

REVIEW OF REPORTS ON THE MASTER PLANNING &
REDEVELOPMENT OPTIONS FOR TOONDAH HARBOUR



TOONDAH HARBOUR
transport gateway - new community - tourist destination



Contents

Executive Summary	1
1. Introduction	2
2. Overview of Concept Plan Options	4
2.1 Introduction	4
2.2 Issues	4
2.3 Opportunities	4
2.4 Concept options	5
2.4.1 Concept 1 – Localised Improvement	5
2.4.2 Concept 2 - Integrated Development (Transport Hub and Bayside Activity Node)	5
2.4.3 Concept 3 - Integrated Development (A Top 5 Destination for Tourists and Residents in the Greater Brisbane Area)	7
2.5 Initial review of findings	11
3. Demand and Financial Appraisal	13
3.1 Need and Demand Analysis - Marina	13
3.1.1 Demand	14
3.1.2 Population Growth	18
3.2 Demand assessment – ferry facilities and tourism	18
3.3 Financial analysis	18
3.3.1 Financial Model Structure and Parameters	19
3.3.2 General Financial Model Assumptions	20
3.3.3 Base Case and Sensitivity Analysis Scenarios	21
3.3.4 Conclusions	28
3.3.5 Recommendations	29
4. Engineering issues	30
4.1 Assessment of reclamation costs	30
4.2 Layout and Constructability	30
4.3 Future ferry service demand and land requirements	31
4.4 Summary of findings	32



5.	Environmental issues	34
5.1	Key Considerations for the Project	34
5.2	Appropriate Assessment Process	34
5.2.1	Relevant legislation and policy requirements	35
5.2.2	Commonwealth Legislation	35
5.2.3	State Legislation	35
5.2.4	Local Government Statutory Instruments	36
5.2.5	Other Matters for Consideration	36
5.3	Summary of findings	37
6.	Property market	38
6.1	Market overview	38
6.2	Residential take-up	39
6.3	Retail / commercial take-up	39
7.	Town Planning and Delivery	41
7.1	Development scale	41
7.2	Urban design review of options	43
7.2.1	Comments on Option 3a (EY option)	44
7.2.2	Consideration of Future Master Planning	44
7.2.3	Key findings	46
7.3	Statutory planning delivery framework	46
7.3.1	Harbour infrastructure	46
7.3.2	Mixed-use development	47
7.4	Overall delivery model	48
8.	Conclusions	49
8.1	Introduction	49
8.2	Demand and financial appraisal	49
8.3	Engineering	50
8.4	Environmental	50
8.5	Property market	51
8.6	Town Planning and Delivery	51
8.7	Next steps	52
8.8	Overall conclusion	52



Table Index

Table 1	Proposed Toondah Harbour Berth Mix	17
Table 2	Berth Rental Data	17
Table 3	Toondah Harbour Proposed Berths and Estimated Revenue (100% Occupancy)	21
Table 4	Financial Analysis Base Case and Sensitivity Scenarios: Expenditure, Demand, Ferry Inclusion	25
Table 5	Financial Analysis Base Case and Pricing – Further Sensitivity Scenarios	27
Table 6	Response to engineering issues / proposals	31
Table 7	Development Yields	43

Figure Index

Figure 1	Concept 1	5
Figure 2	Concept 2 (Option 2)	6
Figure 3	Concept 2 (Option 2a)	6
Figure 4	Concept 3 (Option 3)	7
Figure 5	Concept 3 (Option 3a)	7
Figure 6	Holland Project Services – revised concept plan (IMC Option)	10
Figure 7	Marina and Yacht Club Locations	14
Figure 8	QLD Trends in Number of Registered Marine Vessels	15
Figure 9	Trend of Total Annual Vessel Registrations in QLD	16
Figure 10	Percentage of Total Vessel Registrations in QLD	16
Figure 11	Model Structure	19
Figure 12	Base Case Scenario Marina Rates	22
Figure 13	Base Case Scenario Revenue and Expenses	22
Figure 14	Base Case Scenario Cash Flow	23
Figure 15	Financial Analysis Base Case and Sensitivity Scenarios: Expenditure, Demand, Ferry Inclusion	25
Figure 16	Financial Analysis Further Sensitivity Scenarios	27
Figure 17	Block Land Use Plan	42



Appendices

- 1 Financial Analysis General Assumptions (Inputs and Calculations Model Sections) and Results
- 2 Revised Construction Costs
- 3 Summary and Scope of Environmental Legislation
- 4 Report by Savills
- 5 Assessment of Development Yield



Executive Summary

GHD has reviewed the previous studies into the concept plan options for Toondah Harbour prepared by Ernst & Young (EY), Holland Project Services (HPS), Hassell and International Marina Consultants (IMC). The purpose of the review was to test the feasibility and viability of the concept plan options and identify any information gaps that need to be addressed. The options were reviewed in broad terms, but with specific engineering, cost and financial viability work around the revised option identified by IMC ('IMC option'). The report also makes references to the other options identified by EY, and of these the preferred one being Option 3a, ('EY option').

The previous reports concluded that State Government policy supported change and development at Toondah Harbour given its status as an "Area of State Significance – Social and Economic" in the SEQ Coastal Management Plan. It also noted that agreement would need to be reached between key stakeholders over the way forward, and with State Government in relation to a delivery model and structure. The EY report conceded that additional studies would be needed to "prove up" the proposals or identify another option, especially in relation to marine engineering costs.

It is apparent from the financial analysis that the viability of the 'IMC option' is marginal based on currently assessed cost and revenue profiles. However, there is a strong case for an enhanced viability position based on increased revenue from a higher proportion of marina berth sales. It is considered that more robust cost and income estimates that take account of further technical investigations, additional sources of revenue and detailed demand analysis, have the potential to indicate an improved viability position. The viability of the 'IMC option' is sensitive to increases in costs and reductions in revenue, so these factors should be reassessed once further technical work has been undertaken.

It is likely that the remaining EY options would not be viable given higher dredge disposal costs and reduced marina revenue and commercial marine development opportunities. If these proposals are to deliver critical marine infrastructure, then it must be acknowledged that the final harbour / marina design must provide berths to meet market demand, and land for commercial marine activity, car parking and accommodation associated with the marina and ferry terminal. The environmental requirements dictate that the proposals must be justified by the need for the replacement marine infrastructure and associated land uses as part of a viable development concept. If a dredge to reclamation balance emerges from this exercise, then the project's viability would be optimised.

Our review has identified the need for a number of technical investigations, which need to be undertaken before an optimal master plan can be advanced and the feasibility of the proposals can be assured. These investigations cover services; future ferry operational and land requirements; dredge disposal options; geotechnical; engineering; a review of environmental factors, an overview of transport issues. Once completed, these studies would inform a review of the key project construction costs and in turn the financial viability of the overall concept. Subject to how the project is to be progressed, this technical information would also support the next stage of master planning work and a round of market testing. A Project Plan – including a gantt chart – has been prepared by GHD to identify the best way forward taking account of the above considerations.



1. Introduction

Redland City Council (RCC) has been investigating options for the redevelopment of the Toondah Harbour precinct in order to meet a number of town planning, transport and operational objectives. Most notable amongst these is the need to address operational, safety and capacity issues being experienced by the ferry companies that provide services to Stradbroke Island.

To address these concerns and explore the related wider regeneration and development opportunities, the Council commissioned three reports. These explored the master plan options for the future of the Harbour area, and were prepared by Holland Project Services (HPS)¹, Ernst & Young (EY)² and International Marine Consultants (IMC)³ and provide the basis for the current concept master plan options.

Before moving forward with preparing a detailed master plan, RCC has commissioned GHD to review the past reports to ensure that the analyses and findings remained valid and robust; to identify any gaps in the previous investigations; to identify key considerations for the next phase of work; to identify any additional investigations, and to indicate the next phase in developing a master plan for the area.

The aim of the master plan options was to address the current and growing capacity, safety and operational issues of the ferry terminal, whilst addressing the Council's objective of providing public access to the waterfront alongside any related development opportunities. A number of master plan options were identified ranging from a focus on localised improvements to creating a new regional destination, with several variations in between.

The options variously included an offshore ferry terminal, yacht marina, and the redevelopment of the vacated on-shore ferry terminal land for residential and mixed-use commercial development. This review addresses the master plan options in broad terms, with engineering, cost and financial viability analysis around the concept developed by IMC only.

The proposals envisaged a major reclamation of the Harbour to provide a platform for a marina/ferry terminal, leaving the vacated on-shore land owned by the State Government (Department of Environment and Resource Management – DERM), Stradbroke Ferries and Council available for redevelopment.

The area is zoned Marine Activity Zone – Sub Area (MA1), which allows for mixed-use development that incorporates marine based transport and commercial uses, tourist accommodation (above ground floor) and a range of government and community activities. The ferry terminal has two main operators, Sea Stradbroke and Stradbroke Ferries, as well as a water taxi service (Stradbroke Flyer).

The Toondah Harbour area is characterised by a number of marine environmental constraints; an urban environment dominated by surface parking and functional buildings; a lack of linear waterfront access; harbour safety issues; ferry terminal capacity constraints and a fragmented land ownership pattern.

¹ Toondah Harbour – Master Planning and Redevelopment Options Study Supplementary Report, Holland Project Services, January 2008

² Toondah Harbour – Master Planning and Redevelopment Options Study, Ernst & Young, June 2007

³ Toondah Harbour, Master Planning and Redevelopment Options Study, Marina Component Feasibility, International Marina Consultants, September 2007



These characteristics add to the complexity of planning and delivering viable and comprehensive urban change.

This report addresses the following key areas:

- ▶ **Statutory and land use planning** - an assessment of the current town planning framework and any major impediments to bringing the proposals forward in procedural terms
- ▶ **Urban Design** - an assessment of the urban design work and the extent to which it represents a suitable basis to deliver the Council's objectives for the area
- ▶ **Property market** - an assessment of the extent to which the current/future property market will support the nature and scale of the proposed mixed-use development
- ▶ **Marina demand / need** – an assessment of the future demand for a marina facility in this location
- ▶ **Development economics** – an assessment of whether a ferry and marina facility is in broad terms financially viable, and if it would need the support from other developments and / or sources
- ▶ **Environmental issues** – an assessment of the feasibility of the reclamation proposals in environmental terms given the area is a Marine Park and its location near to an important bird roost
- ▶ **Engineering** – an assessment of the feasibility of the engineering concept and its cost profile

This report is divided into seven further sections that address each of the above matters. Section 2 provides an overview the previous studies, the master plan options (conceptual options). Sections 3 to 5 focus on the ferry terminal and marina elements of the options; addressing in turn demand and viability, engineering feasibility / costs, and environmental issues. Sections 6 and 7 address the land-based development in relation the extent of support from the property market, and town planning issues. This work will 'test' the robustness of the previous studies, identify any weaknesses and the need for additional studies so as to provide for a more detailed and informed master plan.

