

Port Hedland Iron Project – Stage 1

Proposal Content Document

Table 1: General proposal content description

Proposal title	Port Hedland Iron Project - Stage 1
Proponent name	Port Hedland Iron Pty Ltd
Short description	<p>Port Hedland Iron Pty Ltd is progressing the development of large-scale downstream iron ore processing facility known as the Port Hedland Iron Project (the Proposal). The Proposal is located in the Boodarie Strategic Industrial Area approximately 10 km southwest of Port Hedland in the Pilbara region. The Proposal's regional location is shown in Figure 1 and the indicative footprint and development envelopes are shown in Figure 2.</p> <p>The Proposal will consist of a pellet plant and a hot briquette iron (HBI) Plant, consuming approximately 3-3.5 million tonnes per annum (Mtpa) of iron ore. The first processing step is to produce iron ore pellets (3-3.5 Mtpa). Most of the pellets will be fed into the HBI plant to produce approximately 2 Mtpa HBI. The remainder of the pellets (approximately 0.7 Mtpa) will be exported from the Port as pellets.</p> <p>The initial infrastructure to be developed within the Boodarie Strategic Industrial Area (SIA) for the Proposal will include:</p> <ul style="list-style-type: none">• Iron ore processing facility (IOPF) comprising one pellet and one HBI plant producing approximately 2 Mtpa of HBI and 0.7 Mtpa of iron ore pellets;• Hydrogen production and storage facilities for supply to IOPF;• Nitrogen plant; and• Supporting infrastructure such as:<ul style="list-style-type: none">○ HBI and pellet handling and storage facilities;○ Flux storage;○ Administration and other non-process buildings;○ Workshops;○ Water storage and management areas;○ Magnetite concentrate/ore handling facilities;○ Power production, management and transmission;○ Carbon capture, storage and transport infrastructure;○ Drainage and sediment control; and○ Access roads. <p>The HBI and iron ore pellets will be shipped out of the Port of Port Hedland. The scope of the Proposal does not include any construction works at the Port of Port Hedland or the export of pellets and HBI.</p> <p>Water, power and natural gas will be supplied by third parties and subject to separate approvals by the relevant third party and therefore not part of this referral. However, the referral includes an External Infrastructure Development Envelope (EIDE) to allow connection within the Boodarie SIA to third party suppliers, if needed, as well as development of access roads and drainage for the Proposal. The EIDE covers the infrastructure corridors identified in the Boodarie SIA Structure Plan.</p>

	<p>These infrastructure corridors are managed by the Department of Jobs, Tourism, Science and Innovation. The layout of the infrastructure within the EIDE will be determined once commercial arrangements with third-party suppliers have been finalised as well as consultation undertaken with the Department of Jobs, Tourism, Science and Innovation.</p> <p>The Proposal also excludes early works for communications infrastructure, laydown areas and access roads.</p>
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Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Plant Development Envelope	Figure 2	Disturbance of up to 300 ha within a 518 ha Development Envelope
External Infrastructure Development Envelope	Figure 2	Disturbance of up to 90 ha within a 466 ha Development Envelope
Construction elements		
N/A	N/A	N/A
Operational elements		
Ore Processing	N/A	Production of 3.5 Mtpa of iron ore pellets and 2.0 Mtpa of HBI.
Proposal elements with greenhouse gas emissions		
Construction elements:		
Scope 1	The Proposal will generate greenhouse gas (GHG) emissions predominantly from diesel combustion and land clearance. GHG emissions during the Proposal construction phase are estimated at 288,120t CO ₂ -e.	
Scope 2	Electricity may be sourced from a third-party power supplier with an 'islanded' power station or from the NWIS grid. For the purposes of this estimate, it has been assumed power will be from the NWIS. Estimated Scope 2 emissions are 50,329 t CO ₂ -e.	
Scope 3	GHG emissions for the Proposal construction phase associated with upstream processing have been estimated at 4,478,760 CO ₂ -e.	
Operation elements:		
Scope 1	Key Scope 1 emissions sources for the Proposal include: <ul style="list-style-type: none">• Combustion of diesel by light vehicles and machinery;• Combustion of natural gas to produce heat in the pelletising and HBI making process; and• Chemical reactions with fluxes and other reagents including the consumption of natural gas for reduction of pelletised iron ore in the HBI making process. Total Scope 1 greenhouse gas emissions: 18,551,930 t CO ₂ -e.	
Scope 2	The Proposal will be powered by connection to third-party power supplies. The estimated emissions are based on data provided by a potential third-party supplier for their existing network. Commercial	

