



CENTRAL QUEENSLAND PORTS AUTHORITY

**PROPOSED NORTHERN DEVELOPMENT
AT
FISHERMAN'S LANDING PORT FACILITY**

INITIAL ADVICE STATEMENT



SEPTEMBER 2005

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Draw. No. 806-0025	Location of Great Barrier Reef Marine Park boundary and areas of National Estate
Draw. No. 431-0053	Project Location
Draw. No. 803-0111	Proposed development in relation to the existing Fisherman's Landing port facility
Draw. No. 431-0020	Potential future infrastructure located at the new development

APPENDICES

Appendix 1:	Gladstone State Development Area brochure
Appendix 2:	EPBC Act Referral Decision

1 INTRODUCTION

The Port of Gladstone located in Central Queensland is a key part of the transport chain for the Fitzroy region and adjacent parts of Central Queensland. The Port has expanded rapidly over the last 30 years in response to major mining (predominantly coal) and major industrial projects of state significance.

The Central Queensland Ports Authority (CQPA) manages the Port of Gladstone consisting of 6 major port facilities including from the south, Boyne Smelter Wharf, South Trees Wharf, Barney Point Terminal, Auckland Point Terminal, RG Tanna Coal Terminal and Fisherman's Landing in the north (Drg. No. 806-0025). The Fisherman's Landing Port Facility is currently under construction, however, it already includes a multi-user Bulk Liquids Wharf, Cement Australia's cement and clinker wharf and Comalco Alumina Refinery's wharf. Orica Australia's bulk liquid ammonia tank is on site and plans have been developed for a number of storage facilities for Comalco Alumina Refinery to be located at the facility.

The CQPA proposes to expand the Fisherman's Landing port facility by reclaiming an additional area to the north of the existing development. The additional land would provide future adjacent wharves with the space required for transport, storage and loading and unloading facilities. The future wharf facilities will serve export-oriented industries located within the Queensland Government's Gladstone State Development Area (GSDA) and will be linked via the industrial Materials Transport Corridor already under construction.

2 LOCATION OF THE DEVELOPMENT PROPOSAL

The Port of Gladstone is located in Central Queensland approximately 500km north of Brisbane and 100km south of Rockhampton. The proposed development is 10 kilometres north of Gladstone City within the local government area of Calliope Shire immediately adjacent to the existing Fisherman's Landing facility (Draw. No. 431-0053).

The site of the proposed extension is currently below high water mark in Gladstone Harbour, and is regarded as unallocated state land under the administration of the Department of Natural Resources and Mines. Because the land is below high water mark and has not been reclaimed or tenure designated, there is no cadastral property description available, however, the exact position and extent of the proposed development is provided by the co-ordinates below:

Point	Latitude	Longitude
A	23 ⁰ 47'09" S	151 ⁰ 10'11" E
B	23 ⁰ 46'29" S	151 ⁰ 09'59" E
C	23 ⁰ 46'00" S	151 ⁰ 09'54" E
D	23 ⁰ 46'07" S	151 ⁰ 09'30" E
E	23 ⁰ 46'34" S	151 ⁰ 09'34" E
F	23 ⁰ 47'17" S	151 ⁰ 09'47" E

(Datum WGS84 Zones in UTM)

3 DESCRIPTION OF THE DEVELOPE0NT PROPOSAL

The proposal is to reclaim 153 ha of land extending northwards from the existing facility, as shown on Drg. No. 803-0111 attached (also see front cover). A maximum of six (6) additional wharves could be built adjacent to the proposed development.

The precise structures to be located on the site will be determined by the requirements of future industry, however, Drg. No. 431-0020 attached illustrates typical port infrastructure such as storage stockpiles, sheds, silos and tanks etc.

3.1 Type of Construction

The reclamation works would commence with the construction of bund walls to define the boundary of the new development. Infilling would take place using material dredged for safe navigation purposes, and quarried material. A similar process has occurred at other CQPA developments involving reclamation.