Since the three consultants' reports were prepared, there have been a number of changes in circumstances that will need to be addressed in this report. These include:

- ▶ The impacts of the Global Financial Crisis (GFC) on the property and marina sectors
- ▶ Confirmation of the status of Toondah Harbour as an "Area of State Significance – Social and Economic" as the "Toondah Marine Transport Facilities" in the South East Queensland Coastal Management Plan (SEQCMP)
- ▶ The introduction of the *Sustainable Planning Act 2009*
- ▶ The release of the South East Queensland Regional Plan 2009 – 2031 in July 2009
- ▶ The purchase by Council of the CSIRO land north of Middle Street (Lot 58 SL115554).

This review assesses the findings of the EY Study. The aim was to 'test' these findings and identify any gaps/additional work required to enable the project to move forward.



2. Overview of Concept Plan Options

2.1 Introduction

In 2007, EY investigated the conceptual options for the redevelopment of the Toondah Harbour precinct, supported by Hassel which undertook the land use planning and urban design aspects of the work. The study was driven by the recognition that the ferry terminal and harbour were suffering from ongoing operational, safety and maintenance issues, and that the Toondah Harbour area represented an opportunity for focused development supported by improved accessibility.

EY took a holistic approach in order to identify a range of options for the rationalisation of land uses to achieve a range of predetermined outcomes. The report identified a significant number of issues and opportunities, the main ones being:

2.2 Issues

- ▶ The ferry companies' operations are compromised by a lack of land, poor layout, limited access the waterfront, and peak car parking constraints
- ▶ The Harbour has a one-way channel that is too narrow for current needs, too long and needs constant dredging at significant cost
- ▶ The Harbour basin is too small to allow for the efficient manoeuvring of ferries
- ▶ Environmental impacts from dredging
- ▶ Conflicts between commercial and recreation craft, especially in the confined channel
- ▶ Public boat ramp underutilised
- ▶ Fragmented land interests
- ▶ A generally poor environment with low levels of amenity.

2.3 Opportunities

- ▶ Significant areas of bay-side land
- ▶ Important gateway to North Stradbroke and bay islands
- ▶ General community supports the upgrade of Toondah Harbour
- ▶ Toondah Harbour is identified as an "Area of State Significance – Social and Economic" as the "Toondah Marine Transport Facilities" in the South East Queensland Coastal Management Plan (SEQCMP).

Toondah Harbour was identified as an Area of State Significance in recognition of its importance in providing recreational and marine transport facilities (public and commercial). The SEQCMP seeks to ensure that land uses and activities on adjoining or neighbouring locations are compatible with and potentially assist in the functioning of areas of state significance. The implication is that any redevelopment of the land west of the foreshore should be compatible with and complement the ferry and harbour operations.

2.4 Concept options

EY identified a series of project objectives and success criteria, consulting key stakeholders on the latter so as to confirm the relative importance of the criteria. Feedback from stakeholders also formed the basis of a series of land use options: three main concepts were produced featuring a total of five development options. Three of these development options were based on consolidating existing land uses alongside improved public access to the foreshore. The remaining two options were based on a reclamation area to accommodate a new ferry terminal and marina complex, freeing up land for more significant redevelopment. The three land use concepts and related variations are outlined below.

2.4.1 Concept 1 – Localised Improvement

This concept seeks to develop new opportunities within the existing site constraints and planning framework. It would maintain the existing ownership pattern, preserve tenure and have limited impacts on the surrounding environment. The development would feature a main street serving to highlight the bay, but would also retain the currently fragmented foreshore. The preservation of the existing land use pattern results in this concept not being able to deliver an integrated solution. The layout and associated details of Concept 1 are displayed below in Figure 1.



Option 1.

Localised Improvement

- Observes current town planning guidance
- Preserves existing tenure interests
- Existing interests may limit development potential
- Not comprehensive / integrated redevelopment
- 4 – 5 storey development

Would deliver 63,000m² GFA

(75% efficiency of developable area (4.2 Ha) @ 2.0 plot ratio)

Figure 1 Concept 1

2.4.2 Concept 2 - Integrated Development (Transport Hub and Bayside Activity Node)

This concept is largely consistent with current town planning guidance, but explores further opportunities than Concept 1. It envisages a more intense development that achieves a higher level of integration including new uses capable of activating the foreshore area. The layout of the site would feature a main

street of boutique outlets and incorporate a consolidated parking area. Concept two includes two options which are shown below in Figures 2 and 3.



Option 2.

Integrated development

- Observes current town planning guidance
- Preserves existing tenure interests
- Existing interests may limit development potential
- Not comprehensive / integrated redevelopment
- 4 – 5 storey development

Would deliver 78,000m² GFA

(75% efficiency of developable area (5.2 Ha) @ 2.0 plot ratio)

Figure 2 Concept 2 (Option 2)



Option 2a.

Regional Destination

- Long term vision for Toondah Harbour
- Toondah Lagoon
- Land side ferry terminal
- Inland plaza + main street
- Bayside promenade
- 5 – 7 storey development

Would deliver 98,000m² GFA

(75% efficiency of developable area (5.2 Ha) @ 2.5 plot ratio)

Figure 3 Concept 2 (Option 2a)

2.4.3 Concept 3 - Integrated Development (A Top 5 Destination for Tourists and Residents in the Greater Brisbane Area)

This option focuses on a long term vision for Toondah Harbour. It challenges existing site attributes, ownership patterns and town planning controls. It proposes to develop Toondah Harbour into a major bayside attraction and tourist hub. This would include large scale dredging and reclamation works. This concept includes two separation options. The details of these options are shown below in Figures 4 and 5.

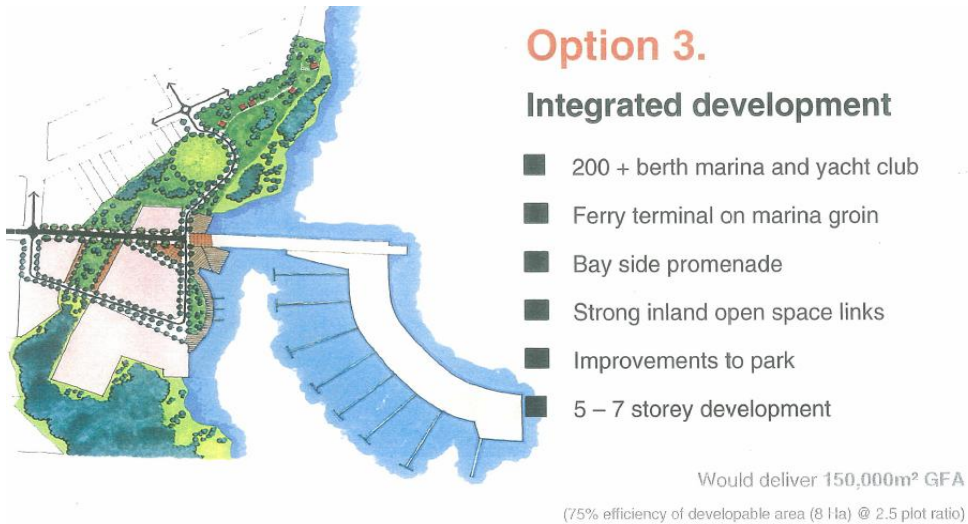


Figure 4 Concept 3 (Option 3)



Figure 5 Concept 3 (Option 3a)



The evaluation of the options followed a fairly coarse-grained method whereby success criteria were used to score the options, with scores adjusted through the application of weightings (the weightings arising from stakeholder feedback). The report provides little material on how this exercise was undertaken – the process appears to be very broad brush and high level, so providing indicative outcomes at best.

Option 3a was selected as most likely to meet the weighted success criteria, but was only marginally ahead of option 3, the difference between the two being difficult to recognise at this conceptual level.

EY then undertook a financial analysis looking at funding options, but not a viability assessment owing to the lack of data on such things as dredging costs etc. Option 3a was seen as offering greater risk transfer to the private sector and higher levels of private sector involvement. The report concluded that option 3a should be the basis of planning going forward. For the purposes of this review, we refer to Option 3a as the 'EY option'.

The report contained the following findings:

- ▶ The project needs someone to take ownership
- ▶ The area's status in the SEQCMP supports change, redevelopment and support from State Government
- ▶ Key land interests (primary stakeholders) must agree to the outcomes
- ▶ If land holdings are to be reconfigured, then interest holders must be left with an equivalent interest
- ▶ Additional detailed studies are required to "prove up" the 'EY option' or identify another option – especially in relation to marine engineering feasibility and costs

Further work was recommended:

- ▶ Investigation of infrastructure requirements
- ▶ Detailed ferry terminal and marina design
- ▶ Detailed study of seabed characteristics and dredging options
- ▶ Detailed costing of reclamation and revetment walls
- ▶ Environmental Impact Study
- ▶ Traffic study
- ▶ Discussions with the Coordinator-General
- ▶ Agreement with land owner and interest holders
- ▶ Further layout and yield analysis
- ▶ Public consultation over a preferred option
- ▶ Preparation of business case
- ▶ Preparation of Master Plan and related planning provisions.

HPS and IMC were commissioned in 2008 to undertake further work because the EY study had left a number of key issues unresolved. HPS/IMC reviewed all information; re-engaged with key stakeholders; assessed the viability of the marina option, and undertook a workshop with Council.



The HPS/IMC report noted that Council's Local Growth Management Strategy (LGMS) identified Toondah Harbour as a Transit Orientated Community (TOC) in recognition of the potential within the 2006 Planning Scheme for mixed-use development in the area. The LGMS was withdrawn from State Government during its first review, and became part of the Council's input into the South East Queensland Regional Plan (SEQRP) 2005 – 2026 (now the SEQRP 2009 – 2031): the Plan contains no reference to the potential for redevelopment or enhanced public transport at Toondah Harbour. However, it does make reference to the need to upgrade services in Redland, including efficient water-based transport.

The report looked more closely at the planning and environmental issues and reviewed the conceptual redevelopment options identified by EY. The key issues were identified: these reflected those noted by EY, but included a number relating to engineering and costs that resulted in the 'EY option' being modified. These issues included:

- ▶ Environmental constraints
- ▶ The use of dredge-spoil for the reclamation
- ▶ Scale of marina should reflect the need to provide revenue to fund solutions to the constraints
- ▶ Size reclamation to accommodate the excavation material with a land area to provide for the terminal and marina
- ▶ Provide for dredge and reclamation balance to avoid the high costs of dredge disposal (marine / land)
- ▶ Adding an additional boat channel to separate recreational and commercial ferry traffic

In addressing these matters, the study concluded that the 'EY option' was only viable if the number of berths was doubled to 400 and the reclamation area was increased significantly. The viability review was undertaken by IMC based on a coarse-grained cost and revenue comparison rather than a more robust discounted cash flow approach. The revised concept plan is shown below.

