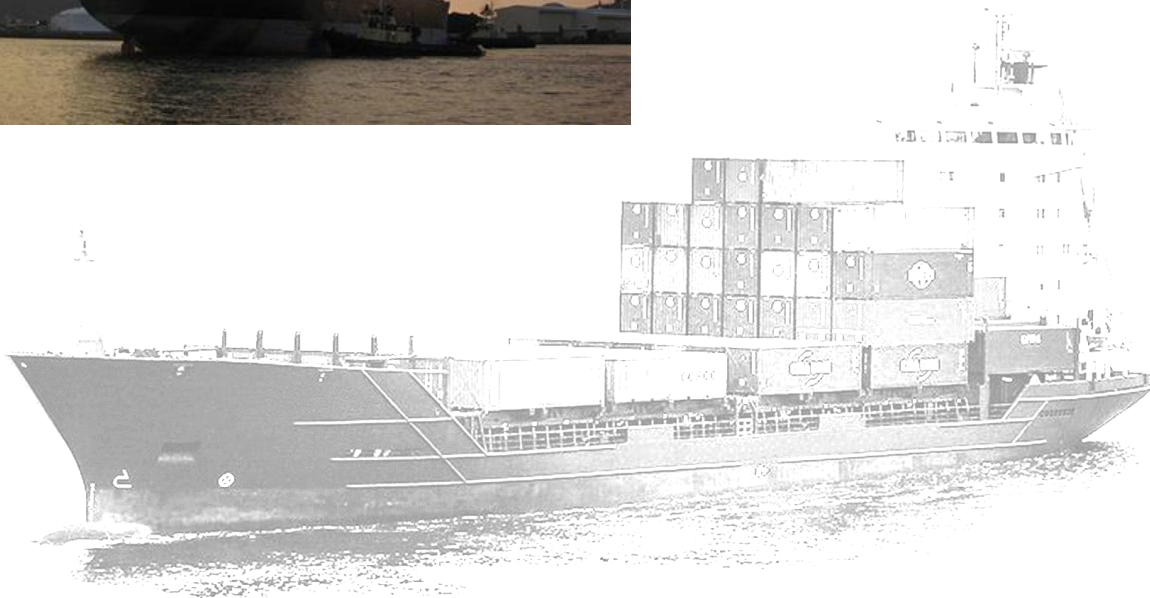




Terms of Reference
for an assignment to
produce a

Cairns Port Deepening Plan

8 November 2015



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A. Summary

This proposal for a Cairns Port Deepening Plan responds to Queensland State Treasurer Curtis Pitt's requests to: 'recast that EIS and make another proposal which has an emphasis on onshore disposal'; and put another option 'on the table.'

The State Government ruled against proceeding with the recommendations in the Ports North draft EIS on the basis that the primary recommendation to put the dredging spoil at an off-shore location has been ruled against by both the Federal and State Governments, and the option of on-land placement of the spoil is considered too expensive.

A submission from Friends of the Port of Cairns (now Cairns Port Development Inc.) proposed an approach that would likely have far lower net costs and meet environmental regulations. This submission's third recommendation is:

We recommend consideration be given to commissioning a different group of specialists to develop a full plan for this alternative proposal, including benefit-cost analyses and implementation time-line. This recommendation is based on the difficulties invariably experienced when consultants are asked to change their previous assumptions, assessments and conclusions.

This document presents terms of reference to:

- Prepare a plan to widen and deepen the Trinity Inlet and basin sufficiently to allow currently-forecasted demand for larger cruise, naval and cargo ships to navigate the channel;
- Demonstrate how this plan could be part of a longer-term Cairns Port development program, taking into account potential future demand to even large vessels; and
- Prepare a comprehensive benefit/cost analysis to accompany the plan.

The assignment would be carried out by team of consultants that were not involved in the Ports North EIS report, together with a representative of Ports North.

This plan would provide information necessary to enable the Federal Government, the Queensland State Government, local governments, Cairns business leaders and the Cairns region community to:

- Understand all key issues relating to widening and deepening the Trinity Inlet channel and basin;
- Understand the benefits completion of this plan would bring to the Cairns region; and
- Make informed decisions on the best course of action to achieve these benefits.

B. Introduction and background

This terms of reference (TOR) requests a proposal (RFP) from a new independent team of consultants to:

- Review the existing body of work contained within the Ports North draft EIS;
- Prepare a new plan to widen and deepen the Trinity Inlet channel and basin sufficiently to allow larger cruise, naval and cargo ships to navigate the channel; and
- Prepare a comprehensive benefit/cost analysis to accompany the plan.