The preferred source of material for the bund walls would be material excavated from sites for industry in the GSDA, including excess overburden from the oil shale mining operations. As bund walls are constructed, riprap (inner armour) would be placed progressively to minimise tidal fretting of the material. The larger outer rock armour would then be placed to protect the development from cyclonic weather.

The northern and western external bund wall batters will be shaped to promote natural recruitment of mangroves and enable mangroves to be planted in the 3.5m-4.0m LWOST area, as part of the Authority's mangrove compensation program.

4 STRATEGIC SIGNIFICANCE OF PROPOSAL

The Federal and Queensland Governments have identified Gladstone as a Port with the potential to service future large scale export-oriented, resource processing and value-adding industries. The close proximity of Gladstone's international port facilities is an essential component of the economic viability of the GSDA, a 22,000ha declared land bank managed and promoted by the Gladstone Economic and Industry Development Board, a statutory authority under the auspice of the Department of State Development (refer to Drg. No. 431-0053 and GSDA brochure Appendix 1). The GSDA will be linked to the proposed port development by the Materials Transport Corridor which is under construction.

The GSDA attracts industries by offering internationally competitive operating costs. Port and shipping costs can be maintained to a minimum by loading and unloading vessels at a high transfer rate and then transfer to the GSDA as demand requires. The proposed development will provide land adjacent to the wharves necessary for efficient loading and unloading of vessels and temporary storage of cargoes and products prior to transport to the GSDA or loading onto ships for export. The proposed facility design is considered the best solution to achieve the efficiencies of handling required by industries located within the GSDA.

A variety of industries have already established in the GSDA which has the capacity to accommodate significant future industrial growth. Wharves 1 to 5 adjacent to the existing Fisherman's Landing port facility are either in use or committed to proposed industries within the GSDA. The proposed development and subsequent adjacent wharves are required to meet the import/export and storage needs for the variety of industries likely to establish in the GSDA in the long term.

4.1 Shipping

Existing shipping to the Fisherman's Landing facilities is limited in size to Panamax vessels (80,000dwt) with tidal constraints on the movement of vessels. It is envisaged that vessels servicing future facilities will remain constrained to Panamax class vessels with the channel being deepened to allow sailing on states of the tide.

This will require the deepening of the existing Targinie Channel and the development of swing basins adjacent to the new wharf development.

Vessels larger than Panamax class will not be able to access the facility and will be limited to future development adjacent to the R.G. Tanna Coal Terminal.

4.2 Materials Corridors

The proximity of the Materials Transportation Corridor linking the Fisherman's Landing facility to the Gladstone State Development Area and the rail link from Cement Australia to the main North Coast Rail line makes the development ideal for the transfer of product between the Port and the Gladstone State Development Area and the hinterland of Central Queensland

5 LEVEL OF INVESTMENT

The construction of the reclamation would be staged to meet development demands.

The initial development would require the construction of the revetment wall to cater for the construction of an additional three berths and the disposal of dredged material to cater for these berths. The timing of the second stage would then be determined by the demand for land and wharf development.

For both stages the reclamation will be developed to allow for the disposal of dredged material and associated settlement ponds necessary for the discharge of clean water into the harbour.

5.1 Revetment Wall

Subject to final design, for each metre run of the revetment wall the material requirements are –

- 75m³ riprap material
- 12m³ rock armour
- 60m³ earth core

A preliminary estimate of cost would be \$2,500 per metre of run. The protected face of the reclamation will not require the placement of rock armour and would reduce the cost to \$2,100/m.

The resultant cost to develop revetment walls for Stage 1 would be of the order of \$7million, while Stage 2 would be of the order of \$6million. A further allowance of \$2million per stage would be required to account for internal bunding for the creation of dredging settlement ponds.

5.2 Dredging

Dredging of the channel approaches and berth pockets provide a two-fold benefit for the project. In addition to providing vessel access to the berths the material dredged will be relocated ashore for the bulk material of the reclamation.

