

## **7. Planning Assessment**

### **7.1. Policy Overview**

This section provides an assessment of the proposed development against relevant planning and environmental policy including the applicable Development Plans.

As discussed in **Section 5.2.2.2**, two development plans, the Port Lincoln Development Plan and the Coastal Waters Development Plan, apply to different parts of the Port Lincoln Wharf site. However, a large area of the Wharf site is not located within either Development Plan. The policy of both adjacent Development Plans is therefore relevant to this area of the site.

Both of the Development Plans contain objectives and Principles of Development Control (PDC) which must be used to assess all proposed development within the respective areas of the site relevant to that Development Plan.

The objectives are the overarching goals for the area and are higher order policy statements. The PDC are generally more specific than the objectives and have a greater level of detail. The Port Lincoln Development Plan also has an additional policy tier for some PDC called design techniques. The design techniques are one way of meeting the relevant principle but are not mandatory.

Further detail on the policy structure and relevance of the two Development Plans is provided below.

#### **7.1.1. Port Lincoln (City) Development Plan**

This Development Plan is structured into four main layers:

- 1) Council Wide objectives and PDC which are relevant to all development within the Development Plan boundary.
- 2) Council Wide objectives and PDC which are relevant to specific land uses.
- 3) Council Wide objectives and PDC for environmental impacts.
- 4) Objectives and PDC for each zone and policy area.

This assessment has considered the relevant Council Wide policy and the policy for the Industry Zone and Lincoln Harbour Policy Area.

#### **7.1.2. Land Not Within a Council Area (Coastal Waters) Development Plan**

This Development Plan is structured into two main layers:

- 1) Objectives and PDC relevant to all development within coastal waters.

2) Objectives and PDC for each zone.

This assessment has considered relevant objectives and PDC for coastal waters. As the relevant area of the Wharf site is not located within a zone under the Development Plan, the zoning policy has not been considered in this assessment. In the Development Plan policy assessment (refer to **Section 7.2** below) references to an objective or PDC from this Development Plan relate to those for all development within coastal waters not a specific zone objective or PDC.

## **7.2. Development Plan Policy Assessment**

Within the Development Plans specific issues are generally covered by a number of objectives and PDC. Conversely, the individual objectives and principles often relate to more than one specific issue. In some instances the same or similar policy is contained in both Development Plans. To minimise duplication, this assessment has been grouped around the specific issues, as follows:

- Form and function (refer 7.2.1);
- Zoning (refer 7.2.2);
- Water and land use conflicts (refer 7.2.3);
- Appearance and siting of buildings and structures (refer 7.2.4);
- Bushfire protection (refer 7.2.5);
- Coastal hazards (refer 7.2.6);
- Coastal features (refer 7.2.7);
- Terrestrial vegetation (refer 7.2.8);
- Marine ecology (refer 7.2.9);
- Stormwater management and water quality (refer 7.2.10);
- Environmental management and pollution (refer 7.2.11);
- Waste management (refer 7.2.12);
- Contaminated land (refer 7.2.13).
- Visual amenity (refer 7.2.14);
- Heritage and conservation areas (refer 7.2.15); and
- Access and transport (refer 7.2.16);

The relevant policy provisions for both Development Plans are referenced for each issue. Although the assessment discussion is integrated, the assessment has considered the policy relevant to the three areas of the Wharf site that are within the jurisdiction of different Development Plan policy (refer to **Map 5-1**).

The policy provisions, referenced to this section of the Development Application are detailed in **Appendix P** for the Coastal Waters Development Plan and in **Appendix Q** for the Port Lincoln Development Plan.

### 7.2.1. Form and Function

**Development Plan Policy Relevant to Form and Function:**

**Land Not Within a Council Area (Coastal Waters) Development Plan**

- Objectives: 1, 2, 3, 24, 33, 35
- Principles of Development Control: 46

**Port Lincoln (City) Development Plan**

- Council Wide Objectives: 1, 2, 5, 6, 31, 32, 33
- Council Wide Principles of Development Control: 1, 2, 3, 4, 30, 131, 132, 225
- Industry Zone Principles of Development Control: 1
- Policy Area 12 Objectives: 1
- Policy Area 12 Principles of Development Control: 1

#### 7.2.1.1. Orderly Development

The proposed development of a mineral exporting facility at the Wharf site is considered to be the orderly and economic development of land, as the project development footprint is within the existing Wharf site. The proposal makes efficient use of the existing infrastructure at the Wharf site, utilising an existing rail unloading facility and Block 5 storage shed. This maximises the space available at the Wharf site and does not require an increase in the site area. As such, the proposal is considered to be infill development, is compact, not linear and is contiguous with the existing built up area. The proposed development therefore complies with Objectives 1, 2, 3 and 33 and PDC 46 of the Coastal Waters Development Plan and Council Wide Objectives 1, 2 and 5 and PDC 1, 2, 3(a-c), 4 and 225 of the Port Lincoln Development Plan.

#### 7.2.1.2. Economic Development

The proposed development is consistent with Council Wide Objective 6 of the Port Lincoln Development Plan as it would contribute to the reinforcement of the City's role as the regional service centre for the lower Eyre Peninsula by increasing economic activity and employment at the Wharf site.

The proposed development is consistent with the Port Lincoln Development Plan Council Wide PDC 225 and the Coastal Waters Development Plan PDC 46 for the economic provision of services and infrastructure as existing services and infrastructure are provided to the site and are easily accessible. The existing distribution of land uses would be maintained as the development area is within the Wharf site.

The development would increase the economic value of the Wharf site by increasing the utilisation of infrastructure, further diversifying exports and increasing export volumes. It would not impact the economic value of commodities currently exported from the Wharf as the proposed design segregates iron ore from other commodities such as grain and includes stringent dust control measures to reduce any risk of cross contamination with other products. It is therefore consistent with Coastal Waters Development Plan Objective 24.

### **7.2.1.3. Appropriate Development**

The proposed development is an appropriate use for the Wharf site and is compatible with its existing industrial nature and scale. The development complies with the industrial development Port Lincoln Development Plan Council Wide Objectives 31, 32 and 33 and PDCs 30 and 132 and Objective 35 of the Coastal Waters Development Plan.

The proposed facilities have been appropriately designed and located to integrate with existing activity at the Wharf site. For example, the conveyor CV7 connecting to the proposed shiploader has been angled at a sufficient height to enable the fertiliser trucks to continue to turn around within that part of the jetty.

The Wharf site has historically been developed in relatively close proximity to residential dwellings. The design of the proposed development has been mindful of the relatively close proximity of neighbouring residences and has minimised the project footprint in terms of visual impact and the potential for off-site environmental impacts which could affect existing amenity levels. The dust control, noise mitigation and other environmental management measures proposed as part of the development would ensure that the proposed development is appropriate for the close proximity to residential development as well as for the wider urban area of Port Lincoln. The proposed development is not expected to have a negative impact on future development in the adjacent industrial or residential areas. It therefore complies with Council Wide PDC 3(d-h) of the Port Lincoln Development Plan.

The part of the development located within the boundary of the Port Lincoln Development Plan is located within the appropriate 'Waterfront Industrial / Public Purpose' industrial area of the Port Lincoln Structure Plan and the Industrial Zone. It therefore complies with Council Wide PDC 1 and 131 and the Industry Zone PDC 1 of the Port Lincoln Development Plan.

The proposal is also consistent with the Port Lincoln Development Plan Policy Area 12 (Lincoln Harbor) Objectives and PDCs as the proposed minerals exporting facility requires both access to the waterfront and jetty for exporting and access to the railway to receive iron ore transported from the Wilgerup Mine site.



## 7.2.2. Zoning

### Development Plan Policy Relevant to Zoning:

#### Land Not Within a Council Area (Coastal Waters) Development Plan

- Objectives: 20, 32
- Principles of Development Control: 42, 57

#### Port Lincoln (City) Development Plan

- Council Wide Objectives: 64
- Council Wide Principles of Development Control: 221
- Industry Zone Objectives: 1
- Policy Area 12 Objectives: 1
- Policy Area 12 Principles of Development Control: 1

The Coastal Waters Development Plan Objectives 20 and 32 and PDC 42 relate to locating development in areas zoned for that purpose. The Coastal Waters Development Plan contains only one zone, the Aquaculture Zone. However, a Boston Island Zone is also proposed. Although the Coastal Waters Development Plan does not contain any zones relating to port activities, port activities are clearly intended to occur within existing port sites and are recognised within PDC 57. Principle 57 states that at the Port Lincoln Port, all development associated with port activities are assigned to Category 2 notification, except non-complying development. Additionally, the proposed development does not involve any of the types of development envisioned in the Aquaculture Zone or the proposed Boston Island Zone and is appropriately located outside of these zones. As such, the proposed development is considered to comply with the Coastal Waters Development Plan policy relating to zoning.