The sponsors for this port deepening plan have yet to be decided, but are likely to include Ports North, Cairns Port Development Inc., Cairns business people and/or organisations, and other relevant government departments.

The sponsors will be represented by a small Port Deepening Plan Steering Group (PSG) comprising Cairns business representatives and a Ports North representative.

The Ports North draft Environmental Impact Statement (EIS) recommended that all dredged spoil be placed at a suitable location in the off-shore lagoon, far from the Great Barrier Reef (GBR). However both the Federal and State Governments ruled against this option despite the best scientific evidence demonstrating that such off-shore placement would not be detrimental to the GBR. The Reef 2050 report was a major basis for several decisions, including UNESCO deciding against listing the Great Barrier Reef as endangered.

The World Heritage Committee decided against declaring the reef 'in danger'. Federal Environment Minister Greg Hunt said the Great Barrier Reef faced real challenges, but described the basis for this decision, the Reef 2050 plan, as a "game-changing" blueprint.

The Reef 2050 plan, also the basis for the Queensland State Sustainable Ports Bill, includes the definition of dredging: *'digging, excavating or removing material from waterways to deepen channels, create harbours, and keep channels and approaches to ports at defined depths. Dredging can either be capital dredging, for new channels and berths, or maintenance dredging, necessary to maintain existing and approved dredging areas.'* The proposed Cairns Port deepening clearly is not for *'new channels and berths'*, but is *'necessary to maintain existing and approved dredging areas'*, which is normal and allowed. It should be noted that the rationale presented by Federal and State Governments assumes the proposed port deepening and widening is *'capital dredging'*. It appears there has been a major misinterpretation of the form of dredging required.

The Ports North draft EIS concluded that placing the dredged spoil on land would cost \$365M plus major additional costs that would considerably exceed revenues if the land is developed. <http://www.dip.qld.gov.au/assessments-and-approvals/cairns-shipping-development-project.html>.

The State Government decided against proceeding with the Ports North draft EIS option of on-land placement of the spoil because it was considered too expensive. This ruling was made without the benefit of any benefit-cost analysis, or even completion of the final EIS.

The submission from Cummings Economics concerning the draft EIS stressed the vital importance to the Cairns economy from completing the work as soon as possible. Cummings

Economics estimate the dredging proposal's Net Present Value (NPV) is \$1.35 Billion; without discounting factors, the estimate is a cash flow of at least \$5 Billion over the 25-year period. http://www.cummings.net.au/pdf/recent/J2865_Cairns_Shipping_Development_Project.pdf

Whilst other options may be suitable, indeed necessary in the longer term, the draft EIS as well as other assessments conclude that if the dredging spoil is placed on land, the preferred location is on part of the 944 ha State-owned property at East Trinity.

The State government did not wait for public submissions to the Coordinator General before announcing the cost of dredging was too high, and decided against the proposal. However, it appears the State Government is not ruling out other options. The Cairns Post reported on 15 May 2015:

'TWO senior State Government ministers are not ruling out developing the Port of Cairns, including dredging. Queensland Treasurer Curtis Pitt and State Development Minister Anthony Lynham are calling on Ports North to re-examine their Environmental Impact Statement on dredging Trinity Inlet shipping channel. Dredging has been ruled out on economic and environmental grounds by the government, with sea dredge spoil dumping estimated to cost \$100 million and land based \$365 million. "What we've said is that this EIS doesn't rule out future port development, what it does is say the options that are on the table ... are not viable options," Mr Pitt said. "What we've said is that Ports North, as the proponent can go back, recast that EIS and make another proposal which has an emphasis on onshore disposal.'

Ports North website states *'...Ports North, is a Queensland Government Owned Corporation responsible for the development and management of the declared Ports of Cairns,..'* Ports North's capabilities and successes in its vital role of port management are well recognized. However, land development, chemical treatment of spoil and resolution of land degradation problems such as those on the East Trinity property are clearly outside Ports North's mandate and, presumably, expertise. As such, Ports North's role in managing implementation of this plan should be focused on Port activities, including shipping channel management, rather than having responsibility for placement and management of a large amount of dredged spoil on land.

A submission from Friends of the Port of Cairns (now Cairns Port Development Inc.) proposed an approach that would likely have far lower net costs. The submission also pointed out several areas where the Ports North consultants had estimated costs to place the spoil on land far higher than necessary, noting it appeared the consultants had not applied the most cost-effective solutions in several significant instances.