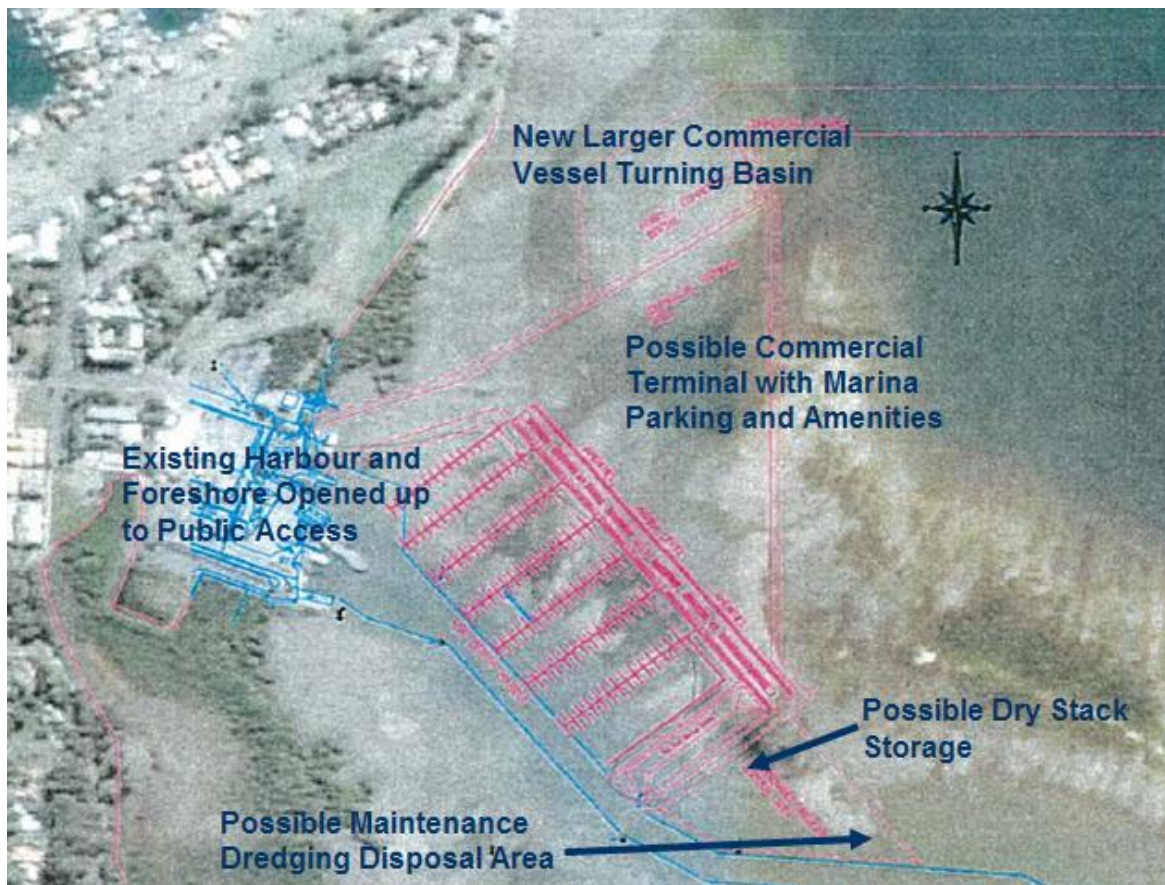


Figure 6 Holland Project Services – revised concept plan (IMC Option)

The 'revised concept plan' shows an enlarged marina oriented towards the exiting channel now dedicated to recreational use, and a ferry terminal oriented for protection against the prevailing south east winds and served by a new wider and shorter channel and a larger basin to improve safety and efficiency. Existing ferry and CSIRO land remains available for mixed-use redevelopment based on the 'EY option'. For the purposes of this review, we refer to this revised concept plan as the "IMC option".

The report identified the ongoing disposal of dredge material as an issue, but offered no possible solution: this matter forms a significant gap in the report. The report also identified that Translink had plans for the provision of public transport to serve Toondah Harbour. A review of the South East Queensland Infrastructure Plan and Program 2010 – 2031 (SEQIPP) revealed no such plans, weakening the Council's intention to develop a TOC around Toondah Harbour. The SEQIPP is to be replaced by the Queensland Infrastructure Plan, currently in draft form (July 2011): the QIP contains no plans for improved public transport to Toondah Harbour.

The release of the draft Connecting SEQ 2031 document provides a more detailed indication of future public transport investment in the Redland area. Connecting SEQ 2031 makes no specific reference to Toondah Harbour, however a number of enhancements to the surrounding transport system are highlighted including:

- ▶ The continued establishment of a busway and strategic transport corridor between Cleveland and Capalaba



- ▶ Enhancement of the existing rail line between Cleveland and Wynnum Central
- ▶ The establishment of a bus corridor between Cleveland and Redland Bay.

The Coordinator-General and the Department of Infrastructure and Planning (DIP) were consulted: the conclusion was that there was limited opportunity for “ownership” at this level within State Government. The report went on to identify an alternative option for a delivery process based on the model used for the redevelopment of Mooloolaba Spit, with several changes to avoid issues in that project and reflect the circumstances pertaining to Toondah Harbour.

2.5 Initial review of findings

The study work to date provides a starting point for future planning, subject to a degree of updating and recognising that some of the work was high level and left a number of important issues unaddressed. Overall, the reports provide a reasonable scoping of the issues related to the potential redevelopment of the Toondah area, but a few items were omitted and some issues were not investigated adequately in relation to how they might impact on the overall concept. Accordingly, the reports did not identify an option that was fully informed and that could form the basis for a detailed master planning phase.

Further, the EY report did not provide a transparent comparative evaluation of the options, which in some ways were poorly defined – consequently, the ‘EY option’ may not represent the most suitable and feasible option in planning and environmental terms. The HPS/IMC report adopted this ‘EY option’ and amended it to reflect commercial, marine operational and engineering considerations with little reference to its feasibility in planning and environmental terms, i.e the “IMC option’. The key factors are as follows:

- ▶ The Council’s objectives contained in its LGMS have not been reflected in the SEQRP – the State Government would not support the area as TOC without significant improvements in public transport. No such improvements are envisaged in current transport planning.
- ▶ The assessment of environmental impacts was very broad, leaving the identification of options poorly informed as to the critical constraints and design parameters.
- ▶ The selection of the ‘IMC option’ followed a coarse-grained evaluation that was less than transparent – the outcome is not considered to be one that forms the basis of a detailed master planning phase
- ▶ The ‘IMC option’ was amended to suit engineering and viability considerations with little reference to the environmental considerations.
- ▶ The reports’ findings on delivery and implementation need to be updated in the context of more high level discussions with State Government.
- ▶ There is an assumption that higher density development devised to provide additional revenue to support infrastructure at Toondah Harbour will be acceptable, viable and supported by the future property market.

These findings do not mean the previous work did not address the Council’s brief as the investigative work did identify the key issues. However, some critical aspects were given inadequate consideration or required further detailed investigation before the most suitable development concept could be identified. The reports recognised this by referring to the need for more detailed studies to “*prove up*” the ‘IMC option’, or indeed identify “*another option as the preferred option due to the findings of the detailed studies in specific areas*”.



In addition to the above broad findings, GHD has undertaken further and additional investigations into specific aspects of the previous work in order to identify additional factors or more informed findings so as to provide a stronger basis for taking the development concept forward into the next phase of master planning. This work will therefore 'test' the various options put forward in the previous reports, and the need for additional studies so as to provide for a more robust basis for taking these proposals forward in planning terms.



3. Demand and Financial Appraisal

This section of the report analyses the demand for marine berths in terms of quantity and size distribution. It also addresses the demand for ferry facilities, although there is little information in relation to this issue. The section concludes with an assessment of the development economics of the proposed Toondah Harbour marina facilities.

3.1 Need and Demand Analysis - Marina

To increase the likelihood of the proposed Toondah Harbour redevelopment being a profitable venture at completion, a sound understanding of the existing and future market is essential. To gather the data necessary to form this understanding required consultation to be undertaken with a number of existing marinas and yacht clubs. The consultation process undertaken by GHD resulted in feedback from a total of seven sailing / yacht clubs. The clubs engaged in this process were located across South East Queensland and ranged in size from those that share marinas with other clubs to large scale developments associated with residential developments (refer to Figure 7). The seven clubs engaged by GHD in the consultation process were:

- ▶ Meridien Marinas
- ▶ Moreton Bay Trailer and Boat Club
- ▶ Qld Cruising Yacht Club
- ▶ Rivergate Marina
- ▶ Royal Queensland Yacht Club
- ▶ Southport Cruising Yacht Club
- ▶ Wynnum Manly Yacht Club

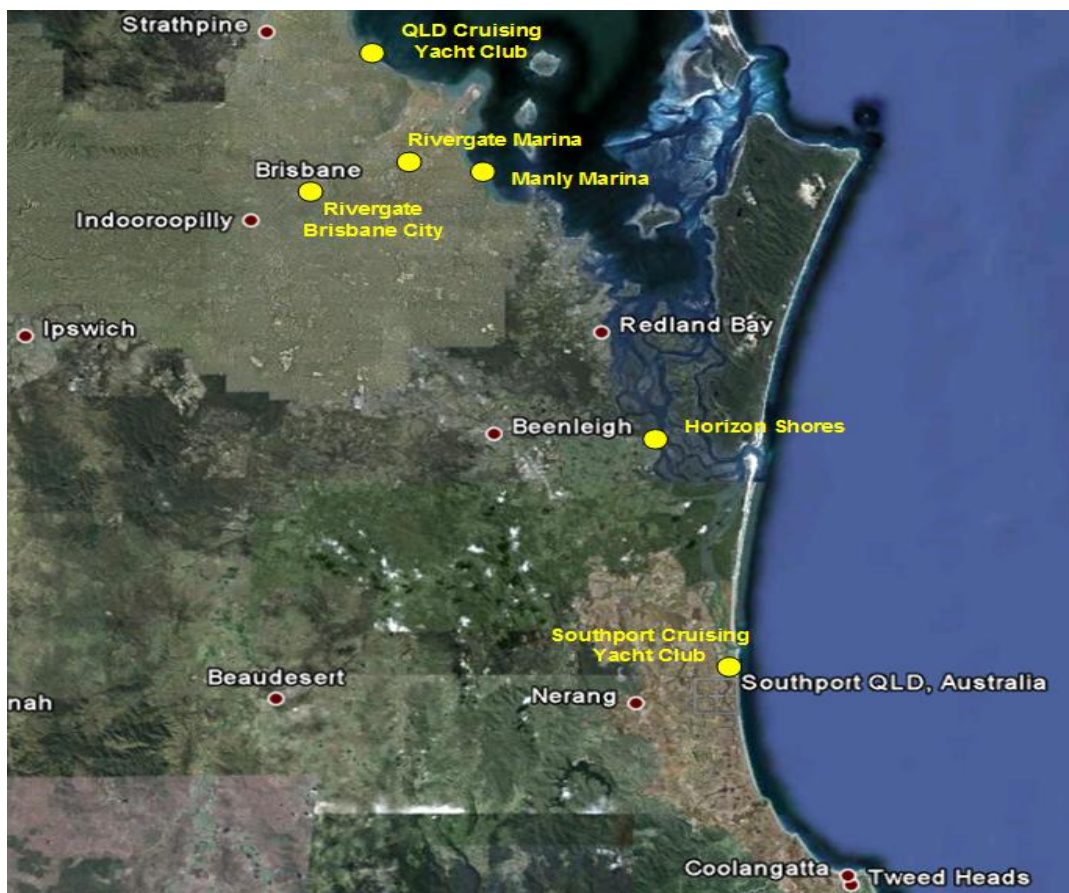


Figure 7 Marina and Yacht Club Locations

3.1.1 Demand

Results of the consultation process identified that the sale rates and prices of marina berths vary across SEQ. Some clubs reported long-term leases to be selling slowly, while others such as Southport Cruising Yacht Club, reported strong sales and long waiting lists. While some clubs were still managing to sell long-term leases, it was consistently noted that they were harder to sell than shorter rental agreements. These characteristics were largely attributed to shifts in the property market and economy after the global financial crisis. This feedback supports the 2009 Marine Queensland report on the recreational marine industry, which identified that continued worldwide economic uncertainty had caused low levels of consumer confidence and reduced levels of demand. While berth rentals remained strong for most clubs, consistent comments were that rental rates can change depending on the season.