The proposed development is consistent with the intent of the Lincoln Harbor Policy Area of the Port Lincoln Development Plan. The Policy Area is intended for suitable developments requiring frontage or convenient access to the sea, harbour facilities or rail terminal. As discussed in **Section 7.2.1** above, the proposed minerals exporting facility requires both access to the waterfront and jetty for exporting and access to the railway to receive iron ore transported from the Wilgerup Mine site. The proposal is therefore a suitable development for the Policy Area and subsequently the Industrial Zone and complies with the relevant policy of the Port Lincoln Development Plan listed above.

### 7.2.3. Water and Land Use Conflicts

**Development Plan Policy Relevant to Water and Land Use Conflicts:**

**Land Not Within a Council Area (Coastal Waters) Development Plan**

- Objectives: 24, 30, 35
- Principles of Development Control: 25, 39, 40,

**Port Lincoln (City) Development Plan**

- Council Wide Objectives: 14, 32, 33, 61, 67
- Council Wide Principles of Development Control: 30, 39, 218, 219
- Industry Zone Objectives: 2

The proposed development is appropriately located within the existing Wharf site. It would not detract from the value of other sites of ecological, economic, heritage, cultural, scientific, environmental or educational importance within the locality. Further, as the development would occur within an operational port site and is consistent with this use, it would not impact the physical or economic resources of the coast or the existing port facilities. It therefore complies with Coastal Waters Development Plan Objectives 24 and 30 and PDC 39 and Port Lincoln Development Plan Council Wide Objectives 32 and 61 and PDC 39 and 218.

Coastal Waters Development Plan Objective 35(b)&(d) and Port Lincoln Development Plan Council Wide Objective 67(b)&(d) seek to minimise conflict between water and land based uses and ensure the fair and equitable sharing of marine and coastal resources. Council Wide Objective 14 of the Port Lincoln Development Plan is similar as it seeks to prevent adverse impact and conflict between land uses.

Existing uses of the Port Lincoln Wharf include recreational fishing, recreation and sightseeing activities using the Parnkalla Trail and the port associated uses of grain exports, fertiliser imports and commercial fishing vessels. The requirements of the existing Wharf uses were considered in the design of the proposed development to minimise the potential for conflict during construction and operation of the facility.

The proposed development is not expected to impact commercial fishing activity at the Port Lincoln Wharf site. Logistically, operation of the fishing fleet would be unaffected. Berth 4 is not used by the fishing fleet which currently use Berths 3, 7, 8, 9 and 10. As Berth 4 is located further out along the jetty, movement of the shiploader during ship loading would not interfere with fishing fleet activity. The mineral exporting facility would have a minimal impact on the existing space constraints at the Wharf site as the existing Block 5 storage shed would be used for the storage facility. The new conveyors would also be mostly raised above ground to provide clearance for vehicles (including heavy vehicles) to travel underneath.



Operation of the proposed mineral exporting facility is not expected to impact the Parnkalla Trail or recreational fishing on Berth 1. However, during construction some activities could necessitate temporary closure of the existing public access for safety reasons. If this is required, Centrex would work with Port Lincoln City Council and Flinders Ports to establish an alternative route during these temporary closures.

The design of the proposed mineral exporting facility has been developed so that cross contamination of grain would not occur. This has included consultation with ABB on the design of the conveyor system and the use of existing infrastructure. The proposed development includes an enclosed conveyor system which is separate from the ABB conveyors. Vessels transporting grain are currently loaded at Berth 5 (on the eastern side of the jetty) whilst vessels transporting iron ore would be loaded at Berth 4 on the western side of the jetty. Clear guidelines and operating protocols for sharing the jetty infrastructure would be established in line with the existing Port Lincoln Wharf Rules. Proposed dust control measures discussed in **Section 4.1.3** further reduce the potential for cross contamination.

Vessels transporting fertiliser to the Port Lincoln Wharf currently unloaded Berth 6 into trucks. The proposed conveyor CV7 which would connect to the proposed shiploader has been designed to angle at a sufficient height to enable the fertiliser trucks to continue to turn around within that part of the jetty.

The Port Lincoln Wharf site has historically been developed in relatively close proximity to residential dwellings. The design of the proposed development has been mindful of nearby residences and has minimised the project footprint in terms of visual impact and the potential for off-site environmental impacts which could affect existing amenity levels and result in land use conflicts. The dust control and other environmental management measures proposed as part of the development would ensure that the proposal is appropriate for the close proximity to residential development as well as for the wider urban area of Port Lincoln.

The proposed development is considered to comply with Objective 35(b)&(d) of the Coastal Waters Development Plan and Council Wide Objective 14 of the Port Lincoln Development Plan. It also complies with Council Wide Objective 33 and PDC 30 of the Port Lincoln Development Plan which relates to development being compatible with surrounding activities and appropriate future land uses. Likewise, it complies with the Port Lincoln Development Plan Industry Zone Objective 2 which seeks to protect industrial activities from incompatible uses.

The proposed development also complies with PDC 25(d) of the Coastal Waters Development Plan which relates to locating offshore development to not obstruct or interfere with shipping, anchorage and diving areas or wharf activities. The proposed development would be built to integrate with existing port infrastructure and wharf activities.

PDC 40 of the Coastal Waters Development Plan and Council Wide PDC 219 of the Port Lincoln Development Plan relates to the protection of existing aquaculture development. The proposed development is considered to comply as it is located within an existing port area. Additionally, vessels transporting iron ore would use existing commercial shipping channels. The proposed development would not result in port or shipping activities being located closer to existing aquaculture lease areas.

#### **7.2.4. Appearance and Siting of Buildings and Structures**

**Development Plan Policy Relevant to Appearance and Siting of Buildings and Structures:**  
**Port Lincoln (City) Development Plan**  
Council Wide Objectives: 68, 70  
Council Wide Principles of Development Control: 3, 150, 151, 152, 153, 154, 155, 156, 194, 227, 228, 230, 232

##### **7.2.4.1. Building Appearance**

The proposed development is considered to have an appearance compatible with the existing visual environment and built character of the Wharf site. The proposed infrastructure is of a built form and scale consistent with the existing infrastructure at the Wharf site and would be built using similar colours and materials.

The proposed development complies with the Port Lincoln Development Plan Objectives and PDCs listed above regarding building appearance. The applicable aspects of the development relevant to the Port Lincoln Development Plan are discussed below.

##### **Rail unloading facility**

The main change to the existing external appearance of the rail unloading facility would be the new cladding to enclose the eastern end of the shed. The new cladding would be a similar colour and texture to existing cladding on the western end of the shed. The existing roof form of the rail unloading facility would be maintained. Although enclosing the eastern end of the shed would increase the visual bulk of the shed, this would only be marginal and would generally be screened from view from outside of the Wharf site by the surrounding infrastructure such as the grain silos.

##### **In-loading conveyors**

A new conveyor (CV3) would be constructed to connect into the existing conveyor gallery to the storage facility. From the rail unloading facility the new conveyor would rise to the same height as the existing ABB conveyor gallery, approximately 11.45 metres above ground level. The new conveyor would be seen as a continuation of the existing built form on the site. Given that the surrounding infrastructure includes a number of raised conveyors of varying height, the new conveyor gallery would not increase the visual bulk of the site.

### **Storage facility**

The existing external appearance of the storage facility would be maintained, with a number of minor changes. These include a new external 2 metre high concrete wall around the eastern, southern and western sides of the facility, a new dust control systems on the northern side of the facility, 2 water tanks on the eastern side of the facility, a new door on the western and eastern sides of the facility and gutters and drain pipes. The vehicle washdown and daily check facility, attached annexe and the oil separator would also be construction to the east of the storage facility. These changes would not significantly alter the existing building mass and proportion or change the building height and roof form. The materials and colours used would be matched to the existing building.