The State Government has directed Ports North to revise the draft EIS, allocating another \$350,000 for this revision. The original draft EIS cost a reported \$5.1m. The Cairns Post Editorial 22 August 2015 explains the main problem which, in essence, appears to be asking the consultants to produce a different result from the same data: *'EIS backflip a big query. If the revised EIS suddenly comes back with a favourable opinion of increased dredging, surely this raises suggestions the government is advising its consultants what outcome they should find rather than merely letting the science do the talking.'*

The CPDI submission's third recommendation is:

We recommend consideration be given to commissioning a different group of specialists to develop a plan for this alternative proposal, including benefit-cost analyses and implementation time-line. This recommendation is based on the difficulties invariably experienced when consultants are asked to change their previous assumptions, assessments and conclusions. The full submission is at:
<http://better-management.org/wp-content/uploads/2015/06/Submission-to-Coordinator-General-1-June-2015.pdf>

It will be assumed for this plan that both Federal and Queensland State Governments will not allow sea-based placement of capital dredging spoil for the foreseeable future.

The proposal should provide one of two options:

Option 1: A full proposal to deliver the 10 requirements listed below. The proposal should be phased, with each phase subject to possible changes to the phase's scope and budget, then approval by the Port Deepening Plan Steering Group.

Or if the proposers consider it impractical to prepare a full proposal until further study is completed:

Option 2: A proposal for a phased approach in which the first phase will be an initial review, or scoping study. It has been estimated that this scoping study would cost about \$50,000.

C. Plan objectives

The overall goals of the plan are to present:

- The most cost-effective solution to complete all aspects of dredging the requisite areas of the existing Trinity Inlet channel and basin. This will include placement and management of the dredging spoil on land to achieve the deepening and widening to allow berthing by larger cruise liners, fuel and freight vessels, and the larger ships of the Royal Australian Navy and Australia's allies;
- The width and depth of the channels and basin, and consequently the amount of dredging spoil, will be determined by a benefit-cost analysis, including reviewing the rationale for the amount proposed in the Ports North draft EIS. This analysis will involve an iterative assessment of the optimal level of port services, including the channel and basin width and depth, based on current forecasts of larger vessels accessing Cairns Port, together with negotiations on port service fees.
- All significant benefits to the Cairns region, and to Australia with regard to aspects of strategic defence, coastal operations and border patrols, expected following completion of the port deepening plan.

D. Complementary requirements

As part of the port deepening plan, the consultants should:

1. Interview, then describe and summarise the views of all major stakeholders with regard to widen and deepening the Trinity Inlet and basin, the costs of the plan, the expected benefits, and any significant additional factors.
2. Assess and briefly describe world best-practices with regard to aspects of dredging and spoil management relevant to this plan, together with supporting references, including:
 - Dredging - technical aspects such as pumping spoil, centrifuging and enzyme treatment.
 - Dredging - management such as environmental, regulatory and communications.
 - Spoil management methods such as chemical injection, nanotechnologies, acid sulphate soil management including lime and other treatment methods.
 - Alternative uses of dredging spoil where the spoil is treated as a valuable resource such as special concrete.
 - Bund walls for dredging spoil containment, in particular the most cost-effective construction.
 - Re-establishing vegetation over spoil-filled areas such as East Trinity.
 - Operation management including community communications.
 - Contract and supply chain management.
3. Describe briefly the main assumptions that underpin the plan and benefit-cost analysis, and explain how and why these assumptions, as well as the plan calculations, differ from those of the Ports North draft EIS.

E. The consultants' capabilities

The selection criteria for the team of consultants for this plan are:

1. A team leader who can demonstrate a high level of ability to:
 - a. Manage complex operations;
 - b. Inspire excellent team synergy;
 - c. Meet deadlines within agreed budgets; and
 - d. Has sufficient knowledge of Cairns Port, Cairns region 'politics' and related economic factors.
2. Consultants with high-level relevant experience; team-players; demonstrated success producing innovative cost-effective solutions; and willing to challenge the status quo.
3. Apart from the one Ports North representative proposed to assist the team, the consultants should not have had any major involvement in the preparation of the Ports North draft EIS in order to ensure a fresh approach is taken to solution development.
4. The consultant team must have include relevant leading international specialists, or access advice from such specialists.
5. After studying proposals, a short-list should be drawn up for further consideration by the Steering Group. Rather than a formal presentation, in-depth discussions with the full teams for the short-listed proposals will precede final selection.