It is estimated that demand for berth rentals will remain relatively high across all seasons, ranging from 50% to 90%, while demand for long term leases can range from 5% to 20%. A marina development at Toondah Harbour should be slightly less sensitive to these seasonal changes as it currently features the only boat ramp in the surrounding area usable during strong northerly winds.

Based on the information gathered from reports, newspapers and interviews, it was found that while the demand for berths varies seasonally throughout the year, there is overall a moderate to high demand for rental of berths; and generally low demand for berth sales.

Further research carried out in addition to the consultation confirmed that demand for marina berths should be sustainable in the long term. A key reason for this ongoing demand is the large number of registered vessels in the Queensland region compared with the number of marina berths available. The 2010 Midwood report estimated there were 7,000 wet marina berths to house 233,862 registered vessels in Queensland. A further 110,000 were recorded as not being registered, but still requiring storage (refer to Figure 8, 9 and 10).

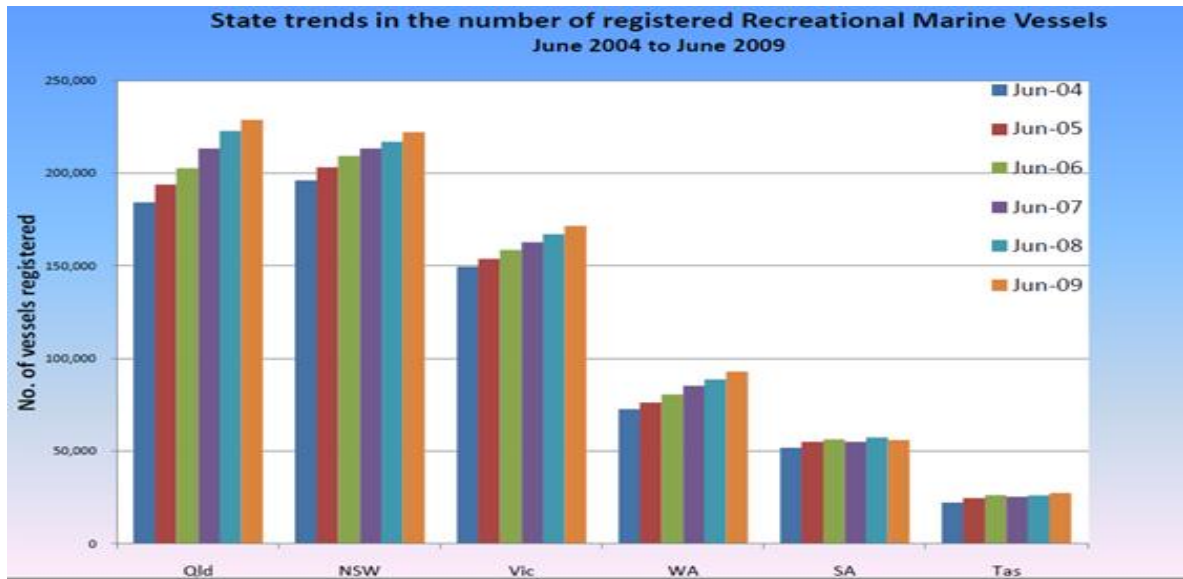


Figure 8 QLD Trends in Number of Registered Marine Vessels

(Marine Queensland, 2009) Queensland's Recreational Marine Industry Report

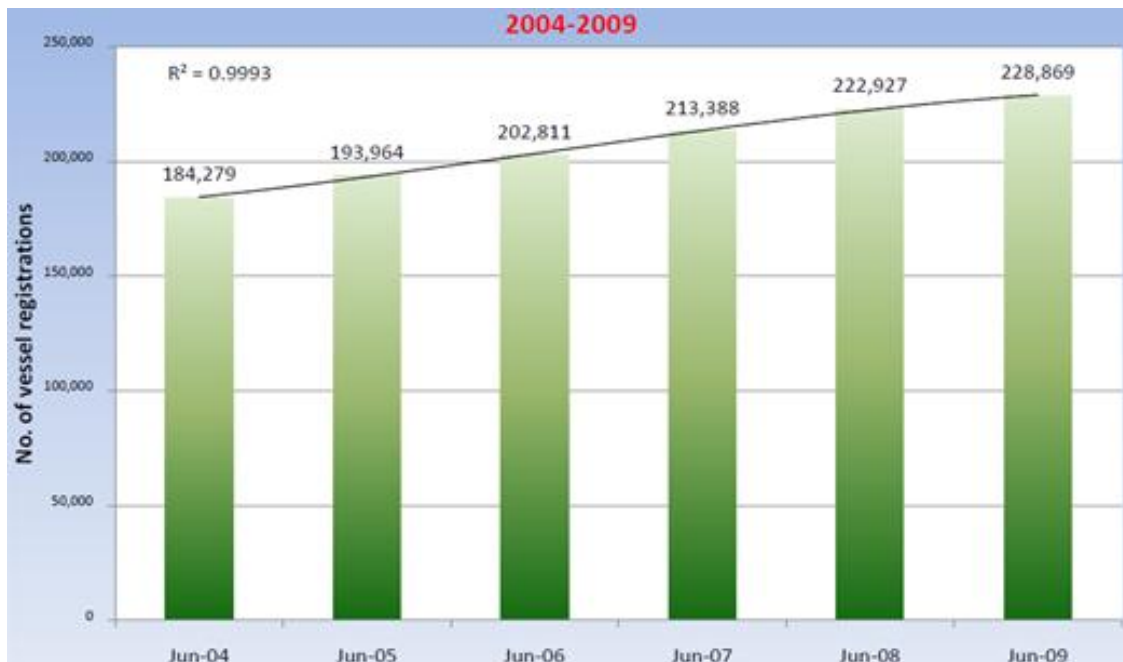


Figure 9 Trend of Total Annual Vessel Registrations in QLD
 (Marine Queensland, 2009) Queensland's Recreational Marine Industry Report

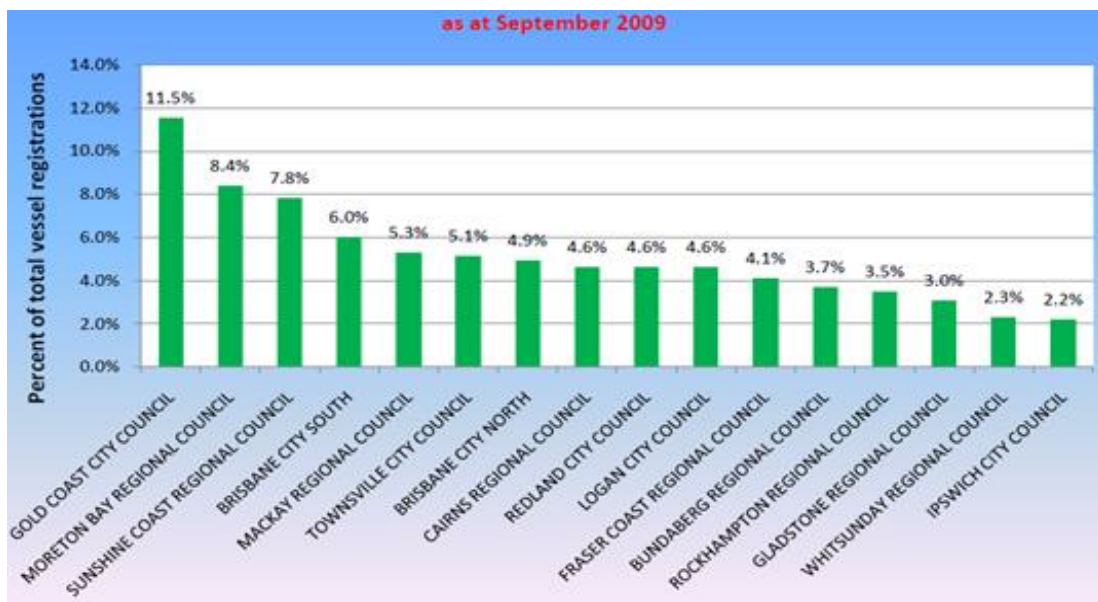


Figure 10 Percentage of Total Vessel Registrations in QLD
 (Marine Queensland, 2009) Queensland's Recreational Marine Industry Report



The data gathered from each of the consulted yacht clubs and marinas also served to highlight average prices and typical marina layouts. For example, all of the marinas reviewed comprised a mix of berth lengths ranging from 6m to 30m. The majority of the marinas were dominated by berth lengths between 10m and 15m. From this research, a proposed optimal mix of berths for the Toondah Harbour marina was calculated as shown in Table 1.

Table 1 Proposed Toondah Harbour Berth Mix

Berth Length	%
6m	1
8m	8
10m	18
12m	30
15m	24
18m	9
20m	6
30m	4

While demand for shorter term rentals is expected to remain higher than long term leases, it should be noted that the 2010 Midwood report estimated that marina berth prices fell on average by 10% in the year to February 2010. Table 2 provides an indication of potential rental fees for Toondah Harbour based on prices used by each of the consulted yacht clubs.

Table 2 Berth Rental Data

Berth Length	Average Rentals		12 Months Rental Fees	Average Long Term Lease
	Weekly	Monthly		
6m	Not Data	No Data	No Data	No Data
8m	\$80	No Data	No Data	No Data
10m	\$143.50	\$477.50	\$4,320	\$80,000
12m	\$207.50	\$650	\$4,900	\$134,500
15m	\$282	\$767.50	\$5,770	\$153,166
18m	\$405	\$1,115.50	No Data	\$187,000
20m	\$381.50	\$1386.50	No Data	\$356,000
30m	Often priced on application \$1,015	Often priced on application \$3,205	No Data	No Data



3.1.2 Population Growth

If the trends of recent years persist, it can be expected that the redevelopment of Toondah Harbour will be undertaken during a period of sustained and rapid population growth. The Department of Infrastructure and Planning (DIP) has estimated that the SEQ population will increase to 4.4 million by 2026. The Regional Plan also projects that the population of the Redland City Council region will grow from 127,000 to 182,000 by 2031. This growth would require an additional 21,000 new dwellings.