### **Out-loading conveyors**

A new conveyor (CV5) would be constructed to connect from the storage facility to the Jetty. Across the land part of the Wharf site CV5 would be at ground level for approximately 100 metres along the northern side of the storage facility before rising to approximately 5.5 metres above ground level until reaching the Jetty. The ground level section of the conveyor would be enclosed within a gallery, with the cladding on the gallery matched to complement the exterior cladding of the storage facility. Similar to CV3, the new conveyor would not increase the visual bulk of the site as the surrounding infrastructure includes a number of raised conveyors of varying height.

#### **7.2.4.2. Streetscape Character and Set Back Distances**

The Industry Zone and the Lincoln Harbor Policy Area does not have a stated desired streetscape character. However, as detailed in **Section 6.10.2** the proposed development would not have a significant impact on the existing streetscape character or visual amenity of King Street, Queen Street, Horrocks Street or Gawler Terrace.

Port Lincoln Development Plan Council Wide PDC 151 and 152 relate to the set back of proposed development from allotment boundaries.

The adjoining allotment on the southern side of the Wharf site is an industrial land use. The new conveyor, CV3 would surface approximately 12 metres south-east of the rail unloading facility. Although this is closer to the boundary of the Wharf site than the rail unloading facility, it is still approximately 6 metres from the allotment boundary.

The Wharf site adjoins the Kirton Point Jetty car park and coastal reserve on the eastern side of the site. The eastern boundary of the Wharf site is the boundary closest to residential development. Although the rainwater tanks, the vehicle wash down and daily check facility, annexe and the oil separator would be located to the east of the storage facility they are all set back from the site boundary. The existing yacht storage area is between the proposed development and the eastern

Wharf site boundary. The new development near the eastern boundary does not increase the height or substantially increase the bulk of the existing infrastructure.

The adjoining allotment on the western side of the Wharf site is the ABB wheat silos and associated infrastructure which is an industrial land use. Existing wharf infrastructure is closer in proximity to the western boundary of the Wharf site than the proposed conveyor, CV5.

As the proposed development does not adjoin non-industrial land uses and is set back from allotment boundaries it complies with Port Lincoln Development Plan Council Wide PDCs 151 and 152.

#### **7.2.4.3. Overlooking and Overshadowing**

The proposed development would not cause overshadowing of non-industrial properties as set back distances would be sufficient (as explained in **Section 7.2.4.2** above) and the proposed development has a smaller visual bulk and height than existing infrastructure on the site. Adequate daylight would be maintained to adjoining land uses. Therefore the proposed development complies with Port Lincoln Development Plan Council Wide PDC 151.

The proposed development would not provide opportunity to overlook nearby residential properties. It therefore complies with Port Lincoln Development Plan Council Wide PDC 3(e) as it would not impact on the privacy of neighbouring properties.

#### **7.2.4.4. Landscaping**

Some landscaping currently exists within the Wharf site. This includes Oosterholt Park, a small triangular shaped grassed park within the Port Lincoln Development Plan boundary. Vegetation in this park is limited to several small trees and grass.

As part of the development, landscaping is proposed between the waterfront and storage facility which would improve the visual amenity along the Parnkalla Trail. The proposed landscaping is outlined in **Section 4.1.8.2**. The proposed landscaping is considered to be appropriate to the Wharf site and would provide some visual relief to the industrial structures on site.

Landscaping to screen the proposed infrastructure, such as the conveyor system, is not considered feasible. If vegetation was planted to screen the proposed infrastructure it would be ineffective in reducing the visual bulk of the site as a whole because the views of the proposed development would generally be screened by existing nearby infrastructure such as the storage silos.



The proposal complies with the Port Lincoln Development Plan Council Wide PDCs 154 and 232. The Design Techniques for Landscaping for PDC 154 are not considered to be appropriate for the Wharf site. Ten percent of the site area is not available for landscaping. Such a large area of landscaping would not be appropriate within the active Wharf site where significant areas of space are required for infrastructure, movement of goods and machinery manoeuvring.

#### **7.2.4.5. Fencing**

The proposed fencing complies with the relevant PDCs (Port Lincoln Development Plan Council Wide PDCs 153, 155 and 156). Fencing would be constructed around some of the proposed infrastructure to restrict access and ensure public safety. For example fences would be installed around the rail unloading facility's dust control system and around the CV3 conveyor where it surfaces from underground.

The fencing would generally be galvanised cyclone mesh fencing 1.8 metres high. This style of fencing is considered to be appropriate for the industrial nature of the site and would not detract from the visual amenity of non-industrial land uses in the locality.

The proposed development does not include any walls or fences along the site boundary.

#### **7.2.5. Bushfire Protection**

**Development Plan Policy Relevant to Bushfire Protection:**  
**Port Lincoln (City) Development Plan**

- Council Wide Objectives: 85, 86
- Council Wide Principles of Development Control: 285, 286, 287, 288

The bushfire protection provisions in the Port Lincoln Development Plan are not relevant as the proposed development is located within the excluded area, as demonstrated in the Development Plan Figure PtL(BPA)/3. The proposed development includes the provision of fire-fighting equipment as required by statutory requirements.

The Coastal Waters Development Plan does not have any provisions relevant to bushfire protection.

## 7.2.6. Coastal Hazards

### Development Plan Policy Relevant to Coastal Hazards:

#### Land Not Within a Council Area (Coastal Waters) Development Plan

- Objectives: 27, 28, 29
- Principles of Development Control: 5, 12, 27, 28, 30, 31, 32, 33, 35, 36, 37

#### Port Lincoln (City) Development Plan

- Council Wide Objectives: 56, 57, 59, 60
- Council Wide Principles of Development Control: 6, 143, 183, 190, 205, 206, 208, 209, 210, 211, 213, 214, 215

The existing Wharf site is an operational port located on reclaimed land. The coastline within the site is protected by rock walls and sheet piling. The proposed development does not include any further reclamation of land or changes to the existing coastline or any further piling or works on the seabed beneath the jetty.

The proposed development is in accordance with the *Coast Protection Board Policy Document*, as discussed in **Section 6.3**.

### 7.2.6.1. Coastal Flooding and Potential Sea Level Rise

The land component of the Wharf site is protected from flooding caused by coastal storm surge events or sea level rise (due to natural subsidence or climate change) by a rock wall and sheet piling.

Survey plans show that the heights of the existing coast protection infrastructure at the Wharf site meet the Coast Protection Board policy for sea level rise up to 2050 (e.g. heights are above the minimum site level of 2.55 m AHD) (refer to **Map 6-2**). Some parts of the coastal protection measures at the Wharf site would need to be raised in the future to meet the sea level rise policy to 2100. This could be achieved by reasonably practical means and would be the responsibility of Flinders Ports as the manager and lessee of the Wharf site.

As the land component of the proposed development is protected by existing coast protection infrastructure in accordance with Port Lincoln Development Plan Council Wide PDC 210 and Coastal Waters Development Plan PDC 32, the proposed development is adequately protected from flooding, severe storm surge events and potential sea level rise and therefore meets the following policy:

- Port Lincoln Development Plan Council Wide Objectives 56, 57 and 59 and Council Wide PDCs 43, 205, 206 and 208
- Coastal Waters Development Plan Objectives 27 and 28 and PDCs 27, 28, 30 and 32.

The proposed development located on the jetty includes a new conveyor system and a new shiploader. Coastal Waters Development Plan PDC 31 and Port Lincoln Development Plan Council Wide PDC 209 require buildings over tidal waters to be capable of being raised or protected by flood protection measures in the future or have a floor level of at least 1.25 metres above the standard sea-flood risk level. The standard sea-flood risk level for this site is the 100-year average return interval extreme sea level (1.85 m AHD, + 0.2 m wave set up, + 0.2 m wave run up) plus land subsidence for 50 years (0.3 m AHD) which equals 2.55 metres AHD. Therefore the floor levels of buildings on the jetty should be at a height of 3.8 metres AHD. The floor level of the proposed buildings on the jetty (i.e. the jetty level) would be approximately 3.6 metres AHD which is 0.2 metres below the height required by the relevant PDC. However the nature of the development requires the proposed infrastructure to be located on the jetty to allow loading of iron ore onto a vessel and as the buildings are designed to be in such a location and are not of a residential or commercial nature, it is considered reasonable that the proposed development does not fully meet the requirements of the relevant PDC. The protection or raising of the jetty, if required, would be the responsibility of Flinders Ports.