The volume of material to be dredged to cater for Panamax class vessels is approximately 10million m³. This equates to the cost of dredging being \$120 million.

5.3 Capping & Site Formation

To finalise the site to a standard suitable for development by third parties the area requires capping and site drainage.

Capping with a suitable clay based quarry run material would be required to an average depth of 1.5m. The resultant volume and cost of material would be of the order of 2.4million m³ and \$24 million.

5.4 Summary of Direct Costs

	Stage 1	Stage 2
Area	80ha	73ha
Revetment Wall	\$9m	\$8m
Dredging	\$70m	\$50m
Capping	\$13m	\$11m
Total	\$92m	\$69m

5.5 Indirect Investment

The level of investment associated with the development will be a direct consequence of the third party users requirements.

The Authority would continue with its policy of developing the new wharf centres as multi-user facilities to maximise the cost benefit of each development. The cost of providing each wharf would be of the order of \$15million.

Loaders and unloaders together with the necessary materials handling system would be the responsibility of the third party developers and varies for each industry.

6 EMPLOYMENT OPPORTUNITIES

The development would be staged as previously indicated.

Each stage would then be programmed such the works undertaken will be progressively undertaken. That is, the revetment wall will be completed prior to dredging commencing and the capping of the reclaim will be progressively undertaken as a need arises for lands for future development purposes.

At this time the Authority proposes to utilise its existing workforce to undertake the bund construction. Should the demand for land increase then the Authority would seek to engage contractors to expedite these works. Direct employment is estimated to be 30man-years for the bund construction.

Dredging would be staged over a number of years based on the need to construct the berth pocket and approach channels. A total of 35 man-years is estimated for this phase of the work and would be performed by contractors.

The direct permanent employment resulting from the development of the reclamation is related to the nature of the product to be handled and as such is not quantifiable.

Indirect employment will result from the creation of industrial developments remote to the port. These developments would not be viable without ready access to port infrastructure for import or export of product. As such the local, state and national economies will ultimately benefit from the development of the reclamation.

7 ENVIRONMENTAL ASPECTS

The project is located within the Great Barrier Reef World Heritage Area, however, is outside the Great Barrier Reef Marine Park and State Marine Parks. Located approximately 3km to the north of the project is The Narrows which is listed in the National Estate Register (Drg. No. 806-0025) and is a State Marine Park. The project and the majority of the Port area are located within the Rodd's Bay Dugong Sanctuary B.

The project site is predominantly subtidal and includes approximately one third of a seagrass meadow which has been described as aggregated patches containing a light cover (ie biomass of <1 gram dry weight per square metre) of *Halophila decipiens* with *Halophila ovalis*. Although seagrass meadows of this community type are uncommon in the Port of Gladstone, *H. ovalis*, is relatively common being found in over 80 seagrass meadows in the region, while *H. decipiens* is found in 15 meadows (Table 1).

Table 1: Seagrass Meadows Containing *H. ovalis* and *H. decipiens*

Geographical Area	Total No. Meadows	No. Meadows containing <i>H. ovalis</i>	No. Meadows containing <i>H. decipiens</i>
Port Limits	93	85	15
Dugong Protection Zone	133	84	14

The total area of seagrass to be disturbed by the development is estimated to be 89ha compared to over 10,000ha of seagrass within the Port Limits and Dugong Protection Area (Table 2). The ecological importance of seagrass meadows, for example, to marine fauna such fish, crustaceans, dugong and turtles and the economic importance of seagrass meadows to commercial fisheries is acknowledged. However, adverse impacts due to the proposed development are likely to be sustainable given the area of seagrass to be disturbed makes up only 0.8% of the total seagrass area or 2.5% of the shallow water seagrass area within the Port Limits and Dugong Protection Area. In addition, the biological diversity of the region will be maintained as two thirds or 178ha of the meadow in question will be retained, therefore, preserving the uncommon seagrass community type.

