE LOCKING BOLT.

- MOUNT TO ONE OF THE ARMOUR ROCKS WITH 4-M30 STAINLESS STEEL ANCHORS EMBED 250mm MIN INTO SOUND ROCK ON A PROPRIETARY 40MPa NON-SHRINK GROUT PAD.

**Materials**

- CLASS 1, PRIMARY ARMOUR
  - M5D=1600kg, 2 LAYERS

- CLASS 2, PRIMARY ARMOUR
  - M5D=825kg, 2 LAYERS

- SECONDARY ARMOUR
  - M5D=150kg, 2 LAYERS

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**Client**

- SMEC TORRES SHIRE COUNCIL

**Contact Information**

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- Fax: (07) 4051 5455
- Email: admin@pderigineers.com.au
1.200m Wide Scour Toe Excavation 13 Rocks Wide x 2 Rocks Deep)

Concrete Barge Ramp & Gravel Pavement

BARGE RAMP SCOUR TOE
SECONDARY ARMOUR
2 LAYERS, MS=150kg, 0.8m

150 Thick Concrete Roadway Refer Notes DRG CO2

CONCRETE ROADWAY 6,000

SECTION

SCALE 1:100

TORRES SHIRE COUNCIL
PRINCE OF WALES ISLAND
LANDING & BARGE FACILITY

BARGE RAMP
SECTIONS SH.1 OF 2
MINIMUM 2 ROCKS WIDE AT TOE
DL-3.770 A.H.D.

STAGE 1 BATTER 1 on 4

2.5

SECTION @

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Project
TORRES SHIRE COUNCIL

Drawing Title
PRINCE OF WALES ISLAND LANDING & BARGE FACILITY

Drawing Number
16575-[16

Revision
E

Level, Grade & Design Member Levels

ISSUED FOR TENDER

SCALE 1:50

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Drawing Status
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To/From

Description

Date

Drawn

EDH

Sheet

1/1

TAC

Plot Date

09/07/18

Printed

E