Continued population growth of this magnitude will increase the number of people interested in recreational sailing. As a consequence, the potential market of investors able to take up leases at the new Toondah Harbour marina will also increase. The widespread population growth in SEQ also boosts the likelihood of individuals wishing to take up short term rental agreements while on vacation.

3.2 Demand assessment – ferry facilities and tourism

The previous reports contained no survey data or forecasts indicating future demand for ferry services to Stradbroke Island. This is considered to be a weakness of the previous work and one that should be addressed as the project moves forward. It is known that sand mining on Stradbroke is being scaled back, which will reduce demand from commercial vehicles in the longer term. The number of tourists / visitors going to Stradbroke Island is related to the extent of accommodation on the island and related promotion / marketing. The recently released Vision for North Stradbroke Island designates significant areas for new mixed-use, residential and commercial land. Future development within these areas will increase the residential population in proximity to Toondah Harbour. A greater residential population in the surrounding area is likely to result in increased passenger movements. This increase would also correlate to higher demand for supporting provisions such as carparking.

Whilst demand is expected to grow, the extent of growth remains difficult to predict, especially in the absence of a clear tourism development strategy for the island. The State Government has initiated a tourism forum (Stradbroke Island Economic Transition Taskforce) to look at the long term options, which will assist in assessing the demand for ferry services.

In summary, assessing future demand for ferry services will be an important factor in the overall master planning of the area, as it will enable a more accurate analysis of the ferry operator's operational and land requirements. The options identified by EY have not been based on any such assessment: future master planning must be progressed with a clearer understanding of future land requirements for ferry services.

3.3 Financial analysis

GHD has completed a financial viability assessment of the Toondah Harbour proposals; this was based on the 'IMC option' only. However, we have arrived at some broad conclusions in relation to the other concept plan options contained in the EY report. This financial analysis assessed the marina aspects of the overall scheme and considered the ferry terminal / boat ramp aspects within the financial viability analysis. The financial viability analysis included:

- ▶ Data collection and review of readily available documentation
- ▶ High level needs / demand analysis (see Section 3.1)
- ▶ Development of a financial model to assess commercial viability
- ▶ Analysis of financial viability assessment results, for incorporation into the overall study findings.



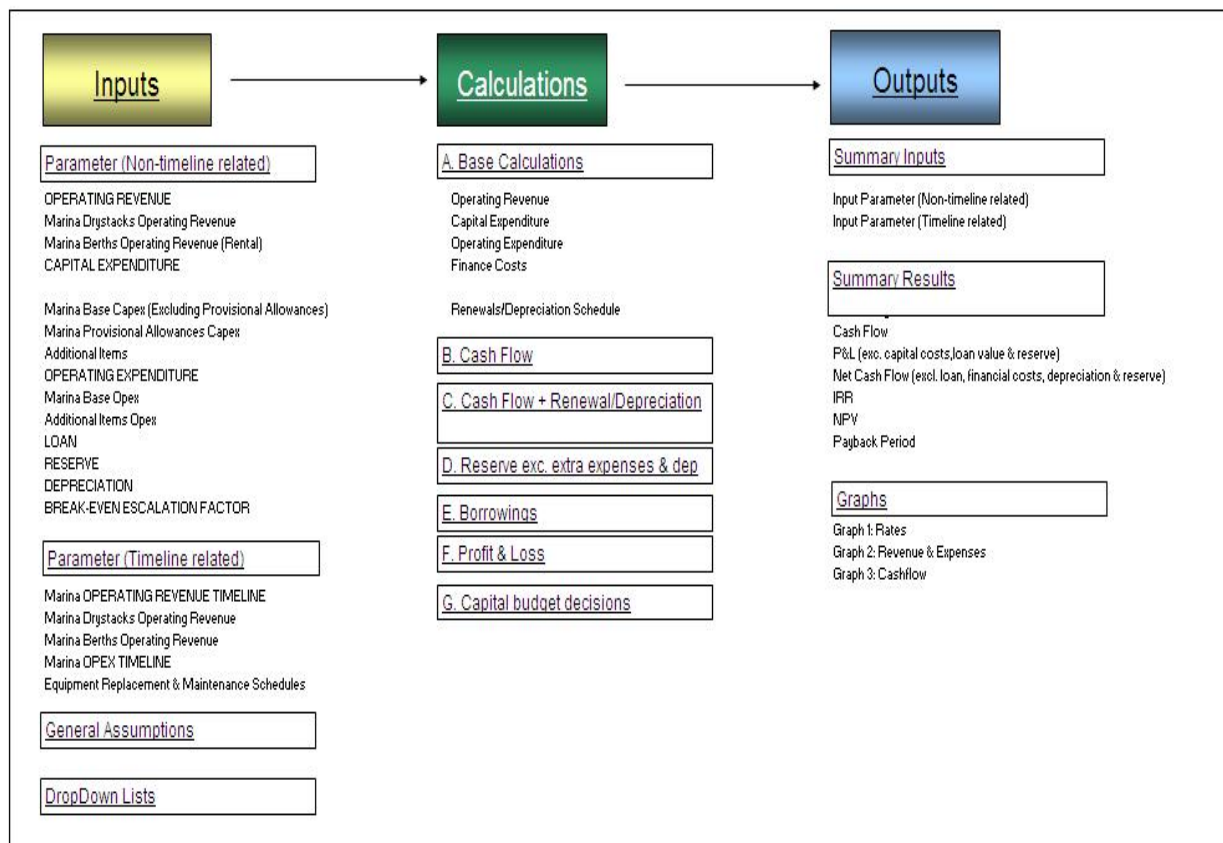
The financial analysis used a base case with most likely values to assess the overall financial viability of the project. Also, a number of sensitivity tests were run, to analyse the financial model's sensitivity to capital and operational expenditure, as well as demand profiles and pricing options.

3.3.1 Financial Model Structure and Parameters

A financial model (P&L account basis) was developed in order to assess in broad terms the financial viability of the proposal. The model included consideration of:

- ▶ Capital and operations & maintenance (O&M) costs (including recurrent dredging)
- ▶ Asset replacement and refurbishments
- ▶ Funding / financing costs
- ▶ Depreciation and interest
- ▶ Demand profiles and assumed occupancy rates
- ▶ Tariff / revenue.

The model structure is summarised in Figure 11 below.



Note: Click on the underlined titles to go to the respective model sections

Figure 11 Model Structure



Model Parameters

The model parameters were defined as follows:

- ▶ Financial rules, (e.g. appropriate depreciation levels and borrowing rates) escalation factors, and model time profile were agreed with RCC
- ▶ Preliminary capital (Capex) and operational expenditure (Opex) items were sourced within GHD
- ▶ The demand and pricing parameters were based on the findings of the high level need analysis (see Section 3.1).

3.3.2 General Financial Model Assumptions

This section summarises general model setup assumptions. Specific assumptions relevant to the base case and sensitivity analysis scenarios are detailed in Section 3.3.3. Other assumptions made for the Inputs and Calculations sections of the model are provided in detail in Table 3.

The key general assumptions are as follows:

- ▶ A fixed loan amount (equivalent to capital expenses) and term (15 year period) has been assumed. No allowances have been made for different borrowed amounts or term conditions (e.g. earlier loan repayment)
- ▶ The model time profile is 15 years
- ▶ Preliminary GHD estimates based on 400 marina berths and 300 drystackes were included in the model after review of previous report data
- ▶ All rates are estimated on an annual basis. Base Case Scenario rental rates have been defined based on average current market values (Berths \$10,000 per year and Drystackes \$6,000 per year). The average rates value might include a combination of charges per day, week, month, year, etc.
- ▶ It is assumed that 80% of the facilities are constructed in year 1 and the remaining completed in year 2
- ▶ RCC blended CPI factor of 4.6% is used to increase yearly revenue and expenses
- ▶ All amounts are exclusive of GST
- ▶ No cash flow values associated with interest rates to be earned/payed from short term cash accumulation or overdraft have been included in the model
- ▶ No tax liabilities have been included in the model
- ▶ The Profit & Loss calculation represents the financial performance for the proposed facilities over the period of funding
- ▶ Capital Budget decision calculations do not include financing costs (only "free" cash flow generated by the assets)
- ▶ Average rates have been estimated based on 2010 typical rental and long term lease rates, as shown in the table below.



Table 3 Toondah Harbour Proposed Berths and Estimated Revenue (100% Occupancy)

Berth Length	Toondah Harbour Proposed Berths	2010 Rental Rates		2010 Long Term Lease Rates			
		2010 Average Annual Tariffs*	Toondah Harbour Annual Estimated Rental Revenue (100% occupancy)	2010 Average Long Term Lease Tariffs	Toondah Harbour Total Estimated Long Term Lease Revenue	2010 Average Annual Charges (Body Corporate)	Toondah Harbour Annual Estimated Charges (Body Corporate) (100% occupancy)
6-10m	108	\$5,000	\$540,000	\$70,000	\$7,560,000	\$900	\$97,200
12m	120	\$7,800	\$936,000	\$120,000	\$14,400,000	\$1,100	\$132,000
15m	96	\$9,200	\$883,200	\$150,000	\$14,400,000	\$1,200	\$115,200
18m	36	\$13,400	\$482,400	\$180,000	\$6,480,000	\$1,400	\$50,400
20m	24	\$16,600	\$398,400	\$200,000	\$4,800,000	\$1,700	\$40,800
30m	16	\$38,500	\$616,000	\$300,000	\$4,800,000	\$2,600	\$41,600
Total	400	-	\$3,856,000	-	\$52,440,000	-	\$477,200
Toondah harbour equivalent average revenue per berth (\$/Berth)			\$10,000		\$130,000		\$1,000

*Based on Market Monthly Rentals

3.3.3 Base Case and Sensitivity Analysis Scenarios

Base Case

The model base case assumes:

- ▶ 80% occupancy rate (rental demand)
- ▶ Rental rates based on average 2010 rental rates (\$10,000/berth/yr)
- ▶ Dry stacks rates set as 50% of berth rates
- ▶ Only average rental demand was considered, selling of berths and drystacks was not included in the base case
- ▶ Base Capex items were included, including a provisional allowance for environmental studies, consultation and approvals
- ▶ Capex contingency value was **excluded** in the base case scenario (contingencies/uncertainties in capital expenditure values are analysed as part the sensitivity analysis scenarios in the following sections)
- ▶ Ferry terminal revenue is excluded



- Rates-increase factor is equal to RCC blended CPI factor (4.6%)⁴

The Base Case scenario results indicate a 7% Internal Rate of Return (IRR), \$2.9M Net Present Value (NPV), and 8 years payback period (see **Appendix 1** for further details).