Table 2: Seagrass Area to be Disturbed and Total Seagrass Area

Geographical Area	Shallow Water Seagrass Area (ha)	Deep Water Seagrass Area (ha)	Total Seagrass Area (ha)
Port Limits	4,496 ± 244	6,332 ± 4,624	10,828 ± 4,868
Dugong Protection Area	7,246 ± 421	3,043 ± 2,299	10,289 ± 2,720
Seagrass area to be disturbed	89 ± 5	nil	89 ± 5

In compensation of the direct impact to seagrass, the sheltered embayment created behind the reclamation is expected to provide a suitable environment for the natural development of more dense intertidal seagrass meadows and is likely to result in increased mangrove area. The proposed development is seaward of the fringing mangroves and will not result in the loss of mangroves. Because the seagrass area to be affected is subtidal, wader bird habitat will not be impacted.

The sensitive habitats and fauna in the vicinity of the project will be managed in accordance with regulatory agency requirements eg minimizing turbidity and smothering impacts from dredge material tail waters on adjacent seagrass areas.

The project will be carried out under the CQPA's Environmental Authority and Integrated Environmental Management System and in accordance with conditions imposed within all relevant approvals and permits.

8 PLANNING ASPECTS

The site of the proposed extension is currently below high water mark within Port Limits, and is unallocated state land under the administration of the Department of Natural Resources and Mines. Because the land is below high water mark and has not been reclaimed or tenure designated, there is no cadastral property description available. However, the site is within the boundaries of Calliope Shire.

The site is shown as future port development in the Central Queensland Ports Authority's Strategic Plan 1997-2047 which has been noted by the Queensland Government. The Strategic Plan was developed in consultation with relevant stakeholders, including the Great Barrier Reef Marine Park Authority, as required under the 25 Year Strategic Plan for the Great Barrier Reef World Heritage Area. The 50 Year Strategic Plan has been the focus of community consultation on two occasions, first in 1992 and again in 1997 as part of the 5 year review process.

It would be the CQPA's intention to gain freehold tenure over the land once reclaimed and apply for the area to be designated Strategic Port Land. While the proposed reclamation is not included in the GSDA, it is connected to the GSDA via the Materials Transport Corridor which is itself part of the GSDA.

Planning issues that would need to be addressed during the planning and approval process include:

- The overlap of the site with the Stuart Oil Shale Deposit;
- Potential effect on relevant infrastructure eg roads, rail and the proposed airport site at Kangaroo island; and
- Environmentally sensitive habitats.

9 POTENTIAL EFFECTS ON RELEVANT INFRASTRUCTURE

The initial reclamation should not affect any of the existing or planned infrastructure in the immediate vicinity of Fisherman's Landing.

Construction materials will be sourced from adjoining sites. It is proposed to use conventional road transport to relocate the materials for the construction of the bund wall and the capping of the site. Materials for the bulk of the reclamation will be placed as a consequence of dredging of the channels and berth pockets associated with the development of future berths.

With development of industry onto the reclaimed land, the impacts on the existing infrastructure will occur subject to the industry's needs. The transfer of product between the port site and the industrial lands at Aldoga and Fisherman's Landing will be by conveyor, pipeline or rail. Road transport is not a preferred option and will be discouraged for all but the smallest volume materials transfer.

Anticipated development at the site should result in low level development with stockpiles, silos and other associated infrastructure not exceeding forty metres in height. Development to this level should not project into the clearance plane around the airport.

Each industry shall be required to address the impacts of their development on the existing infrastructure.

10 APPROVAL PROCESS

10.1 Commonwealth

The Project has undergone referral in accordance with the Environmental Protection & Biodiversity Conservation Act (EPBC Act) and has been determined to not be a controlled action (see Appendix 2). Therefore the project is not subject to further Commonwealth environmental approval processes. However, when the project was referred under the EPBC Act in 2000, available seagrass mapping from 1994 gave no suggestion of seagrass being in the development area. A new seagrass mapping survey conducted in 2002 has since confirmed that a seagrass meadow does extend into the proposed development area. This new information has the potential to have ramifications for the decision under the EPBC Act.