The Wharf site is adequately protected from potential inundation, and is in accordance with Port Lincoln (City) Council Wide PDC 6.

The proposed development is not sited in a location where access to essential and emergency services would be restricted by a 100-year average return interval extreme sea level event or sea level rise, in accordance with Port Lincoln Development Plan Council Wide PDC 215 and Coastal Waters Development Plan PDC 37.

#### **7.2.6.2. Coastal Erosion**

The existing Wharf site is protected from coastal erosion by a rock wall and sheet piling along the north (coastal) site boundary and no evidence of existing coastal erosion at the Wharf site has been detected. As the Wharf site is adequately protected from coastal erosion, the proposed development is consistent with Port Lincoln Development Plan Council Wide Objective 56 and PDC 211 and 213 and Coastal Waters Development Plan PDC 33 and 35.

As the Wharf site is adequately protected from coastal erosion, Port Lincoln Development Plan Council Wide PDC 214 and Coastal Waters Development Plan PDC 36 are not applicable as they apply to land at risk from long-term coastal erosion.

Additionally, in accordance with Port Lincoln Development Plan Council Wide PDC 183 and Coastal Waters Development Plan PDC 5, the proposed development would not aggravate coastal erosion as the existing rock wall and sheet piling would not be altered by the proposed works.

### 7.2.6.3. Coastal Ecology

The coastal ecology at the existing site is significantly modified by the existing Wharf development and reclamation of land. The proposed development would not require additional coastal protection infrastructure which could further alter the coastal ecology, processes or erosion, in accordance with Port Lincoln Development Plan Council Wide PDC 210 and Coastal Waters Development Plan PDC 32.

The proposed development is located on an existing urban industrial port site with limited ecological value and existing coast protection measures. No new coastal protection works or other intrusions into the marine environment such as jetty piles are proposed. Therefore, it complies with Port Lincoln Development Plan Council Wide PDC 190 and Coastal Waters Development Plan PDC 12 which require development to allow for natural geomorphologic and ecological adjustment to changing climate.

### 7.2.6.4. Public Expenditure on Environmental Protection

The existing Wharf site is leased and managed by Flinders Ports, which is responsible for coastal protection measures that protect the site from flooding, coastal erosion, potential sea level rise and coastal processes. The overall responsibility for on-site coastal protection measures would continue to remain with Flinders Ports. The proposed development would not require public expenditure on the protection of the development or the environment, in accordance with Port Lincoln Development Plan Council Wide Objective 60 and PDC 210 and Coastal Waters Development Plan Objective 29 and PDC 32 as this is the responsibility of Flinders Ports.

### 7.2.7. Coastal Features

<p><b>Development Plan Policy Relevant to Coastal Features:</b></p> <p><b>Land Not Within a Council Area (Coastal Waters) Development Plan</b></p> <ul style="list-style-type: none"><li>■ Objectives: 16, 21, 23, 25, 30</li><li>■ Principles of Development Control: 3, 4, 17</li></ul> <p><b>Port Lincoln (City) Development Plan</b></p> <ul style="list-style-type: none"><li>■ Council Wide Objectives: 51, 52, 58, 61, 67</li><li>■ Council Wide Principles of Development Control: 181, 182 , 195</li></ul>
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The proposed development is located in an existing operational port which is partly reclaimed land. The site is not natural coastline and does not have any features which are environmentally important or of high landscape or amenity value such as mangroves, wetlands, dunes, significant native vegetation, headlands, cliffs or beaches. Within the vicinity of the site the coastal landscape has been affected by urban development. East of the site is the main beach area of Port Lincoln. However, west of the site, between Kirton Jetty and Kirton Point, the coastline has natural features

of low lying coastal vegetation and rocks. The development would not impact these coastal features as it would be contained within the existing footprint of the Wharf site.

As such the proposed development complies with Port Lincoln Development Plan Council Wide Objectives 51, 52, 58, 61, 67 and PDCs 181, 182 and 195 and Coastal Waters Development Plan Objectives 16, 21, 23, 25 and 30 and PDC 3, 4 and 17(a) as it is not expected to impact any coastal features of environmental importance or that have a high landscape or amenity value.

### 7.2.8. Terrestrial Ecology

**Development Plan Policy Relevant to Terrestrial Ecology:**

**Land Not Within a Council Area (Coastal Waters) Development Plan**

- Objectives: 9, 11, 12, 13, 16, 17, 23, 24, 25

**Port Lincoln (City) Development Plan**

- Council Wide Objectives: 40, 41, 42, 43, 44, 45, 47, 50
- Council Wide Principles of Development Control: 165, 167, 168, 169, 170, 172, 177, 178, 179, 180

The Wharf site is largely covered with hard surfaces and has minimal vegetation on site. There is no evidence of any intact natural vegetation communities or threatened or endangered flora species. The majority of vegetation occurring at the proposed development site has been planted and is not remnant vegetation or endemic to the region. A detailed discussion of the terrestrial ecology of the site, including existing vegetation, is discussed in **Section 6.4**.

Minor clearance of vegetation may be required to ensure good line-of-sight for operational safety. Site vegetation is not indigenous to the region nor remnant vegetation, therefore approval for native vegetation clearance under the *Native Vegetation Act 1991* would not be required.

To offset any vegetation clearance it is proposed that the area to the north of the storage facility, which is traversed by the Parnkalla Trail, be landscaped with locally occurring native plant species. The proposed landscaping is outlined in **Section 4.1.8.2**. The proposed landscaping would include flora species which are indigenous to the area and appropriate for coastal locations, consistent with Coastal Waters Development Plan Objective 13 and Port Lincoln Development Plan Council Wide Objective 50.

An assessment of the likelihood of the occurrence of threatened fauna species was undertaken and it is considered unlikely that any threatened fauna species are present at the site. Potential impacts on terrestrial native fauna were considered including habitat loss, dust, noise and vibration and traffic. However due to the lack of habitat and the highly developed nature of the site these impacts are considered unlikely to affect terrestrial native fauna in the area. In addition, environmental management measures and monitoring have been detailed in the Construction and Operational Environmental Management Framework to address these potential impacts.

The proposed development complies with all provisions relating to the preservation of native flora and fauna, including Coastal Waters Development Plan Objectives 9, 11, 12, 13, 16, 17, 23, 24 and 25 and Port Lincoln Development Plan Council Wide Objectives 40, 41, 42, 43, 44, 45, 47, 50 and PDCs 165, 167, 168, 169, 170, 172, 177, 178, 179 and 180.

### 7.2.9. Marine Ecology

<p><b>Development Plan Policy Relevant to Marine Ecology:</b></p> <p><b>Land Not Within a Council Area (Coastal Waters) Development Plan</b></p> <ul style="list-style-type: none"><li>■ Objectives: 13, 16, 17, 21, 22, 23, 24, 35</li><li>■ Principles of Development Control: 4, 14, 17</li></ul> <p><b>Port Lincoln (City) Development Plan</b></p> <ul style="list-style-type: none"><li>■ Council Wide Objectives: 58, 67, 195</li></ul>
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The proposed development is sited in close proximity to the marine environment. Potential environmental impacts of the proposed development on marine ecology have been considered in the design and would be managed in accordance with Centrex’s Environmental Management Plan (EMP) Framework. An impact assessment of the proposed development on marine ecology is discussed in **Section 6.5**.

The marine environment within the Wharf site locality is not located within a protected area and is not specifically identified as an environmentally important feature. The Sir Joseph Banks Group Conservation Park is located more than 35 kilometres offshore from Port Lincoln and is very unlikely to be impacted by the proposed development. The proposed development would be managed to limit adverse environmental impacts, eg pollution and dust control measures, and preserve existing marine ecology, in accordance with Coastal Waters Development Plan Objectives 13, 16, 17, 21, 22, 23, 24 and PDCs 4, 14 and 17 and Port Lincoln Development Plan Council Wide Objectives 58 and 195.