F. Information available to the selected consultants

A wide range of information will be available to the selected consultants.

It is assumed information used and generated by the Ports North consultants during the preparation of the draft EIS will be available via the Ports North representative on the team, noting that the draft EIS study and report was paid for from public funds.

There are also many reports completed during recent years concerning East Trinity that will be available.

H. The proposal and costing

It will be assumed for this plan that both Federal and Queensland State Governments will not allow sea-based placement of capital dredging spoil.

The consultants' proposal should be delivered as a PDF document to (*to come: name, email address, by x date*).

The proposal should be as short as practical in order to demonstrate and provide one of the two options (any redundant text, graphics and photographs for the purpose of bulking-up the proposal will not be viewed favourably):

Option 1: A full proposal to deliver on the 10 requirements listed below.

The proposal should be phased, with a brief working paper at the end of each phase presented to, and discussed with, the PSG. Following each phase the scope, time and budget may be changed if the PSG considers this would improve the final plan. This is the preferred option.

Option 1 deliverable would be:

- A report that meets the three objectives listed in Section C;
- A brief scoping phase working paper that presents initial findings;
- A phased plan that will deliver on the 10 requirements below;
- A final report that outlines the key issues that will need to be addressed in order to produce a report covering the 10 requirements; and
- A total and broad breakdown of time and costs involved, together with any contingencies considered necessary.

If the consultants consider it is not practical to prepare a full proposal until further study is completed:

Option 2: A proposal for a phased approach in which the first phase will be a firm initial review, or scoping study. It has been estimated that this scoping study would cost about \$50,000.

Option 2 deliverable would be:

- A report that outlines the key issues that will need to be addressed in order to produce a report covering the 10 requirements below;
- An indicative phased plan to that will deliver the 10 requirements; and
- A total estimate, and breakdown, of time and costs involved in the scoping study; and
- Indicative timing, costing and any contingencies considered necessary to complete the plan and a report that will meet the three objectives listed in Section C;

Both Option 1 and 2 should include:

- Demonstration of a thorough understanding of the plan requirements and background; and
- An assignment time-line, including discussions with the PSG at appropriate intervals (a 'no surprises' approach is important).

The assignment deliverables will be:

- A review of the existing body of work contained within the Ports North draft EIS
- A plan to widen and deepen the Trinity Inlet Channel and basin sufficiently to allow larger cruise, naval and cargo ships to navigate the channel;
- A comprehensive benefit/cost analysis for the plan; and
- A report that meets the three objectives listed in Section C;

In achieving the above, the report should address, but not be limited to, the following ten points;

1. Brief working papers for discussion with the PSG at the end of each phase;
2. An updated plan at the end of each phase for discussion with the PSG. (*Note: quality is far more important than quantity – supporting information is required only to the extent that it provides sufficient support for conclusions*);
3. A draft final plan report for discussion with the PSG; and
4. A final plan report presented to the PSG, then presented to two or more wider audiences of stakeholders.

The plan should include:

5. Consideration of the Ports North draft EIS and submissions to the Coordinator General concerning the final EIS, in particular the alternative proposal presented in the Friends of the Port of Cairns' submission and the Cummings Economics submission.
6. Assessment and application of relevant best practices in order to demonstrate why the plan is the best option to achieve the plan objectives.
7. Description of the main assumptions underpinning the plan, as above, including an analysis and conclusion with regard to the legal form of dredging involved (such as 'capital' and/or 'maintenance' dredging), and any other issues such as those described in Section B above, Introduction and Background.
8. Details of the main potential suppliers of key services to complete the plan, together with initial assessments for a future team leader's consideration. These should be sufficient for the team leader to commence negotiations and commence the plan as soon as possible. (*Note: it should be assumed that the team leader will be a highly experienced professional who has successfully completed several major complex operations and, for the duration of the operations, would report solely to the Steering Group.*)
9. Proposed arrangement with Ports North for delivery of the capital dredged spoil to the selected site, and possibly future delivery of maintenance spoil. (*Note: benefit-cost analyses may suggest consideration should be given to ongoing dredging of additional spoil to create a deeper and wider channel and basin, as well as other port services, that would attract additional vessels to use Cairns Port.*)
10. Assessment of options, and recommendations, on the optimum relationships with the owners of the land on which the spoil will be placed including: one or a group of developers; private/public partnership; and public development.