10.2 State

Because complementary port facilities are essential to the success of the GSDA and play a significant role in the regional and state economy, it is likely to be appropriate to refer the project to the Coordinator General under the State Development and Public Works Organisation Act (SDPWOA) for a determination as to whether the project meets criteria for 'significant project' declaration. Should the project be declared 'significant' under the SDPWOA, then CQPA will finalise the Terms of Reference for the Environmental Impact Statement in consultation with the Coordinator General and pursue the approval process as below:

10.2.1 Approval Process for Significant Project under SDPWOA

- i) Co-ordinator General advises declaration and need for EIS and publicly notifies declaration
- ii) Co-ordinator General seeks comment on draft ToR
- iii) Co-ordinator General sends finalized ToR for EIS
- iv) Prepare and submit EIS to Co-ordinator General
- v) Co-ordinator General publicly notifies EIS and seeks comment
- vi) Prepare EIS addendum incorporating comments raised
- vii) Submit Final EIS to Co-ordinator General
- viii) Co-ordinator General evaluates the EIS and sends the evaluation report to the approving agency ie likely to be EPA
- ix) Apply for relevant approvals ie
 - a) constructing tidal works approval under Coastal Protection and Management Act (previously known as Section 86 under Harbours Act);
 - b) reclaiming land under tidal water approval under Coastal Protection and Management Act (previously Section 51 under Harbours Act); and
 - c) marine plants permit under Fisheries Act

10.2.2 Approval Process for Non-Significant Project

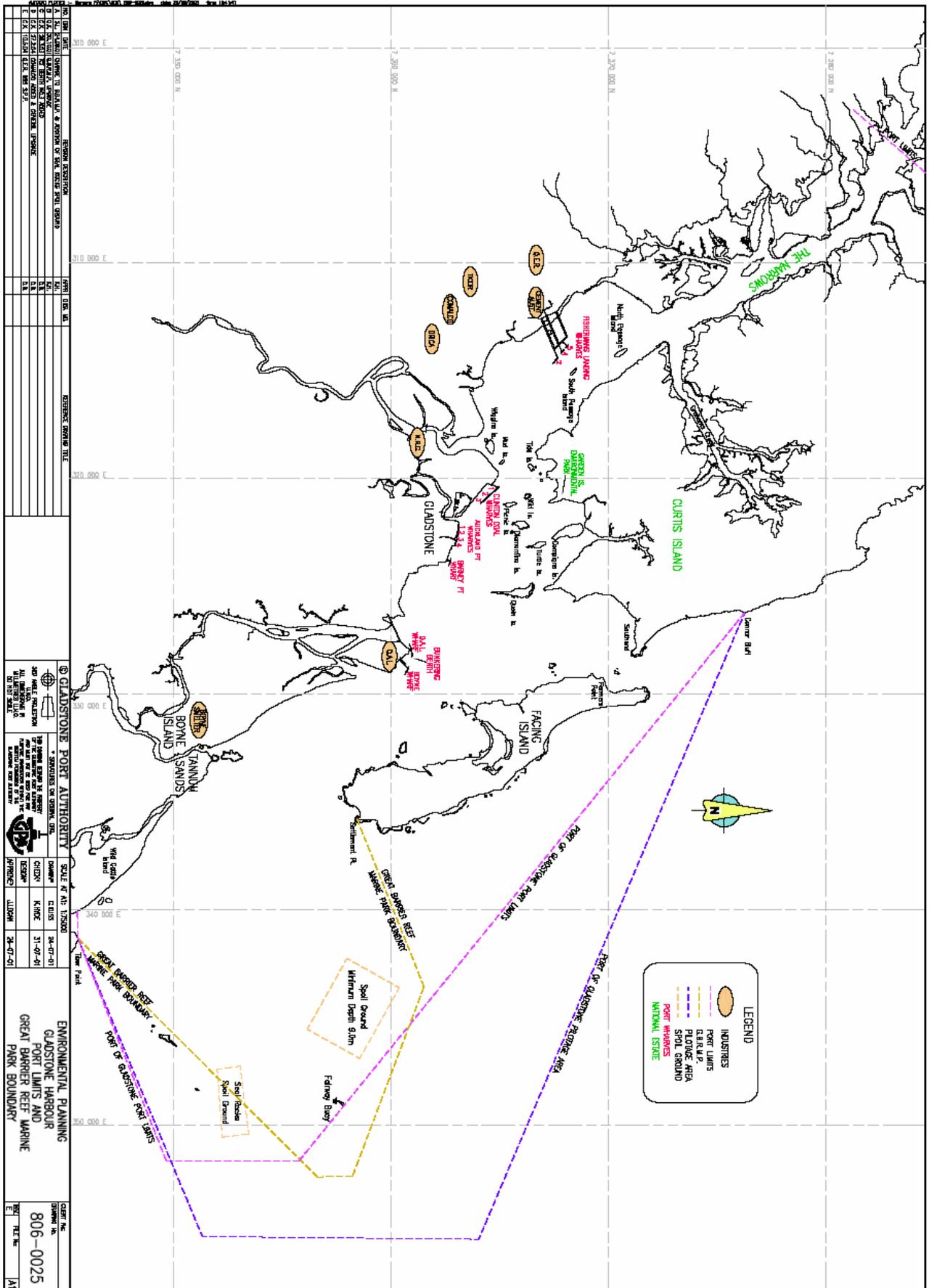
In the event the proposal is not declared 'significant' the appropriate approval process with regulatory agencies will be pursued and relevant approvals as listed above obtained in accordance with the Integrated Planning Act and other relevant legislation.