The results of the Base Case simulation over the 15-year period analysed are shown in Figure 12 to Figure 14 (inclusive) and detailed in **Appendix 1**. Figure 13 shows indicative marina drystack and berths rates per year; and Figure 12 shows total revenue, expenses and renewal/depreciation values for the base case. Figure 14 shows cash flow: cash flow including renewals and depreciation, profit & loss and net cash flow. The revenue generated under the base case scenario is sufficient to provide a positive cash flow at the end of the period analysed (red line) but not sufficient to accumulate values equivalent to the renewal and depreciation expenses associated with the development (blue line). Allowing for a sinking fund to provide for the renewal of the infrastructure is not usual practice, so the scenarios summarised below in Table 4 are based on no allowance for renewal and depreciation.

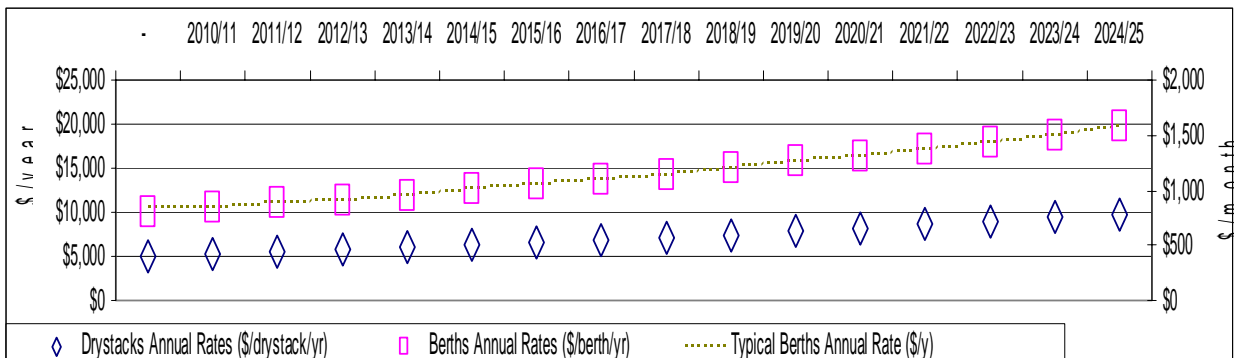


Figure 12 Base Case Scenario Marina Rates

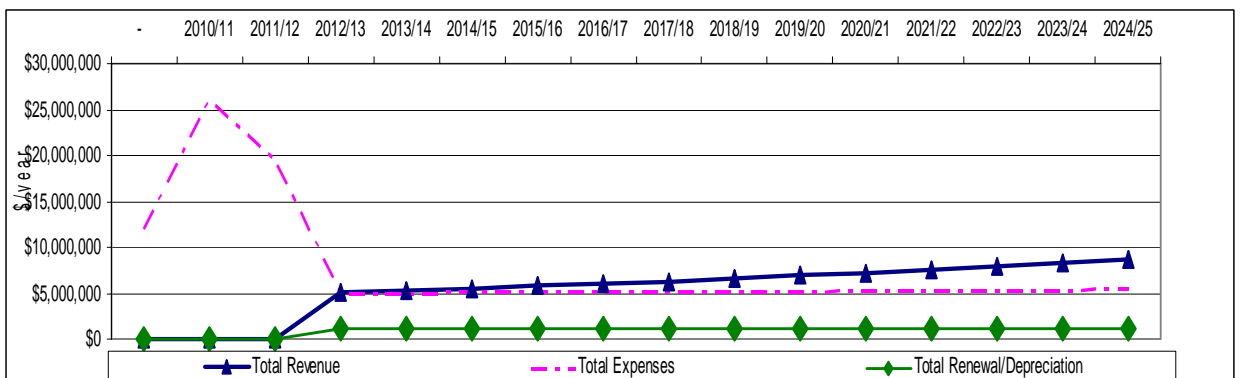


Figure 13 Base Case Scenario Revenue and Expenses

⁴ RCC blended CPI factor based on Access Economics - September 2009 rates

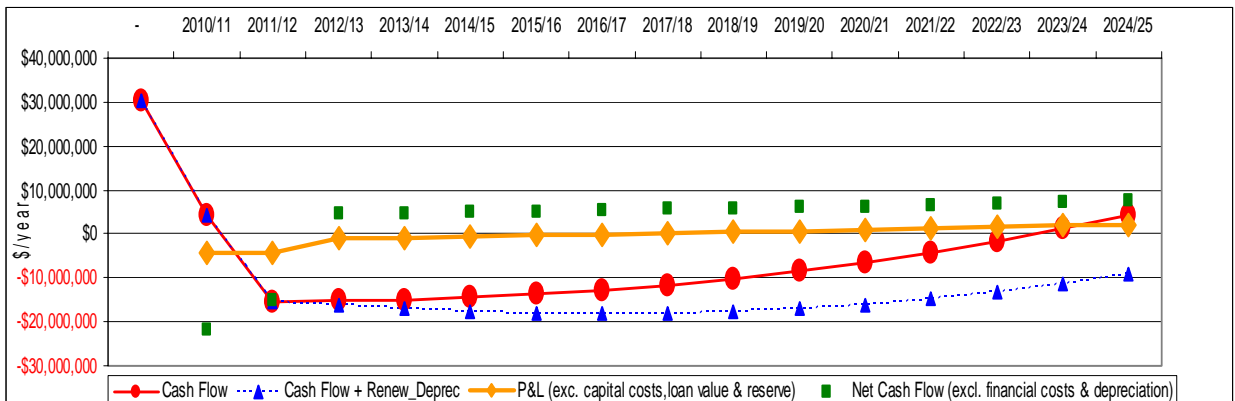


Figure 14 Base Case Scenario Cash Flow

The following sections describe variations of the base case scenario in relation to expenditure, demand and pricing assumptions (See **Appendix 1** for further details).

Capital and Operational Expenditure Sensitivity

Cost sensitivity of capital expenditure (Capex) and operational expenditure (Opex) were adjusted for scenario modelling, using the following scenarios:

- ▶ Cpx115% Scenario: 15% more capital expenditure than Base Case
- ▶ CpxOpx115% Scenario: 15% more capital and operational expenditure than Base Case
- ▶ Cpx125% Scenario: 25% more capital expenditure than Base Case.

Demand Sensitivity

Demand sensitivity was analysed using the following scenarios:

- ▶ RentDmd70% Scenario: 10% less berths and drystack rental demand than Base Case
- ▶ RentDmd90% Scenario: 10% more berths and drystack rental demand than Base Case
- ▶ Sell1% Scenario: combined rental and sell demand. Assumes 1% of berths and drystack are sold every year (4 berths and 3 drystack) at prices (\$130,000/berth) and long term lease rates (\$1000/berth/yr) equivalent to 2010 values. Assumes berths and sales not sold are rented (at 80% occupancy rates).

Ferry Capital and Operational Expenditure Inclusion Sensitivity

The ferry / boat ramp terminal aspects were considered through the analysis of the scenario below:

- ▶ BC&FerryRev Scenario: Includes ferry infrastructure expenditure estimate of \$11.6M, average ferry revenue of \$14M/y, and operational expenditure of \$12M/y, assuming 10% IRR for the ferry.

This scenario only allows for overall revenue and expenditure values associated with a 10% IRR for the ferry operators. Ferry revenue has not been disaggregated into operational revenue and lease values. Ferry lease values (of the order of \$200K/year in 2010) are comparatively low, when compared with the \$11.6M GHD estimate of capital expenditure in ferry infrastructure.



Pricing Options Sensitivity

While previous sensitivity analyses considered only rental of berths and drystackes at average market values, combinations of renting and selling of berths are considered in this section. A number of pricing options and combinations of scenarios were considered in this study to assess the sensitivity to pricing arrangements, as follows:

- ▶ Rates90% Scenario: rental rates set at 10% less than the average 2010 rates used in the base case
- ▶ Moderate Range - Rates95%, RentDmd75%, Capex105% Scenario: A combination of 95% rental rates (5% less than base case), 75% rental demand (5% less than base case) and 105% capital expenditure (5% more than base case)
- ▶ Low Range - Rates90%, RentDmd70%, Capex125% Scenario: A combination of the lowest ranges used in previous sensitivity analysis, including 90% rental rates (10% less than base case), 70% rental demand (10% less than base case) and 125% capital expenditure (25% more than base case)
- ▶ Low Range & High Sales - Rates90%, RentDmd70%, Capex125%, Sales10% Scenario: A combination of the lowest ranges used in previous sensitivity analysis, while also including a high sales rate, with 90% rental rates (10% less than base case), 70% rental demand (10% less than base case) and 125% capital expenditure (25% more than base case), as well as sales of 10% of available berths and drystackes per year (combined rental and sell demand, assumes 10% of berths and drystackes are sold every year - 40 berths and 30 drystackes - at prices and long term lease rates equivalent to 2010 values; assumes berths and sales not sold are rented, at 80% occupancy rates).

Financial Analysis Results

The financial model analysis results indicate that based on the narrow parameters of the base case, and assuming the assumptions hold, this is potentially a financially viable project. However, the project is highly sensitive to capital and operational expenditure as well as demand and revenue assumptions. Minor changes on these assumptions have the potential to significantly change the financial outcomes of the project, as demonstrated by the sensitivity analysis findings detailed in this section. Accordingly, if the cost contingency is taken into account, the project is not viable. It would therefore be necessary to undertake further engineering investigations so as to firm up the construction costs.

Variations in capital and operational expenditure, demand and pricing, have a strong impact on the financial viability of the project, including internal rates of return below 6%, negative net present values, and pay back periods of 9 years or more, as shown in Figure 15 and Table 4. Equally, an increase in berth sales could have a positive impact on viability.

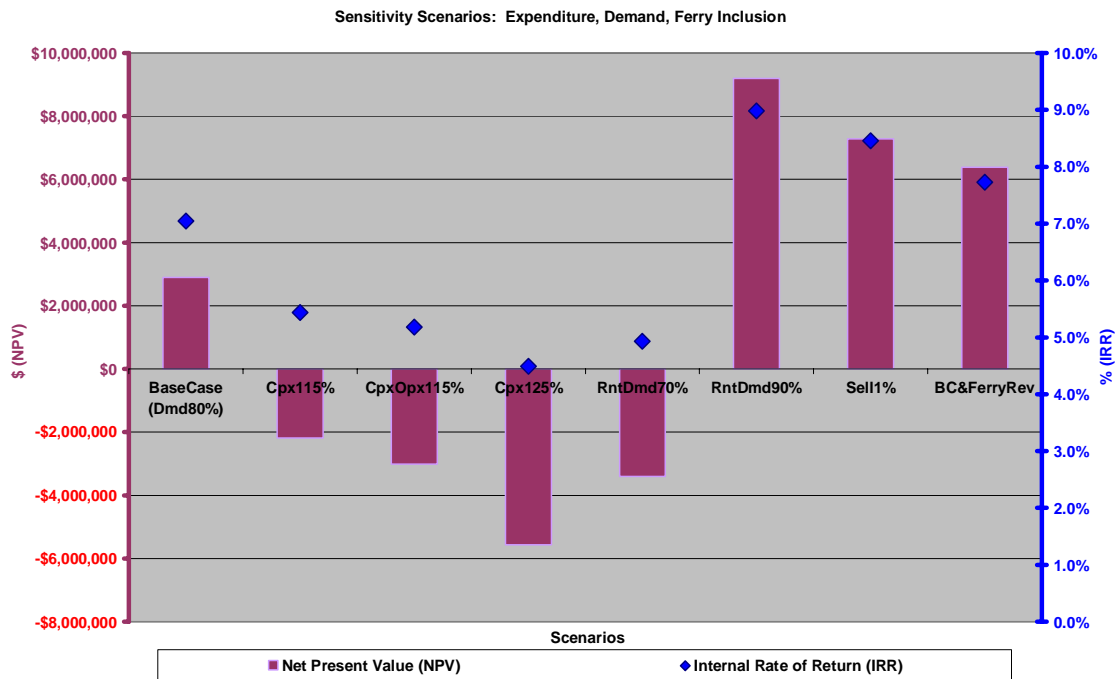


Figure 15 Financial Analysis Base Case and Sensitivity Scenarios: Expenditure, Demand, Ferry Inclusion