The proposed development is not expected to require the construction of new piles for the existing jetty or any other development in the marine environment. All proposed development would be located on land or above the highest tide level at the existing jetty. Due to the location of the proposed development, significant impacts to the benthic environment surrounding the jetty structure are not expected to result from construction, in accordance with Coastal Waters Development Plan Objectives 35 and Port Lincoln Development Plan Council Wide Objective 67.

## 7.2.10. Stormwater Management and Water Quality

### **Development Plan Policy Relevant to Stormwater Management and Water Quality**

#### **Land Not Within a Council Area (Coastal Waters) Development Plan**

- Objectives: 22
- Principles of Development Control: 2, 7, 9, 10

#### **Port Lincoln (City) Development Plan**

- Council Wide Objectives: 48, 58, 89, 90, 91, 92, 93
- Council Wide Port Lincoln Principles of Development Control: 133, 142, 143, 144, 173, 174, 176, 180, 185, 187, 188, 295, 296, 297, 298, 299

The design and operational methodology of the proposed development incorporates environmental management measures, which aim to prevent water pollution and improve stormwater management. Wastewater would be generated at the vehicle wash down facility but would be contained in bunding and directed into an oil separator and treatment system for reuse. The stormwater drainage system currently in place in the storage facility would be modified to allow stormwater runoff from the roof to be collected, stored and reused for dust suppression and vehicle washing. The proposed development is consistent with Coastal Waters Development Plan Objective 22 and PDCs 2 and 7 and Port Lincoln Development Plan Council Wide Objective 58 and PDCs 133, 142, 143, 144, 180, 185, 187, 295, 296, 297 and 298.

In line with Port Lincoln Development Plan Council Wide PDC 299, the run-off water tanks would not pose a safety risk and would be designed to prevent mosquito breeding.

The potential for water pollution related to use of the existing rail unloading facility is not expected to increase as dust emissions would be contained and the current stormwater management would be maintained. Currently, stormwater runoff from this facility flows directly on to gravel and infiltrates the ground, or is directed into the existing stormwater management system that directs stormwater to the sea. Collection of stormwater at the rail unloading facility is not considered feasible, as there is no water use proposed within the facility. The roof area of the rail unloading facility would not be increased so the resultant volume of stormwater flowing to sea would remain unchanged. The proposed development is, therefore considered consistent with Port Lincoln Development Plan Council Wide Objective 48, 89, 90, 91, 92 and 93 and PDCs 133, 173, 176, 185, 295, 296, 297 and 298.

The proposed development is an already developed area and there are no natural drainage systems in the vicinity. The proposed development would not increase the volume of water flowing to the sea as the area of sealed surfaces would not be increased. The development would reduce volume of water flowing to sea compared with the current development by catching and using rainwater runoff from the storage facility roof. Currently, the runoff from the storage facility flows directly to

sea. This approach addresses Port Lincoln Development Plan Council Wide PDC 187 and Coastal Waters Development Plan PDC 9.

There is potential for interaction with groundwater due to construction of the new underground conveyor tunnels associated with the rail unloading facility where excavation would reach a depth of -3.4 metres AHD. In line with Coastal Waters Development Plan PDC 10 and Port Lincoln Development Plan Council Wide PDCs 174 and 188, the facility would be designed, and construction would be managed, to avoid deleterious effects on the quality and hydrology of groundwater.

### 7.2.11. Environmental Management and Pollution

#### Development Plan Policy Relevant to Environmental Management and Pollution:

##### Land not Within a Council Area (Coastal Waters) Development Plan

- Objectives: 22, 35

##### Port Lincoln (City) Development Plan

- Council Wide Objectives: 15, 49, 58, 60, 67
- Council Wide Principles of Development Control: 3, 29, 34, 35, 132, 133, 134, 145, 146, 147, 180
- Industry Zone Objectives: 3
- Industry Zone Principles of Development Control: 4

#### 7.2.11.1. Pollution Control and Environmental Management

The design and operational methodology of the proposed development incorporates environmental management measures that reduce the risk of pollution of the marine and onshore coastal environment. A detailed assessment of potential environmental impacts has been undertaken for the proposed development and is discussed in **Section 6**.

An Environmental Management Plan (EMP) framework for the proposed mineral exporting facility has been prepared in accordance with Centrex's commitment to best environmental practice and in line with EPA Codes of Practice, including the *Code of Practice for Materials Handling on Wharves*. It is described in **Section 8** of this report. The environmental impact assessment and EMP framework demonstrates that the proposed development is capable of meeting contemporary environmental standards.

The EMP framework has been developed to respond to the identified issues and potential impacts associated with the proposed minerals exporting facility during both the construction and operational phases of the development. Further detailed documentation regarding the implementation of these measures would be prepared following project approval, and incorporated into the construction and operational EMPs during the detailed design stage.

As such, the proposed development complies with the Coastal Waters Development Plan Objectives 22 and 35, Port Lincoln Development Plan Council Wide Objectives 49, 58, 60 and 67 and PDC 132, 133 and 180 and Port Lincoln Development Plan Industry Zone Objective 3 which all relate to protection of the environment from pollution.

#### **7.2.11.2. Proximity to Sensitive Land Uses**

The Port Lincoln Wharf site has historically been developed in relatively close proximity to residential dwellings. The development of the proposed mineral exporting facility would not decrease the existing separation distances. The closest dwelling on Gawler Terrace is located approximately 100 metres from the existing Block 5 storage shed which is proposed to be used as the storage facility. The closest dwelling on the corner of Queen Street and Cook Street is located 210 metres from the rail unloading facility.

The design of the proposed development has been mindful of nearby residences and has minimised the potential for off-site environmental impacts which could affect their existing amenity levels through environmental management measures such as dust control.

The proposed development complies with Port Lincoln Development Plan Council Wide PDCs 3, 29 and 132 and the Industry Zone PDC 4. It would not cause nuisance to neighbouring properties from noise, odour, vibration, smoke, light spill or glare, dust, waste emissions or hours of operation. The project would not impact public safety as safety signage and fencing would be installed, refer to **Section 4.1.8**.

A summary of the air quality and noise impact assessments are provided below.

#### **7.2.11.3. Air Quality**

The potential for dust emissions has been reduced by enclosing all storage areas, iron ore handling points and transfer points and incorporating dust control systems. During ship loading, enclosure of the transfer of iron ore between the shiploader and vessel is maximised as far as practical. The transfer point between the conveyor CV7 and shiploader boom is completely enclosed. The iron ore is directed out of the enclosed shiploader boom through a length adjustable discharge chute (a telescopic chute) which reaches into the vessel hatch. Using the telescopic chute and water sprays for ship loading significantly reduces the potential for even small dust particles (PM<sub>10</sub>) to be released into the environment.

The Council Wide Objective 15 and Principle 134 of the Port Lincoln Development Plan relate to the protection of community health. The air quality impact assessment discussed in **Section 0** includes a quantitative assessment of potential human health impacts from emissions of small particles (PM<sub>10</sub>) that exist in dust clouds. The health effects of small particles are largely related to

the extent to which they can penetrate the respiratory tract. The potential emission sources of PM<sub>10</sub> from the proposed development are from the shiploader and the ship stack. Although these sources are located outside of the Port Lincoln Development Plan boundary, they comply with the air quality provisions in this Development Plan. The air quality modelling undertaken for the impact assessment found that the expected levels of PM<sub>10</sub> from the development are relatively small and would be well below the *National Environment Protection Measure (NEPM) Ambient Air Quality* PM<sub>10</sub> standard and guideline. As such the proposed development is unlikely to have a significant impact on the health of the community and is within air quality standards.

#### **7.2.11.4. Noise**

A number of policies within the Port Lincoln Development Plan relate to noise emissions including Council Wide PDCs 3, 29, 34, 35 and 147. The noise impact assessment undertaken for the proposed development is discussed in **Section 6.7.4**.

The potential noise emissions generated by the proposed development have been reduced through the design of the proposed mineral exporting facility. This is achieved by enclosing operating equipment such as the rail unloading facility and conveyors and locating the exhaust fans for the dust control systems behind buildings where possible. These measures act to shield noise sources from residential dwellings in the locality.