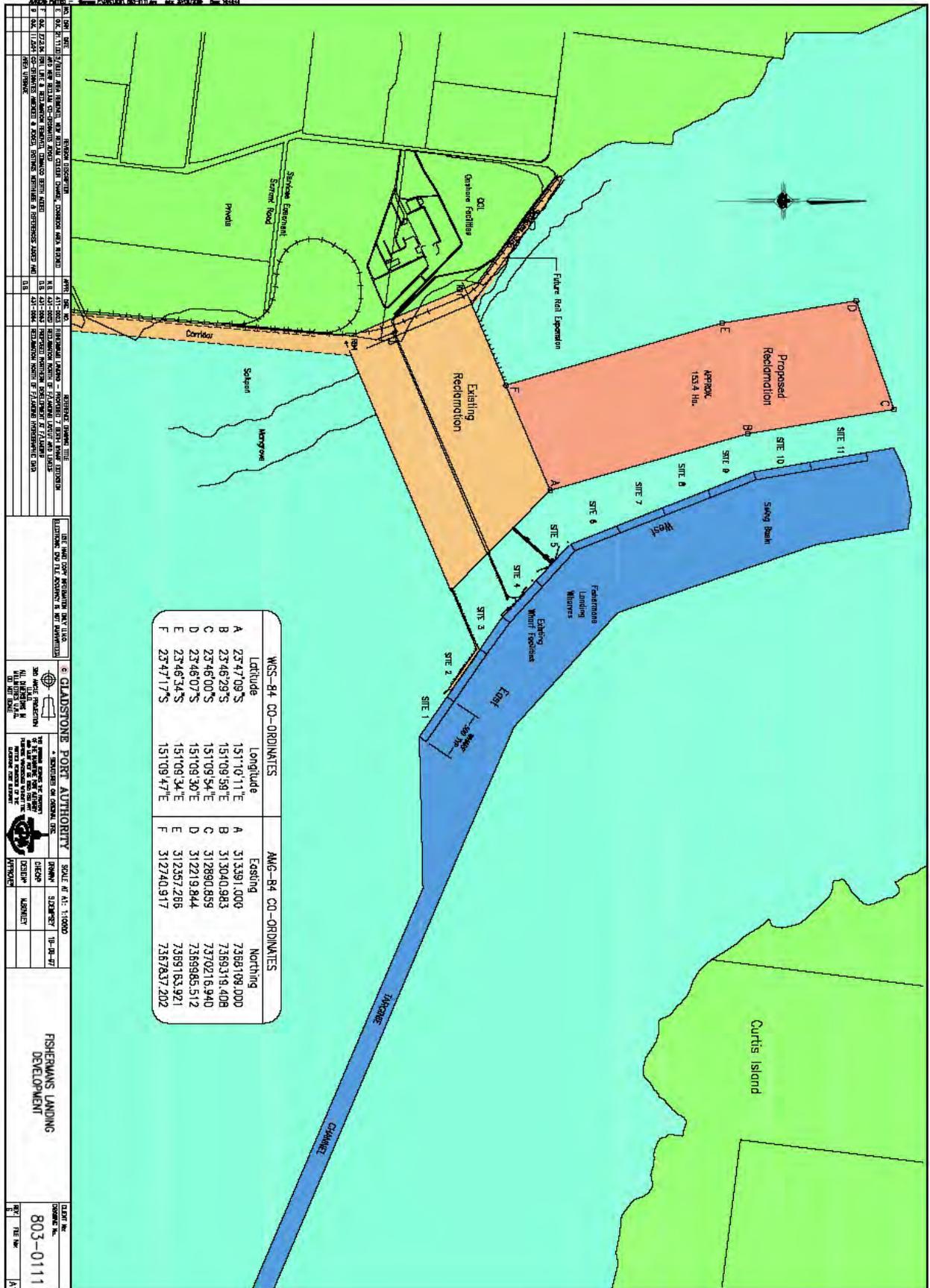
CQPA would engage a consultant to assist in preparing the Terms of Reference in consultation with relevant regulators and stakeholders and to prepare the Environmental Impact Statement and conduct community consultation as appropriate.

