

Gascoyne Gateway Ltd

Proposal Content Document

Table 1: General proposal content description

Proposal title	Gascoyne Gateway Marine Complex
Proponent name	Gascoyne Gateway Ltd
Short description	<p>Gascoyne Gateway Ltd proposes to build, own and operate a multi-purpose marine complex in Exmouth that will service a variety of vessels including but not limited to cruise liners and associated ecotourism activities, Defence and marine supply vessels. The project will not be utilised for livestock or iron ore.</p> <p>The Proposal site is located 10 kilometres south of the Exmouth township and immediately south of the Ingram Street light industrial area; opposite the Exmouth landfill site and to the north of the Wilderness Estate residential area.</p> <p>The Proposal includes a land based component (106.54 ha footprint within a 119.02 ha terrestrial development envelope) to support the marine infrastructure (61.63 ha marine footprint within and 79.44 ha marine development envelope) which includes a combination rock groyne and pylon steel construction to a berth-face. The berth face will require 13.5 m of cleared depth (at chart datum, equivalent to depth at LAT) to meet design vessel draughts, achieved by both natural depth and some dredging of sand and seabed limestone at the berth pocket. Marine construction includes piling and dredging, with dredge spoil used in the causeway construction. Three anchorage locations of 1nm diameter each are located in Exmouth Gulf approximately 9.5 km to the north east of the end of the causeway, within a nominal anchorage development envelope of 1153.14 ha.</p>

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Total Development Envelope (DE)	Figure 1	DE of 1351.61 ha including: - 119.02 ha terrestrial DE - 79.44 ha marine DE - 1153.14 ha anchorage DE
Terrestrial Infrastructure Includes supporting uses such as: <ul style="list-style-type: none"> Northern precinct – bulk fuel storage and bunding, water storage, utilities corridor, access road 	Figure 2	DE of 119.02 ha , with a total disturbance footprint (DF) of 106.54 ha comprising: <ul style="list-style-type: none"> Northern precinct - 17.33 ha Marine facility precinct - 44.63 ha Renewables and laydown precinct - 19.89 ha Access & utilities corridor – 24.69 ha