Amenity impacts from noise shift changes are expected to be negligible. Road access to the Wharf site is via King Street through the existing industrial area. Additionally, with a maximum of only 6 staff per shift at the mineral exporting facility the number of vehicles entering and exiting the site at shift change over would not be significant.

Noise modelling has been undertaken for the proposed development to assess the potential noise emissions against the *Environment Protection (Noise) Policy 2007*. The modelling results discussed in **Section 6.7.4.1** found that noise from the 24 hour operation of the mineral exporting facility would be below the residential night time noise goal at the nearest residential properties on Queen Street and Gawler Terrace.

The noise impact assessment also found that ground vibration from the proposed development would be minimal and is unlikely to affect residential dwellings. Noise from the rail operations is also expected to be similar to the level of noise from the current grain unloading operations.

Construction noise during the 9 to 12 month construction period would also be managed to minimise the potential for amenity impacts on nearby residents. Management measures for construction would include:

- Restricting activities that could cause high noise levels to between 7am and 7pm on weekdays

- Locating noisy equipment or processes in strategic locations so that their impact on neighbouring premises is minimised (e.g. work at locations further away from residential buildings or locate work or processes behind barriers such as buildings etc).
  - Ensuring that noise reduction devices such as mufflers are fitted and operating effectively.
- Additionally, existing background noise from current site operations would reduce the potential impact of construction noise.

The proposed development is considered to comply with all of the policy relevant to noise emissions and is not expected to generate unreasonable interference for neighbouring residents.

#### **7.2.11.5. Chemicals and Materials Storage**

Port Lincoln Development Plan Council Wide PDCs 145 and 146 relate to the appropriate storage of chemicals and materials. Chemicals and materials stored within the Wharf site as part of the minerals exporting facility would be located within the maintenance facility. This is the existing road hopper shed (which would be modified) and is located adjacent to the storage facility on the western side. Chemicals and materials would be stored, handled and disposed of in accordance with the relevant Australian Standards, including AS 1940-2004 (*Storage and handling of flammable and combustible liquids*) and EPA guidelines.

As part of the operational management measures, storage of chemicals would be limited on site. It is intended to reduce the number of different type of chemicals required to be stored through the selection of equipment that uses the same types of chemicals where practical. It is anticipated that chemicals stored on site would be limited to hydraulic fluids and a bio-degradable wetting agent used to enhance water misting properties. These would be stored separately within bunded areas within the maintenance facility in order to guard against spill hazards and air or water borne migration from the storage area. Any chemical spills within the bunded areas would be removed off-site to a licensed waste depot by a licensed waste carrier.

Mechanical and electrical components for the mineral exporting facility would also be stored in an appropriate way within the maintenance facility. This would be limited to common items such as conveyor rollers, pouch conveyor drives, electric motors, circuit breakers, proximity switches, hydraulic hosing and conveyor belting.

Hydrocarbon spill kits would be kept on site as part of the emergency spill contingency plan. If a hydrocarbon spill kit is used, material containing the hydrocarbon would be isolated and disposed of at a licensed disposal facility.

The proposed development therefore complies with Port Lincoln Development Plan Council Wide PDCs 145 and 146.

## 7.2.12. Waste Management

**Development Plan Policy Relevant to Waste Management:**

**Land not Within a Council Area (Coastal Waters) Development Plan**

- Principles of Development Control: 7

**Port Lincoln (City) Development Plan**

- Council Wide Objectives: 81
- Council Wide Principles of Development Control: 133, 149, 175, 185, 258, 261
- Industry Zone Principles of Development Control: 3

Waste generated by the proposed development would be limited to wastewater from the vehicle wash down facility (including sludge from the oil separator), waste hydrocarbons from minor front end loader maintenance, domestic solid waste (e.g. food wrappers) and solid waste from infrastructure and vehicle maintenance (e.g. scrap metal and timber pallets).

The design and operational methodology of the proposed development aims to minimise waste and to reuse and recycle waste materials where possible. Waste generated by the development would be managed to prevent pollution and other adverse environmental impacts. Waste management provisions would be incorporated, and undertaken in accordance with, the Construction and Operational Environmental Management Plans.

Wastewater from the vehicle wash down facility would be collected, treated and reused. Existing solid waste management arrangements would be used where possible, particularly for domestic waste. Recyclable solid waste (e.g. scrap metal) would be stockpiled in separate waste storage bins ready for drop off or collection for recycling.

Any minor maintenance or daily checks of front end loaders would be undertaken in the bunded vehicle wash down facility that would be fitted with an oil separator to collect any incidental or accidental hydrocarbon spills. Hydrocarbon spill kits would be kept on site as part of the emergency spill contingency plan. If a hydrocarbon spill kit is used, material containing the hydrocarbon would be isolated and disposed of at a licensed disposal facility.

The proposed waste management is consistent with Coastal Waters Development Plan PDC 7, Port Lincoln Development Plan Council Wide Objective 81, Port Lincoln Development Plan Council Wide PDC 133, 149, 175, 185, 258 and 261 and Port Lincoln Development Plan Industry Zone PDC 3.

### 7.2.13. Contaminated Land

**Development Plan Policy Relevant to Bushfire Protection:**

**Port Lincoln (City) Development Plan**

- Council Wide Objectives: 94, 95, 96
- Council Wide Principles of Development Control: 217, 300

A site contamination assessment has been undertaken for the proposed development and is discussed in **Section 6.9**. This assessment reviewed several reports from environmental site assessments and investigations undertaken previously by PPK between 1998 and 2001 at the Port Lincoln Wharf site. The reports were made available by Flinders Ports to SKM for review, however the documents remain confidential. Centrex understands that the EPA has received copies of these reports previously, but will provide these reports to the State Government for review on request.

The review was undertaken to determine the potential for site contamination to be present and the subsequent potential constraints on the proposal. The review and assessment also considered the potential for the proposed development to exacerbate any existing contamination on the site.

No site contamination was identified in areas of the site where development is proposed.

After reviewing the PPK reports, the site contamination assessment found that additional investigations were not required. The proposed development complies with Council Wide Objective 95 of the Port Lincoln Development Plan.

The proposed development is not considered to pose any risk to human health or the environment in terms of site contamination. The site is therefore suitable for the proposed use and the proposed development complies with the Port Lincoln Development Plan Council Wide Objectives 94 and 96 and PDCs 217 and 300.

### 7.2.14. Visual Amenity

**Development Plan Policy Relevant to Coastal and Visual Amenity:**

**Land Not Within a Council Area (Coastal Waters) Development Plan**

- Objectives: 6, 8, 9, 13, 14, 17, 18, 19, 25, 35
- Principles of Development Control: 17, 16, 21

**Port Lincoln (City) Development Plan**

- Council Wide Objectives: 15, 39, 41, 46, 50, 53, 54, 67, 68, 69
- Council Wide Principles of Development Control: 3, 29, 148, 151, 165, 168, 169, 170, 172, 193, 194, 195, 199, 227, 229, 231
- Industry Zone Principles of Development Control: 6

A visual amenity assessment has been undertaken for the proposed mineral exporting facility and is discussed in **Section 6.10**.

#### **7.2.14.1. Landscape**

The proposed development would not impact the landscape of the site or surrounding area as the project footprint is confined to the same footprint as existing infrastructure at the Wharf site, in accordance with Coastal Waters Development Plan Objective 6 and Port Lincoln Council Wide Development Plan Objectives 53 and 54.

The site does not contain any trees of visual significance and no clearing of protected native vegetation is required, consistent with Coastal Waters Development Plan Objective 9, Port Lincoln Development Plan Council Wide Objectives 41 and PDCs 168, 169, 170 and 172. The proposed development includes native landscaping along the northern side of the storage facility.

#### **7.2.14.2. Coastal Landscape**

The proposed development would not detract from scenically attractive areas of Port Lincoln, nearby coastal reserves or general coastal scenery as it would have a built form and scale consistent with the existing infrastructure on the site and would not substantially alter existing views, in accordance with Coastal Waters Development Plan Objectives 8, 13, 16, 17 and 25 and PDCs 17 and 21 and Port Lincoln Development Plan Council Wide Objectives 39, 50, 53, 54 and 67 and PDC 165, 172, 195, 199 and 229.