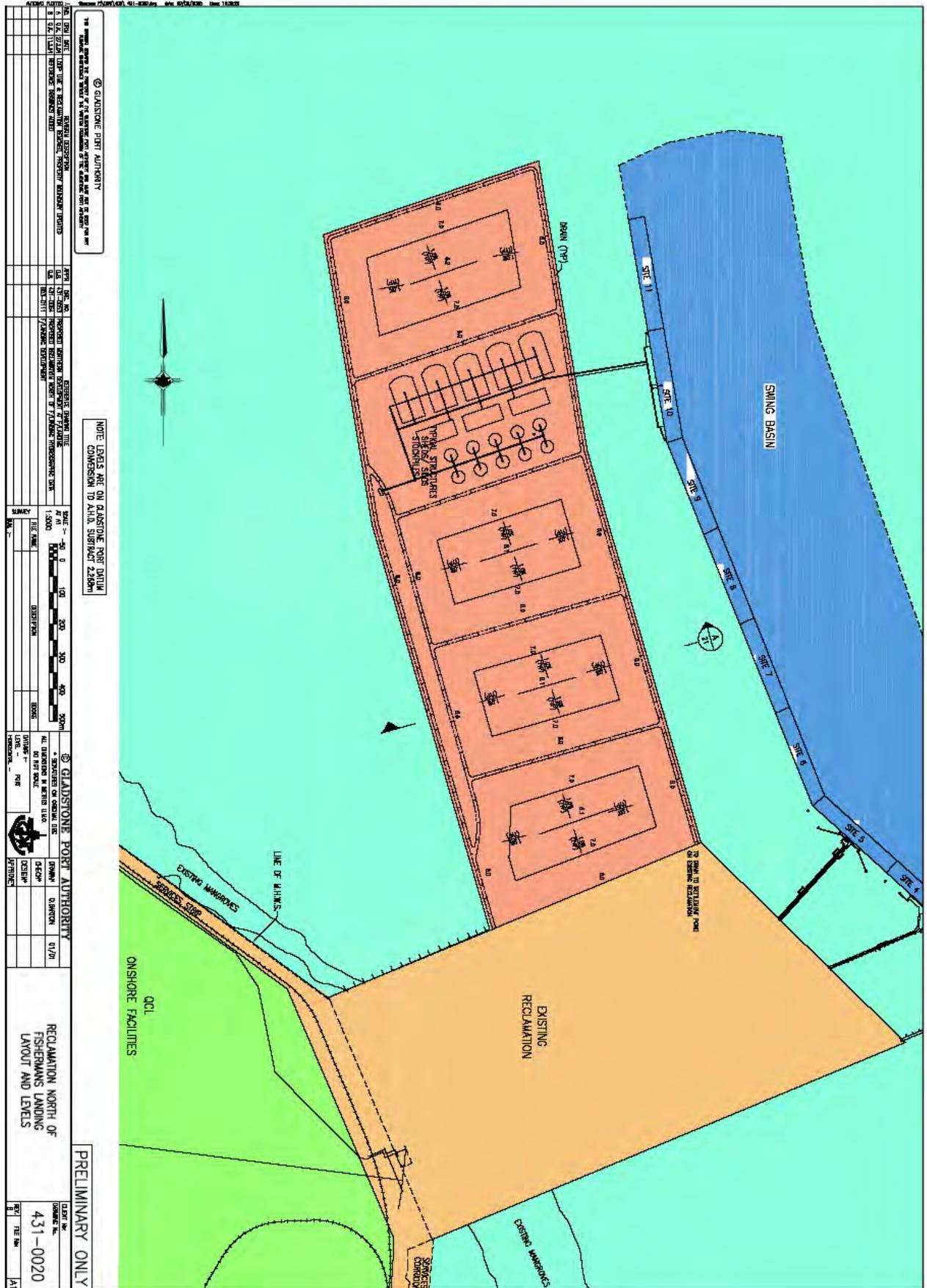
11 SUMMARY

The economic and social importance of the success of the Port and GSDA are highly significant for the Region and State. Despite potential impacts to the estuarine environment, the project is of net benefit to the state due to the importance of adequate port facilities in promoting the GSDA as an economically viable option to potential national and international industries.

FIGURES







APPENDIX 1

Gladstone State Development Area Brochure

APPENDIX 2

EPBC Act Referral Decision



GLADSTONE PORT AUTHORITY		
20 AUG 2004		
GM	EN	S/AGRT
GM	EE	OTA
BDN		OS
SAC	MM	
AO	CRQ	
PEM	MA	ERM
EO	PUR	
	IS	
RETURN		FILE

Mrs Judy Horsfall
 Senior Environmental Officer
 Gladstone Port Authority
 PO Box 259
 GLADSTONE QLD 4680

Dear Mrs Horsfall

**RECONSIDERATION OF DECISION
 Fisherman's Landing Port Facility (EPBC 2000/129)**

I am writing to advise you of the outcome of my reconsideration of the above proposed action, pursuant to section 78 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

As you are aware, the proposed action was originally submitted by Gladstone Port Authority on 29 December 2000 pursuant to the EPBC Act. The Minister decided on 30 January 2001, under section 75 of the EPBC Act, that the proposal is not a controlled action (the original decision).

Gladstone Port Authority provided substantial new information in respect to the proposal on 30 June 2004 and requested that this information be considered pursuant to section 78 of the EPBC Act. Section 78 provides for the revocation and substitution of a new decision if warranted by the availability of substantial new information about the impacts of an action on a protected matter.

I have now carefully considered all the new information provided about the impacts that the proposal will have, or is likely to have, on matters protected under the EPBC Act. I have concluded that revocation of the original decision and substitution of a new decision is not warranted. This means that further consideration of the proposal under the EPBC Act is not required.

Thank you for your assistance on this matter. Please do not hesitate to contact Steve Mercer (02 6274 1861) if you require further information.

Yours sincerely

Mark Flarigan
 Assistant Secretary
 Policy and Compliance Branch

15 August 2004



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