	negotiations are ongoing for this supply and the exact Scope 2 emissions will be determined once the preferred power supply provider is selected. Scope 2 emissions will therefore be accurately quantified during the assessment. Total Scope 2 greenhouse gas emissions: 2,291,460 t CO ₂ -e.	
Scope 3	Scope 3 emissions have been estimated using known emissions intensities, import/export quantities and distances, and production rates. Scope 3 emissions estimates include the following sources: <ul style="list-style-type: none">• Processing of HBI to steel using electric arc furnace;• Export of HBI and Pellets from Port Hedland to South Korea;• Supply of Iron Ore from a third-party provider; and• Import of reagents (bentonite and limestone) from the closest major international exporters using ocean shipping method. Total Scope 3 greenhouse gas emissions: 511,810,175 t CO ₂ -e.	
Rehabilitation		
Areas temporarily cleared during the construction phase that are not required for operations will be rehabilitated following construction. Final rehabilitation to commence within 12 months of cessation of decommissioning. Topsoil will be spread across the site, with seeding of native species likely to be required.		
Commissioning		
Commissioning of the processing facility to be undertaken subject to operational limits.		
Decommissioning		
All above-surface infrastructure will be removed from site. Buried concrete and other buried infrastructure may be remain in-situ if they do not pose a contamination risk.		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	101 years
	Construction phase	5 years
	Operations phase	99 years
	Decommissioning phase	10 years

* Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).