Table 4 Financial Analysis Base Case and Sensitivity Scenarios: Expenditure, Demand, Ferry Inclusion

Scenario Type	Base Case	Capex	Capex & Opex	Capex	Rental Demand	Rental Demand	Sell Demand	Base Case Including Ferry
Scenario Name	BaseCase (Dmd80%)	Cpx11 5%	CpxOp x115%	Cpx12 5%	RentDmd 70%	RentDmd 90%	Sell1%	BC&Ferry Rev
Internal Rate of Return (IRR)	7.0%	5.4%	5.2%	4.5%	4.9%	9.0%	8.5%	7.7%
Net Present Value (NPV) (\$M)	\$ 2.90	-\$ 2.18	-\$ 3.01	-\$ 5.57	-\$ 3.40	\$ 9.20	\$ 7.28	\$ 6.38
Payback Period (years)	8	9	9	9	9	7	7	8



Capital and Operational Expenditure Sensitivity

- ▶ The increased expenditure sensitivity analysis scenarios showed negative NPVs of -\$2.2M, -\$3.0M, and -\$5M, with IRR of 5.4%, 5.2%, and 4.5%, for 115% Capex, 115% Capex and Opex, and 125% Capex, respectively. Also, the scenarios showed an increased payback period of 9 years (compared with 8 years for the base case). As such, the increases in expenditure analysed results in non-financially viable options. Given the conceptual level of this study, a variation of 15% or 25% of the base engineering cost estimates is not unlikely; in particular, uncertainties relating to dredging materials management, geotechnical conditions and environmental requirements associated with the current proposal could result in high capital and operational cost sensitivities.

Demand Sensitivity

- ▶ The financial analysis indicates that constant demand of 70% berths and drystack rentals, results in negative NPV values, thus making the proposal unviable under this scenario. The high-level needs analysis completed has indicated that the demand for berths and drystack rental is moderate to high, indicating that a 70% rental demand scenario is not unlikely to occur. As such, appropriate pricing is required to avoid adverse demand responses that might compromise the viability of the project.
- ▶ On the other hand, an optimistic scenario of 90% average demand for berths and drystack rentals results in a positive NPV of \$9.2M and an IRR of 9%.
- ▶ A scenario in which a small number (1%) of berths and drystack are sold every year at average advertised 2010 prices, results in a positive NPV. This indicates that a slight increase in demand for the sale of berths and drystack might improve the overall financial outcomes of the project. Whilst this is not a highly likely scenario under current market conditions, it may eventuate over time as the market returns to more normal conditions. The high-level needs analysis completed has indicated that the rate of sale of berths and dry stacks is currently very low, suggesting that advertised berth and drystack prices are most likely above realistic market levels.

Ferry Capital and Operational Expenditure Inclusion Sensitivity

- ▶ A scenario including ferry terminal revenue and operational expenses (assuming the ferry terminal is a commercially viable venture with a 10% IRR), results in an overall positive NPV of \$6.4M and IRR of 7.7%.

Pricing Options Sensitivity

A summary of the pricing options for further sensitivity analyses are shown in Figure 16 and Table 5.

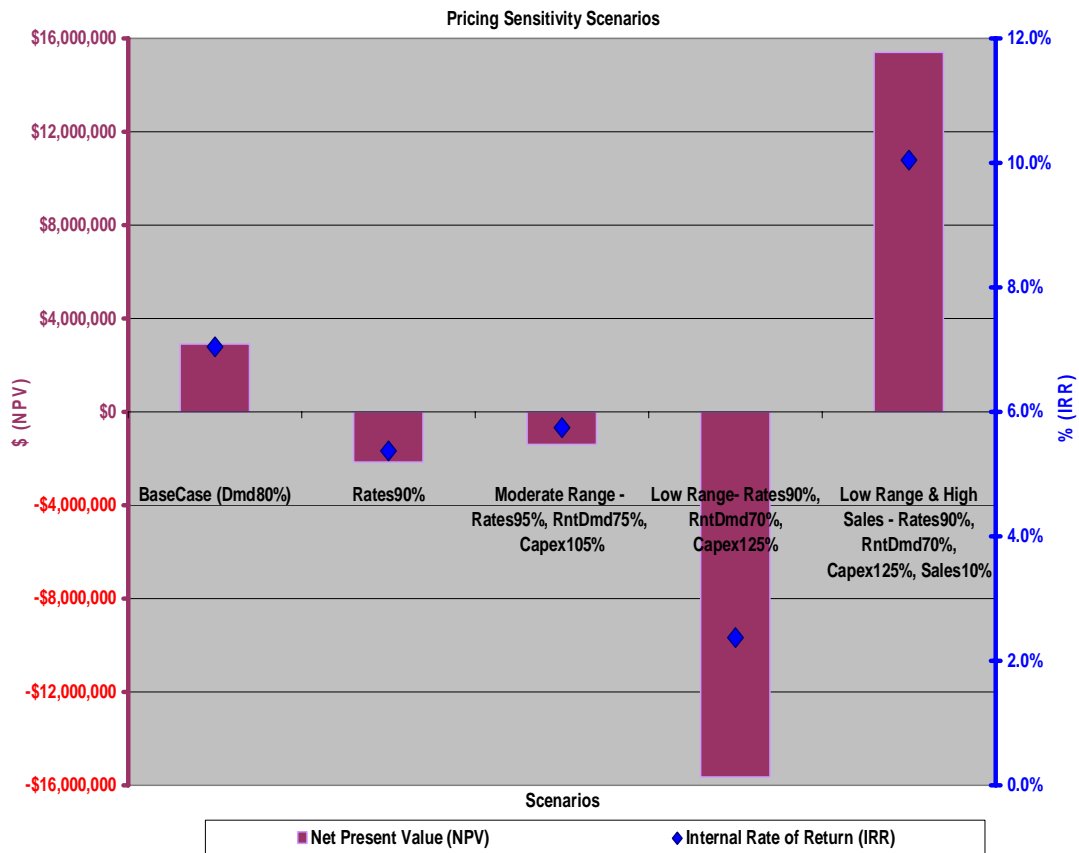


Figure 16 Financial Analysis Further Sensitivity Scenarios

Table 5 Financial Analysis Base Case and Pricing – Further Sensitivity Scenarios

Scenario Type	Base Case	Price	Price (Combined)	Price (Combined)	Price (Combined)
Scenario Name	BaseCase (Dmd80%)	Rates90 %	Moderate Range - Rates95%, RentDmd75%, Capex105%	Low Range - Rates90%, RentDmd70%, Capex125%	Low Range & High Sales - Rates90%, RentDmd70%, Capex125%, Sales10%
Internal Rate of Return (IRR)	7.0%	5.4%	5.7%	2.4%	10.0%
Net Present Value (NPV)	\$2.90 M	-\$2.14 M	-\$1,39 M	-\$15,65 M	\$15,41 M
Payback Period	8 years	9 years	9 years	11 years	7 years



- ▶ While average rental rates have been used in the base case scenario, volatility in these rates might have a substantial impact on the financial viability of the project. This is shown by the rental prices sensitivity analysis, which indicates that a reduction of 10% in prices (that is, 90% of the existing average rental prices) results in negative NPV values.
- ▶ The rental demand and rental rates (pricing) results indicate high sensitivity to variations in these values. These might compromise the project's viability, as under low rental demand there will be limited scope to vary the rental prices in order to impact demand responses
- ▶ Combinations of moderate and low range rental demand, rental prices and increased capital expenditure were analysed to assess the impact of the combination of these variables. These resulted in negative NPVs of -\$1.4M and -\$15.5M, for moderate and low ranges, indicating high sensitivity to the combination of these critical variables.
- ▶ An optimistic scenario with high sales (in the order of 40 berths and 30 drystackes per year) has been analysed in conjunction with low range rental demand, rental prices and increased capital expenditure. The results show that under low range conditions, if an annual rate of sale of berths and drystackes of 10% (40 berths and 30 drystackes sold every year) can be realised at prices equivalent to the 2010 advertised pricing levels, the result would be a positive NPV of \$15M and an IRR of 10%. However, strong sales of berths and drystackes are an unlikely scenario under current market conditions. But as noted above, future market conditions over a 10-year period could well see a rate of sale above 1% as the domestic economy recovers along with demand for boat berths.

3.3.4 Conclusions

Overall, the analyses indicate that the financial viability of the 'IMC option' is not plausible if a construction cost contingency is allowed for in the analysis. However, should the berth sales be higher than 1%, the project is likely to be financially viable under the contingency-inclusion scenario. The potential of stronger berth sales should be reviewed within a detailed needs/demand analysis, in which consideration should be given to the price and demand relationship, and the effect of alternative demand management strategies to allow for adequate pricing policies.

If a contingency is not allowed for, the financial model indicates that the project appears financially viable under a number of different scenarios, albeit sensitive to a number of changes in the level of cost and revenue that represent some downside risk. This conclusion is based on the preliminary work undertaken to date. Further work will be necessary to refine and review the development appraisal in order to reassess the project's viability over time with additional information from detailed studies.

Options 1 to 3 in the EY report – including the 'EY option' (Option 3a) – are based on a smaller reclamation area, with the ferry facilities and marina sharing the existing channel. IMC concluded that with a marina, a second channel becomes essential to maintain maritime safety. The addition of a second channel in these options would be necessary to ensure operational feasibility. If a second channel was added, the disposal of excess of dredge material would add considerable costs to the reclamation, as such disposal is very expensive. Under these circumstances, these options would have far higher capex components than the 'IMC option'.

It is considered that the EY options 1 to 3 are likely to have lower financial viability prospects than the 'IMC option', given their reduced scope for revenue generating development - smaller marina and limited land for commercial marine opportunities - in combination with the potential of a higher capex, if configured with a second channel to meet marine safety and efficiency requirements. To deliver the



critical ferry infrastructure to meet future needs, the reclamation area is likely to need to accommodate a larger marina, associated marine business activity, and possibly other uses such as residential/holiday accommodation, in order to provide a viable outcome. Coincidentally, such an option would most likely involve a dredge-to-fill balance. These conclusions are not based on any financial viability modelling, but have been drawn from the available evidence for the 'IMC option' and the previous work by IMC.