The proposed development would not impact the features or scenic beauty of off-shore islands. Boston Island is approximately 4.7 kilometres across Boston Bay from the jetty. From this distance it would be difficult to distinguish the individual elements of the proposed infrastructure from the overall Wharf site resulting in a negligible visual impact, in accordance with Coastal Waters Development Plan Objective 18.

#### **7.2.14.3. Amenity**

The development would not impact the appearance of the city of Port Lincoln. It would not have a significant impact on the amenity of the local area as it would not increase the existing visual dominance of the Wharf site. Given that the development would utilise the existing storage facility to contain the iron ore stockpiles, the most notable visual elements of the proposed development would be the new conveyor system and new shiploader. Views of these elements would be possible from vantage points along the coastline and the encircling hills, with the shiploader distinguishable in the skyline of the jetty infrastructure. However, the infrastructure would be consistent with the existing built form of conveyors and the two shiploaders on the site. Additionally, the new



conveyors and shiploader would have a smaller visual bulk than other elements of the existing infrastructure such as the wheat storage silos.

The proposed vehicle washdown and daily check facility, oil separator / waste container and run-off water tanks may also be distinguishable from the back drop of the storage facility when viewed from Kirton Point and the Kirton Point Jetty. These building and structures would be of a similar colour to the storage facility and would be within the existing skyline of the storage shed. As such, they would have a negligible impact on visual amenity.

Overall, the nature and character of existing views of the Wharf site would be retained and the visual impact is considered minimal, in accordance with Coastal Waters Development Plan Objectives 14 and 35 and PDC 16, 17 and Port Lincoln Development Plan Council Wide Objectives 15, 46, 68 and 69 and PDC 29, 151, 193, 194 and 227 and Industry Zone PDC 6.

When viewed from Boston Bay (looking directly towards the Wharf site) the sky line of the Wharf site would remain relatively unchanged from the proposed development. The new shiploader would be positioned behind the two existing shiploaders and the new conveyors are lower in height than other existing infrastructure on the site, in accordance with Coastal Waters Development Plan Objective 16 and Port Lincoln Development Plan Council Wide Objective 46.

Excavation works required during construction of the proposed development, in particular the new underground conveyor tunnels associated with the rail unloading facility, would not be easily visible from the surrounding area. This is due to the existing infrastructure on the Wharf site and the adjoining Shell Oil site effectively screening the works from view, in accordance with Port Lincoln Development Plan Council Wide PDC 231.

#### **7.2.14.4. Signage**

Some security and safety signage would be put in place around the proposed mineral exporting facility. Details of the signage are not included in this Development Application and separate approval would be sought if required. However, signage would be designed to minimise potential visual amenity impacts and would not impact the coastal environment, in accordance with Coastal Waters Development Plan Objective 19.

### 7.2.14.5. Lighting

Any new outdoor lighting required for the proposed development would be designed to avoid intrusion of light onto other properties or roads in the area as far as practical. To achieve this, all lighting would be directed downward and incorporate glare shields wherever possible, unless site safety would be compromised. The lighting would be comparative to the street lighting used around airports to minimise upward glare, in accordance with Port Lincoln Development Plan Council Wide PDC 3 and 148. Lighting details would be finalised in the project detailed design phase.

### 7.2.15. Heritage and Conservation Areas

**Development Plan Policy Relevant to Heritage and Conservation Areas:**

**Land Not Within a Council Area (Coastal Waters) Development Plan**

- Objectives: 9, 10, 13, 17, 24, 35
- Principles of Development Control: 14,17, 25

**Port Lincoln (City) Development Plan**

- Council Wide Objectives:54, 67, 74, 75, 76, 77
- Council Wide Principles of Development Control: 192, 193, 249, 250, 252, 257

The proposed development does not include the removal or damage to any trees of historical, ecological, or particular visual significance, in accordance with Coastal Waters Development Plan Objectives 9 and 13. The proposed development includes planting new stands of indigenous vegetation along the northern side of the storage facility, consistent with Coastal Waters Development Plan Objective 13.

The proposed development does not include any modification or demolition works to any State or Local Heritage Places, consistent with Coastal Waters Development Plan Objectives 10 and 35 and Port Lincoln Development Plan Council Wide Objective 67. No registered State or Local Heritage Places are located on the Port Lincoln Wharf site.

The closest State Heritage Place is the Port Lincoln Railway Station which is approximately 155 metres from the Wharf site. The proposed development and associated increase in train movements is not expected to detract or degrade the heritage value of the Port Lincoln Railway Station, in accordance with Port Lincoln Development Plan Council Wide Objectives 75, 76 and 77 and PDCs 249, 250 and 252. The proposed development involves additional train movements past the State Heritage listed Port Lincoln Railway Station which is not expected to impact the heritage value of the station.

A shipwreck is located within the locality of the Port Lincoln Wharf jetty. Although it is not protected on the Register of Historic Shipwrecks under the *Historic Shipwrecks Act 1981*, the proposed development and vessel movements are not expected to impact the shipwreck, in accordance with Coastal Waters Development Plan PDCs 14 and 17. In accordance with the Coastal Waters Development Plan PDC 18 there are no protected shipwrecks within 550 metres of the proposed development.

The operation of the proposed development would not impact any known indigenous historic fishing grounds and would not impact the continuation of recreational fishing from Berth 1, consistent with Coastal Waters Development Plan PDC 25.

No known or registered sites or areas of heritage or cultural importance would be detrimentally affected or degraded as a result of the proposed development, consistent with Coastal Waters Development Plan Objectives 17 and 24 and Port Lincoln Development Plan Council Wide Objectives 54 and 74 and PDCs 192, 193 and 257.

#### **7.2.16. Access and Transport**

**Development Plan Policy Relevant to Access and Transport:**

**Land Not Within a Council Area (Coastal Waters) Development Plan**

- Objectives: 4, 5, 26, 35
- Principles of Development Control: 20, 21, 22, 23, 25

**Port Lincoln (City) Development Plan**

- Council Wide Objectives: 7, 8, 9, 10, 55, 67
- Council Wide Principles of Development Control: 10, 11, 12, 13, 14, 15, 16, 19, 29, 135, 136, 139, 198, 199, 200, 201

##### **7.2.16.1. Internal Roads and Access Points**

The proposed operation of the site would be consistent with existing internal traffic operations. The proposed development and existing layout of internal roads would maintain the safe and efficient movement of people and goods on the Wharf site and would not create unsafe, inconvenient or restricted movement of pedestrian and vehicular traffic in accordance with Port Lincoln Development Plan Council Wide Objective 7 and PDC 11 and Coastal Waters Development Plan Objective 4.

The proposed development includes minor changes to the existing layout of internal roads at the Wharf site. The proposed changes to the layout and markings of the internal roads, parking, loading and manoeuvring areas would be established in accordance with Australian Standards 2890.2-1989, and therefore complies with Port Lincoln Development Plan Council Wide PDC 139 and associated Design Technique 139.1. Sufficient space is available at the site for the parking,



loading, unloading and turning of vehicles, in accordance with Council Wide PDC 12 of the Port Lincoln Development Plan.

The main entrance to the site is from King Street, which is just off London Street. London Street is a designated primary arterial road in the Port Lincoln Development Plan. This entrance currently provides access for both commercial and passenger vehicles. No changes to the King Street or Kirton Jetty Car Park entrances to the site are proposed as part of the development. As per current arrangements all vehicles can enter and exit the Wharf site in a forward direction, in accordance with Port Lincoln Development Plan Council Wide PDC 16 and PDC 139 and associated Design Technique 139.2. The proposed development is only expected to result in an additional 17 vehicle movements a day and would not cause traffic conflicts (refer to **Section 6.12.3.2**). As such it complies with Council Wide PDC 135 of the Port Lincoln Development Plan.

In accordance with Port Lincoln Development Plan Council Wide Objectives 8 and 10 and PDC 10, the proposed development would not increase heavy vehicle traffic or impact the free flow of traffic on London Street as the iron ore is delivered via train. The operation of the proposed development would require 6 staff on site and some contractor maintenance staff. The access and traffic impact assessment in **Section 6.12.3** determined that the additional traffic caused by the operation of the development would have a negligible impact on the free flow of traffic within the site or exiting/entering King Street, in accordance with Port Lincoln Development Plan Council Wide Objective 8 and PDCs 10 and 14. In accordance with Port Lincoln Development Plan Council Wide PDCs 14 and 15, there would be no additional vehicular access points from the Wharf site. The proposed building works are consistent with existing development on site and are set back from adjoining roads. Therefore, they would not impact traffic sightlines or cause an obstruction or distraction to traffic on adjacent roads, in accordance with Port Lincoln Development Plan Council Wide PDC 19.