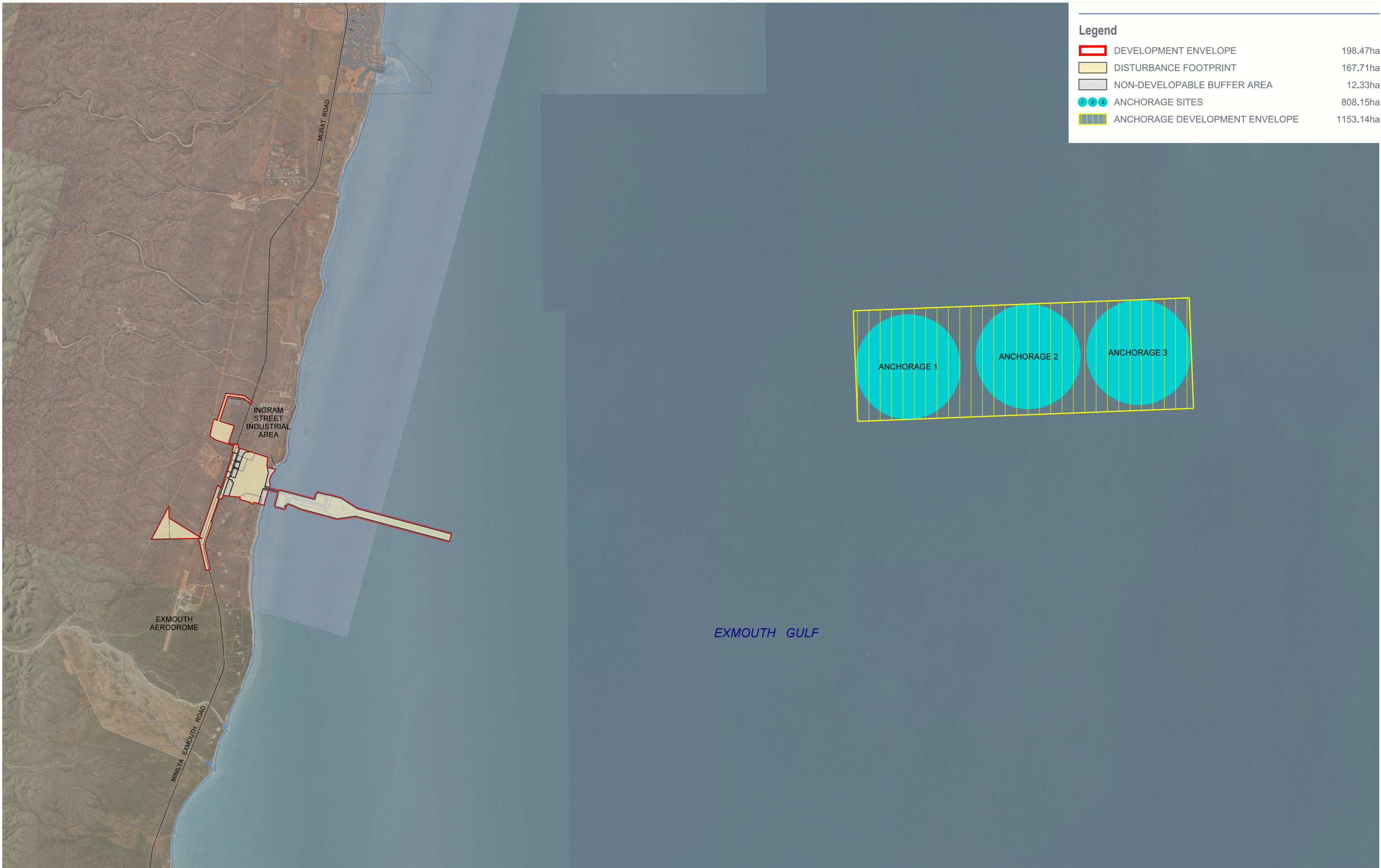
Proposal element	Location / description	Maximum extent, capacity or range
<ul style="list-style-type: none"> • Marine facility precinct - warehouse office/amenities, laydown/storage area(s), desalination plant, water storage, access roads and utilities corridors. • Renewables and laydown precinct - solar farm, laydown area, access roads and utilities corridors. • Access and utilities corridor – roadworks, bridgeworks, services and utilities (including, power, water, fuel lines) alongside Minilya-Exmouth Road 		<ul style="list-style-type: none"> • Buffer areas (no clearing) – 12.33 ha
<p>Marine Infrastructure – seabed precinct</p> <p>Includes dredge footprint for vessel berths, access channel and turning basin at end of causeway; jetty and causeway (wharf), allowance for seawater intake line on south side of jetty; brine pipeline and outlets/diffusers fixed to the north side of the jetty and causeway; and vessel safe haven.</p>	Figure 2	<p>Disturbance of up to 61.63 ha of benthic habitat within 79.44 ha marine DE, including the following (where some of the dredge footprint overlaps with jetty and wharf footprint):</p> <ul style="list-style-type: none"> • Jetty and wharf structure of 12.63 ha • Dredge footprint of 50.11 ha: <ul style="list-style-type: none"> ○ Berth 1 - 0 ha ○ Berth 2 - 1.78 ha ○ Berth 3/4 – 2.24 ha ○ Berth 5 - 0.79 ha ○ Access channel 39.09 ha ○ Turning basin 6.21 ha
<p>Anchorage</p> <p>Includes 3 anchorage locations in Exmouth Gulf</p>	Figure 1	<p>Disturbance of up to 808.14 ha of benthic habitat within a 1153.14 ha nominal anchorage DE.</p>
Construction elements		
<p>Clearing of native vegetation</p>	Figure 1	<p>Clearing of up to 106.54 ha of native vegetation within a DE of 119.02 ha</p>
<p>Construction of marine infrastructure including jetty and causeway (wharf), vessel safe haven, seawater intake pipeline fixed to southern side of jetty and causeway and causeway; and desalination brine outfall fixed to the northern side of the jetty and causeway.</p>	Figure 1	<p>Disturbance of up to 12.63 ha of benthic habitat within a marine DE of 79.44 ha including:</p> <ul style="list-style-type: none"> • Desalination brine outfall extending 500 m from the shoreline along the northern side of the jetty and causeway; and • Seawater intake pipeline extending 500m from the shoreline along the southern side of the jetty and causeway.
<p>Capital dredging</p>	Figure 1	<p>Dredging of up to 1,164,296 m³ within a 50.11 ha dredge footprint, consisting of-</p> <ul style="list-style-type: none"> • 128,251 m³ for 5 berths, turning basin and access (shipping) channel to depth of - 13.5 LAT; and