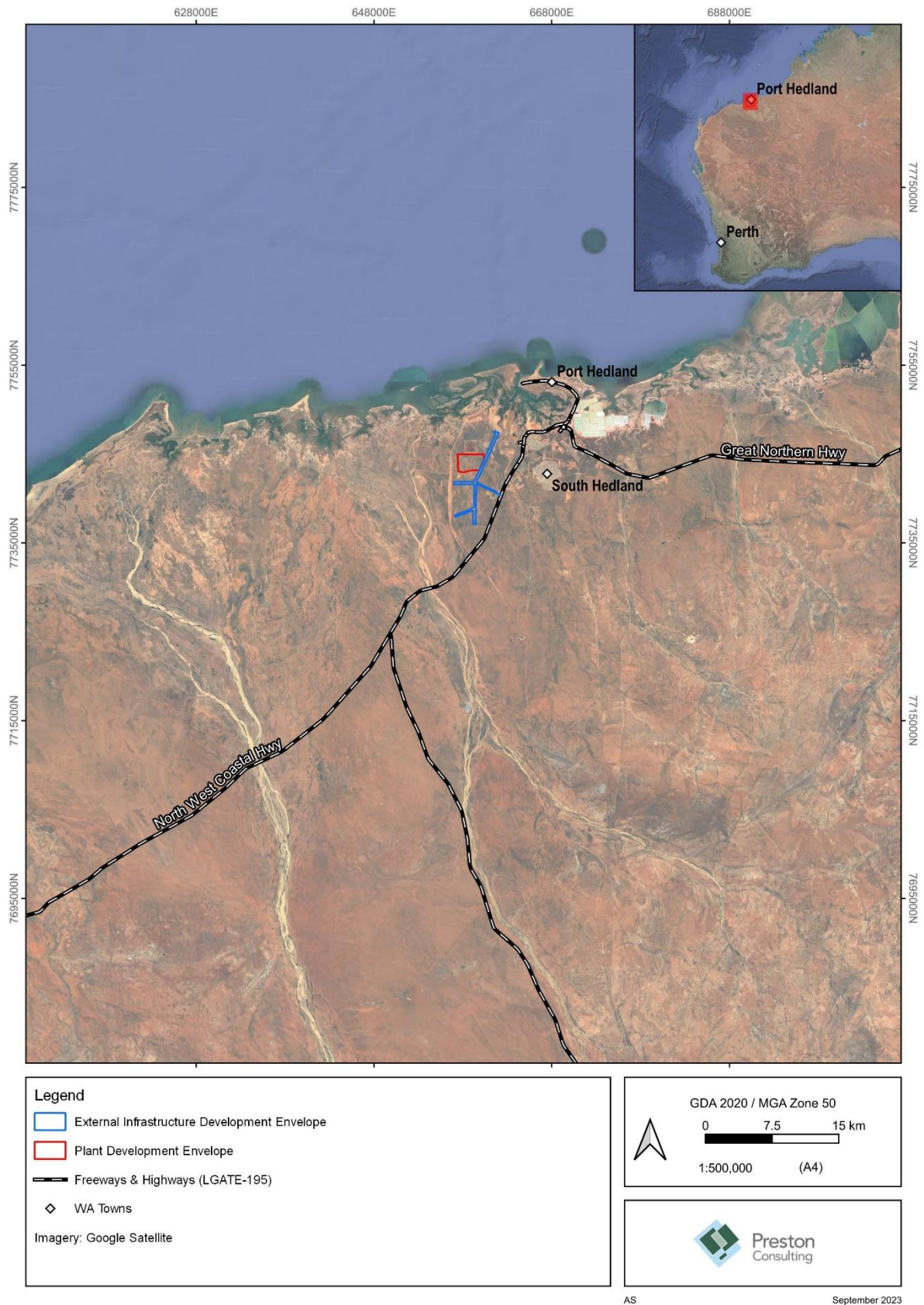


Figure 1: Regional Location

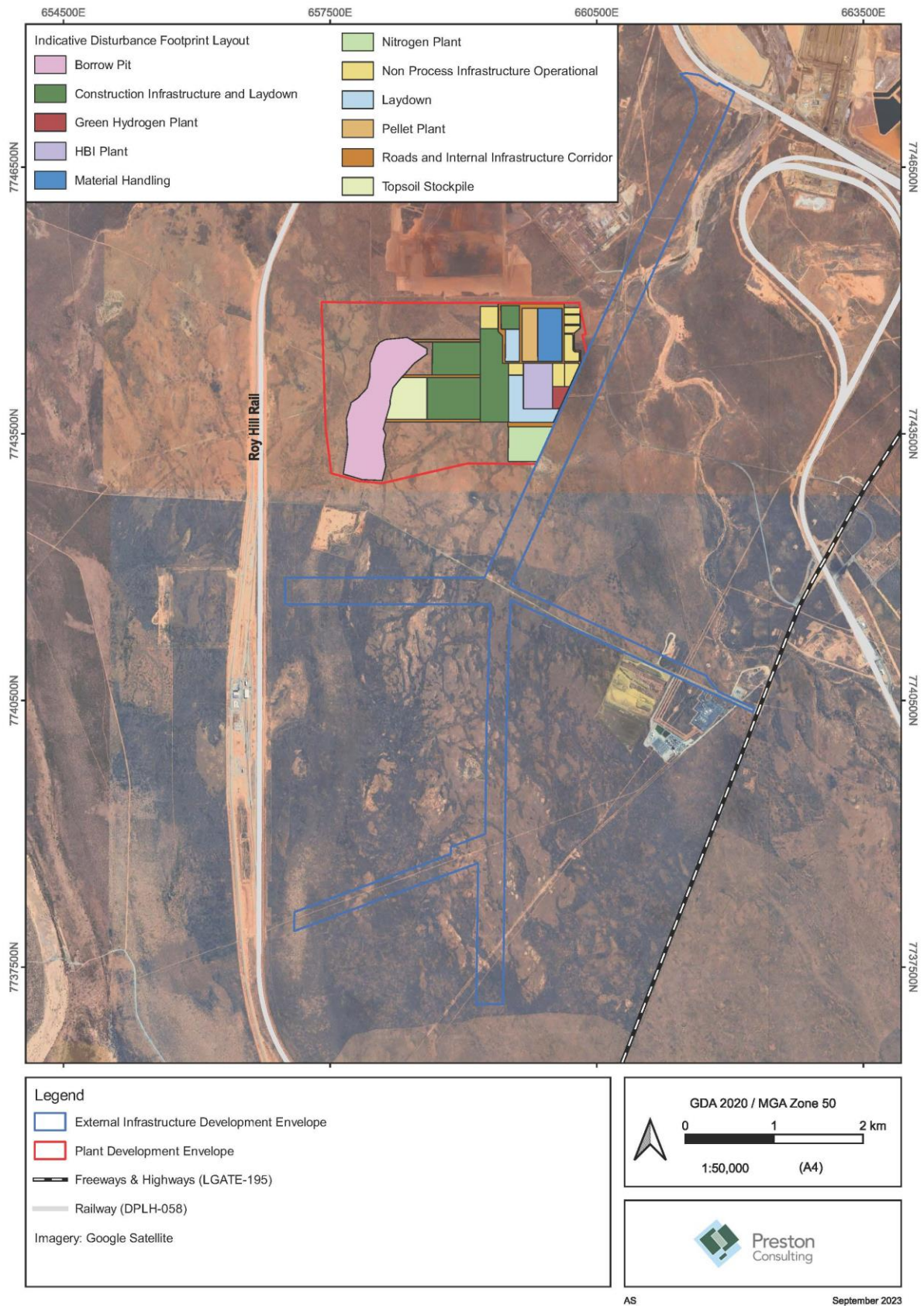


Figure 2: Development Envelopes and Disturbance Footprint