#### **7.2.16.2. Traffic**

**Section 6.12.2** provides a detailed description of the existing traffic conditions and a traffic impact assessment of the proposed development. The operation of the proposed development is expected to add a maximum of an additional 17 trips per day to and from the site which would not impact the operation of the road at the existing Level of Service A. The proposed development would not involve significant heavy road vehicle movements as the iron ore is transported to the site via train. The traffic impact assessment determined that traffic impact of the proposed development would be limited and would not cause unreasonable interference with traffic, in accordance with Port Lincoln Development Plan Council Wide PDCs 10 and 29.

Vehicle movements to, from and within the site would use the existing internal road network, with minor changes to the existing road alignment and marked in order for commercial traffic to be managed in a safe, efficient and convenient manner pursuant to Port Lincoln Development Plan Council Wide PDC 139. The unloading of iron ore at the rail wagon unloading facility is separated from car parking and vehicle manoeuvring areas, in accordance with Port Lincoln Development Plan Council Wide PDC 139.3.

#### **7.2.16.3. Rail**

The proposed development includes modifications to the rail unloading facility to enable iron ore to be unloaded at the site. The proposed development would increase the number of trains accessing the site. Approximately 1.7 trains would arrive at the Wharf site every 24 hours to deliver iron ore. Train unloading would generally be completed in less than 2 hours. Currently, during peak periods there are a maximum of 2 trains arriving at the site each day. The proposed iron ore train schedule proposed by Centrex would utilise spare rail capacity to the Wharf site.

The railway crosses three level crossings in Port Lincoln prior to arriving at the Wharf site, namely: at Lebrun Street, Shepard Avenue, and Pine Freezers Road. It is unlikely that two crossings would be simultaneously blocked, however trains travelling across the level crossings are likely to cause minor delays in traffic of approximately 90 seconds. This would occur a maximum of 4 times every 24 hours due to the operation of the proposed development – as trains arrive and leave the Wharf site. This would result in a slight reduction in traffic flow at these times. There are however, additional roads by which cars and pedestrians can traverse between the north and the south of Port Lincoln so it is not expected that this would lead to significant loss in connectivity and convenience.

Due to the increased number of trains, the potential for conflicts between trains and vehicles or pedestrians at level crossings would increase. Impacts are still considered to be a low risk due to the low train frequency. Centrex is committed to working the GW&A and Port Lincoln City Council to address potential safety risks at the level crossings through pedestrian crossings and increased signage.

#### **7.2.16.4. Car Parking**

The existing Wharf site has car parking facilities in the following locations:

- Flinders Ports administration office car park, approximately 10 car parks;
- Public car park, 57 car parks; and
- Truck parking area, unmarked parking area.

Port Lincoln Development Plan Council Wide PDC 13 and 136 outline car parking requirements based on the Total Floor area of new developments which are stipulated in Table 4 of the Development Plan. As the proposed mineral exporting facility would use the existing storage facility, the increase in total floor area of the Wharf site as a result of the development is minimal. The proposed vehicle wash down and daily checks facility would have a total floor area of approximately 75 square metres. Based on Table 4, this would require an additional 1.5 car parks. However, given the nature of this facility, no new car parks are considered warranted as it is designed for washing the front end loaders and would not require additional vehicles or staff to enter the site. Additionally, sufficient car parking for the proposed development can be provided within the existing car parking areas of the Wharf site.

It is proposed that staff would park in the Flinders Ports administration office car park and heavy vehicles, including front end loaders, would be stored in the storage facility. The existing car parking facilities are not at capacity and would be sufficient for the proposed development to allow adequate safe, convenient and efficient parking and circulation, in accordance with Coastal Waters Development Plan Objective 26 and Port Lincoln Development Plan Council Wide Objective 55. As such, no additional car parking areas are proposed.

#### **7.2.16.5. Access to the Coast**

Parnkalla Trail is a pedestrian walkway which traces the coast along Port Lincoln. As part of the proposed development, public pedestrian access via Parnkalla Trail along the north side of the site would be maintained in accordance with Coastal Waters Development Plan Objective 5 and Port Lincoln Development Plan Council Wide Objective 9. Pedestrian fencing would be installed in between Parnkalla Trail and the realigned road along the northern side of the storage facility to provide safe pedestrian access along Parnkalla Trail, consistent with Coastal Waters Development Plan Objectives 4 and 26 and Port Lincoln Development Plan Council Wide Objective 55 and PDC 200. The proposed development would maintain the existing public pedestrian access to the coast via Parnkalla Trail and the design and construction of Parnkalla Trail would not be impacted, in accordance with Coastal Waters Development Plan Objective 35 and PDCs 23 and Port Lincoln Development Plan Council Wide Objective 67 and PDC 201. Public access to the rail unloading facility, conveyor system, storage facility and shiploader would not be provided for public safety reasons in accordance with Coastal Waters Development Plan PDC 22 and Port Lincoln Development Plan Council Wide PDC 200.

Access to the coast at the Wharf site, including public car parking is provided (space for 57 vehicles), and further public car parking is provided at Kirton Point Jetty car park to the east of the site, in accordance with Coastal Waters Development Plan Objective 26 and Port Lincoln Development Plan Council Wide Objective 55.

The provision of an additional public reserve is not included in the proposed development and as the proposed development is associated with port operations Coastal Waters Development Plan PDC 20 and Port Lincoln Development Plan Council Wide PDC 198 is not considered applicable. As the proposed development is located within the existing Wharf site and is similar in scale to existing infrastructure it is not expected to impact on the existing use of nearby reserve land, and is in accordance with Coastal Waters Development Plan PDC 21 and Port Lincoln Development Plan Council Wide PDC 199.

#### **7.2.16.6. Marine Traffic and Development**

Grain is exported and fertiliser imported from the existing Port Lincoln Wharf. The proposed development would expand exporting operations to include the export of iron ore. Centrex would use Panamax vessels to export iron ore from Berth 4 on the jetty. A Panamax vessel would arrive approximately every 18 days and it would take approximately 45 continuous hours to load. The Wharf site has sufficient capacity for the proposed iron ore export operations. All Panamax vessel movements would be in accordance with relevant maritime and shipping legislation and industry standards to ensure safety and minimise the potential for any adverse environmental impacts associated with loading vessels. Jetty access arrangements for existing users, including recreational fishermen, commercial fishing boat owners, grain vessels and fertiliser vessels, would remain unchanged, apart from several minor restrictions to public access during construction.

It is not anticipated that loading of grain vessels and iron ore vessels would occur concurrently. Loading of vessels would be managed by clear guidelines and operating protocols for sharing the jetty infrastructure in line with the existing Port Lincoln Wharf Rules and in accordance with Coastal Waters Development Plan Objective 4.

The proposed development on the jetty includes a new conveyor system (including transfer points) and iron ore shiploader. In accordance with Coastal Waters Development Plan PDC 25, the proposed development on the jetty would generally maintain existing access arrangements. The conveyor system is raised above Parnkalla Trail and Berth 1 (recreational fishing jetty) and therefore public access to Berth 1 and the Wharf site via Parnkalla Trail would be maintained during operation of the facility. The proposed conveyor system and shiploader would not reduce access to the jetty for users, including commercial fishers, grain exporting and fertiliser importing. The proposed development has been designed to allow existing jetty users to maintain existing operations, for example the shiploader and conveyor system have been designed to allow fertiliser trucks to access the jetty and have sufficient space to turn around, as per existing operations.



Vehicle parking space on the jetty adjacent Berth 3 would no longer be available as CV6 and CV7 would be constructed in this location. However this is expected to have limited impact on existing operations and sufficient public parking is located in close proximity to the jetty. The proposed access arrangements for the jetty, which allow the continuation of existing operations, are consistent with Coastal Waters Development Plan Objective 35 and PDC 25 and Port Lincoln Development Plan Council Wide Objective 67.