Proposal element	Location / description	Maximum extent, capacity or range
		<ul style="list-style-type: none"> Dredging of up to 36,045 m³ for vessel safe haven to depth of -4 m LAT
Dredge spoil disposal	Wharf structure	Capital dredge spoil used to construct wharf structure within 12.63 ha DF (no other disposal location).
Operational elements		
Bulk fuel storage	Northern precinct	Up to a maximum of 210 ML storage design capacity
Solar energy production	Renewables and laydown precinct	Up to 10MW generating capacity solar farm, located within a 12.34 ha DF
Onsite sewage treatment and disposal via infiltration	Marine facility precinct	Treatment and disposal design capacity for up to 75 persons per day, equivalent to up to 13.5 kL/day (<5000 kL/year)
Seawater Intake Intake and pipeline fixed to the southern side of the causeway and jetty structure	Seabed precinct	Intake of up to 6 ML/day of seawater
Desalination plant	Marine facility precinct	Production capacity of up to 2ML/day of desalinated water (6ML/day intake;4 ML/day brine discharge)
Desalination brine discharge via pipeline fixed to jetty and causeway, extending approximately 500 m from the shore on the north side of the structure, discharging below the surface perpendicular to the causeway.	Discharge to marine environment along causeway within seabed precinct	Discharge up to 4 ML/day of brine within marine development envelope via pipeline fitted with outlets and diffusers designed to achieve a design flow rate of 0.046 m ³ /s of brine with maximum salinity of 70,524 mg/L Total Dissolved Solids
Maintenance dredging	Marine DE	Periodic maintenance dredging within marine development envelope to maintain safe navigation and vessel berthing; with uncontaminated dredge spoil to be used for beneficial beach replenishment. Contaminated material to be disposed of to an appropriately licensed landfill.
Shipping channel and turning basin	Marine DE	Turning basin of approx. 150 m radius, (overlapping Berth 2), with shipping channel extending approx. 1,970 m in length from the turning basin to the marine DF boundary
Anchorage locations	Anchorage DE	3 anchorage locations of 1nm diameter each (269.38 ha) within a nominal anchorage development envelope of 1153.14 ha.

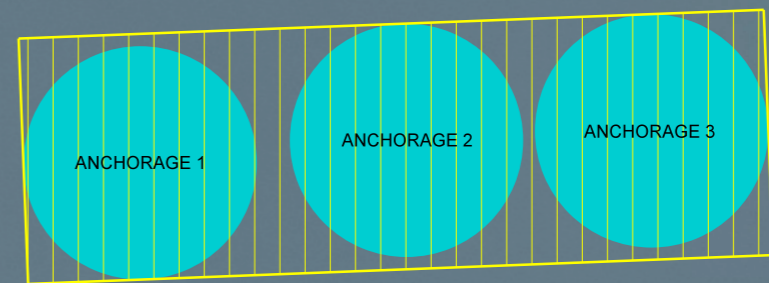
Proposal elements with greenhouse gas emissions	
Construction elements:	
Scope 1	22,900 tCO ₂ -e comprised of: <ul style="list-style-type: none"> • 8,200 tCO₂-e land use change • 14,700 tCO₂-e Combustion of fuels from heavy machinery and vehicles
Scope 2	None
Scope 3	None
Operation elements:	
Scope 1	2,700 tCO ₂ -e /year comprised of combustion of fuels from heavy machinery and vehicles
Scope 2	None
Scope 3	Not Determined
Rehabilitation	
<ul style="list-style-type: none"> • Areas temporarily cleared for laydown will be rehabilitated following construction. • Final closure and rehabilitation within 2 years of cessation of operations. 	
Commissioning	
<ul style="list-style-type: none"> • Desalination plant commissioning; including <ul style="list-style-type: none"> ○ seawater intake integration pipeline pressure testing and disinfection; re use of water where practicable; water neutralised and discharged to terrestrial environment; and ○ whole effluent toxicity testing of brine within 3 months of establishment of brine discharge. 	
Decommissioning	
<ul style="list-style-type: none"> • Removal of all above surface marine infrastructure • Marine infrastructure to be repurposed in consultation with the appropriate Decision-Making Authority • Buried pipelines to be decommissioned and left in situ. • Removal of power infrastructure • Seawater brine outfall will be cut to below the seabed surface, removed, and disposed of. • Groundwater monitoring bores decommissioned and permanently sealed. 	

Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	> 100 years
	Construction phase	Approx. 2 years
	Operations phase	> 100 years
	Decommissioning phase	2 years following cessation of operations

*LAT = lowest astronomical tide



Legend	
	DEVELOPMENT ENVELOPE 198.47ha
	DISTURBANCE FOOTPRINT 167.71ha
	NON-DEVELOPABLE BUFFER AREA 12.33ha
	ANCHORAGE SITES 808.15ha
	ANCHORAGE DEVELOPMENT ENVELOPE 1153.14ha



DEVELOPMENT ENVELOPE AND DISTURBANCE FOOTPRINT
 GASCOYNE GATEWAY MARINE COMPLEX

A Gascoyne Gateway Ltd Project

scale / 1:60,000@A3 | 1:30,000@A1 plan / 20/004/040A
 0 500 1000m date / 09/12/2024

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Legend

- DEVELOPMENT ENVELOPE
- DISTURBANCE FOOTPRINT
- NON-DEVELOPABLE BUFFER AREA
- 560 CADASTRE

DEVELOPMENT ENVELOPE AND DISTURBANCE FOOTPRINT
 GASCOYNE GATEWAY MARINE COMPLEX

A Gascoyne Gateway Ltd Project

scale / 1:15000@A3 | 1:7500@A1 plan / 20/004/034F
 0 100 200 300m date / 09/12/2024

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