The viability criteria for a State funded project is likely to be different from that which the market would accept from a financial perspective, as State-wide economic costs and benefits differ from financial costs and benefits. The results of this appraisal and any further analysis based on more robust data will need to be assessed against these criteria. This will inform the decision on the method of delivery and procurement. In this context, further consideration should be given to the inclusion of the ferry revenue data, which could be considered as falling outside the overall viability assessment from the financial perspective of a project proponent.

3.3.5 Recommendations

- ▶ Given the strong impact of capital and operational expenditure variations, it is recommended that more detailed design is completed to arrive at robust project cost estimates
- ▶ A further review of the potential market for higher levels of berth sales and changing market conditions
- ▶ There should be consultation with State Government over suitable/acceptable viability parameters
- ▶ Given the strong impact of revenue and demand on the financial viability of the project, it is recommended that the price and demand relationship, as well as the effect of alternative demand management strategies, are closely considered to allow for adequate pricing policies.
- ▶ Consideration should be given to funding options and associated loan details (e.g. interest and periods, if different from those considered in this study)
- ▶ The viability model should be reassessed once the above issues have been addressed



4. Engineering issues

The IMC report does not provide any background on how the cost estimates for the construction of the reclamation area and related infrastructure in the IMC option were derived. For example, estimates of the volume of dredge material and the unit cost of dredging are not provided, only the total cost of dredging and reclamation. GHD has therefore undertaken an assessment of the unit costs of dredging and reclamation, and the cost of constructing the related infrastructure so as to validate the costs provided in the IMC report, allowing for inflation.

4.1 Assessment of reclamation costs

The GHD estimate of broad construction costs was closely aligned with the IMC estimate: this related to the cost of dredging, reclamation, rock armour protection, 400 berth marina, 300 berth day stack, service and marina buildings. However, the review has identified certain cost elements that have not been adequately addressed.

A breakdown of the revised costs estimated by GHD is provided in **Appendix 2**. The cost estimates are based on GHD's professional judgement as to the nature of the dredge material; the constructability cost issues; an estimate of quantities based on the 'IMC option' layout plan, and estimates of civil infrastructure works. Based on this assessment, the total cost of the works is estimated to be \$66.1M compared with the estimate by IMC of \$44.6M: this equates to an increase in costs of 48%.

The actual construction costs were of a similar order between the IMC and the GHD estimate. The increase in overall costs related to some additional / higher costs estimated for the following items:

- ▶ **Ferry infrastructure** – IMC made no allowance, but re-providing this infrastructure would be part of ensuring the ferry companies remain in an equivalent position
- ▶ **Contingency** – IMC allowed for 15%, which is considered to be too low, so an allowance of 25% has been made in line with normal practice
- ▶ **Indirect costs** (e.g. EIS, approvals, design and overall project management) – IMC allowed for \$2.5M whereas an allowance of \$5M has been made based on experience on similar projects.

The above costs are considered to represent a fair and reasonable estimate based on the known design parameters and construction context at Toondah. The costs have been used as the basis of GHD's assessment of the development economics of the ferry terminal and marina: a financial viability model has been developed, the results of which are contained in this report.

4.2 Layout and Constructability

The brief required comments on the constructability of the infrastructure and related abnormal costs. From our assessment, and based on the known physical context and engineering issues, it is considered that there are no abnormal constructability issues or costs associated with the terminal and marina proposals. However, GHD did not consider other layout options in this study and a more thorough investigation into a preferred layout should be carried out in subsequent stages.



In addition, in reviewing the reports, a number of other engineering / construction issues were identified that need to be addressed – these are set out in the table below along with GHD’s response (Table 6).

Table 6 Response to engineering issues / proposals

Engineering issue	GHD response
Bund walls are proposed to reduce the need for maintenance dredging.	Bund walls are used primarily to contain dredge spoil. They are not a direct means of reducing the need for maintenance dredging and cannot be depended upon to achieve this outcome.
The proposed north channel combined with a bridge link may facilitate scouring of the Harbour to reduce maintenance dredging, i.e. allowing for tide to circulate and scour channels.	All channels regardless of their orientation are likely to accumulate higher levels of silt as water flows slower in areas of deeper water.
The north channel dredge spoil is suitable for reclamation.	It is assumed that dredge spoil taken from this area will be suitable for reclamation. While this is assumed it must be noted that no geotechnical studies have been undertaken. In the event this spoil is determined to be of insufficient quality, techniques can be employed to improve the quality of the dredged material in the reclamation.
The 'IMC option' was oriented to provide shelter from prevailing SE winds.	The 'IMC option' would provide sufficient shelter from prevailing SE winds.
The 'IMC option' does not set aside an area for the disposal of maintenance dredge material: the current pond is proposed as a development site.	If the pond is to be developed, then an alternative long term solution to the disposal of maintenance dredge material will be needed.
The disposal of dredge material from forming the north channel would be two or three times more expensive than disposal in the reclamation area, i.e. a solution with no dredge-to-reclamation balance would be much more expensive.	A solution that involved the disposal of dredged material on shore would be more expensive.
The current dredge disposal pond will need to be emptied if it is to be developed.	The disposal pond would need to be drained and raised in accordance with a geotechnical report to provide suitable ground conditions for built development.
A dredging levy paid by passengers and marina berth owners could provide secure funding for ongoing dredging.	The application of a levy to passengers and marina berth owners is common practice. The money generated by a levy could at least provide a reliable and significant source of funding for ongoing maintenance dredging.

From the available information, our preliminary finding is that there are no serious impediments to the proposed development in engineering or constructability terms, or any abnormal costs associated with the proposals contained in the 'IMC option'. However, in the absence of any geotechnical information, it is impossible to provide a definitive conclusion on these matters. There is therefore a risk that the material to be dredged is not suitable for reclamation. Without this information, we cannot confirm that there are no serious impediments to the constructability / engineering feasibility of the project. Accordingly, if the Council wishes to proceed with the project, then it would be necessary to undertake a preliminary geotechnical investigation to assess the feasibility of the reclamation.

4.3 Future ferry service demand and land requirements

One critical factor omitted from the reports is any assessment of future demand for ferry services to Stradbroke Island, and the consequent future land requirements of the ferry companies. Data on current



levels of usage is scant, but responses from the ferry companies provided the following current demand profile:

Sea Stradbroke

- ▶ Reliance on recreational market
- ▶ 144 commercial vehicle movements per day

Stradbroke Ferries

- ▶ Sand mining industry a significant market
- ▶ Desire to compete with Sea Stradbroke for recreational 4WD market

Stadbroke Flyer (water taxi)

- ▶ 80% commuter market
- ▶ 20% tourist market
- ▶ Average 700 person movements per day
- ▶ Peak is 800 – 1,000 person movements per day

Overall ferry / taxi movements

- ▶ Passenger trips 450,000 / annum
- ▶ Car trips 67,500 / annum
- ▶ Trucks 7,500 / annum

As noted in Section 3.2, it is difficult to predict how the demand profile may change without access to any ferry usage forecasts. Whilst the demand for tourist trips to Stradbroke Island are likely to increase over time, the commercial traffic related to the sand mining industry is likely to cease over the medium to long term as sand mining in the island ends in around 2027. Over this period, the mining areas are expected to form part of a new National Park, so restoration and rejuvenation works are likely to continue up to and beyond 2027.

Over time, tourist ferry usage is expected to absorb the excess capacity formed by the cessation of mining operations, but with these dynamics, it is difficult to predict the scale for ferry terminal facilities that should be provided for over the long term, say to 2031 and beyond. It is recommended that the three ferry companies undertake a joint forecast of future demand, which can be fed into the master planning of facilities for Toondah Harbour.

4.4 Summary of findings

The estimation of construction costs by IMC omitted any allowance for ferry infrastructure, an adequate contingency, and adequate indirect costs.

The IMC cost estimate was \$44.6M, compared with GHD's revised estimate of \$66M.



Significant geotechnical investigations are required to demonstrate feasibility and identify project costs more precisely.

A survey of future ferry service demand is also required to establish ferry land and operational requirements.



5. Environmental issues

The key issues that need to be considered for the development of the Toondah Harbour are summarised below as related to all the options. These included recognition of the matters of state significance and National Environmental Significance that have the potential to be affected by the project.

5.1 Key Considerations for the Project

Key issues for this project will include:

- ▶ Impacts of coastal infrastructure construction, dredging and changes to coastal processes and hydrodynamics on key sensitive habitats within and immediately adjacent to the development footprint such as intertidal habitat, coastal dunes, mangroves and potentially seagrasses
- ▶ As highlighted within the Draft State Coastal Plan the protection of the coastline from the potentially adverse impacts of climate change, including increased sea levels and erosion
- ▶ The potential presence of protected species within and surrounding the study area such as migratory birds, dolphins and turtles and potential impacts on these species from construction and operation of the facility
- ▶ Potential social consequence impacts that may result from the introduction of coastal infrastructure facilities including conflict of use of lands, noise, air and water quality impacts

The project is, therefore, a multidisciplinary project requiring consideration of economic, environmental, social, engineering and potentially cultural matters.

5.2 Appropriate Assessment Process

A search of the *Environment Protection and Biodiversity Conservation Act (EPBCA)* Protected Matters Database shows a number of matters of national importance which may be affected by the project. These include:

- ▶ **Biodiversity** – 213 species of national importance may occur within the project footprint
- ▶ **Threatened Ecological Communities** - none of national importance are likely to occur within the project footprint
- ▶ **Heritage** – one site of Australian heritage value may be affected by the project
- ▶ **Wetlands** – one internationally important and one nationally important wetland may be affected by the project
- ▶ **National Pollutant Inventory** – four matters of national relevance for pollutant inventory, including airshed and catchments, may be affected by the project
- ▶ **Protected Areas** – two areas nationally recognised may be affected by the project.

Based on the number of protected matters, it would be appropriate to refer the project to the Department of Sustainability, Environment, Water, Population and Communities (SEWPC, previously DEWHA) for assessment under the EPBC Act. It is likely the proposal would be declared a controlled action, most likely requiring assessment by Environmental Impact Statement (EIS). Given this and the multidisciplinary nature of the proposed works, it may be beneficial to also seek the declaration of the



project as a significant project under the *SDPWOA Act*. This would enable the EIS to be completed to satisfy both federal and state requirements through the concurrent assessment approach offered by the *State Development and Public Works Organisation Act (SDPWOA)*. It should be noted that, to date the State government, at both a political and individual officer level has not indicated support for the redevelopment being declared a Significant Project.

Environmental Impact Assessment (to develop an EIS) through the *SDPWOA* provides opportunity to coordinate state engagement on the project for planning and development against multidisciplinary considerations through the single Department of Infrastructure and Planning approvals process. For multidisciplinary projects such as this one, the coordinated approach removes proponent management into each agency, decreasing the duplication of effort and the chance for cross-agency discrepancies in project assessment. The approach enables the management of projects, coordination of environmental impact assessments and direction on programs of works to be achieved through the Coordinator-General's office for a whole-of-government assessment basis.

Once an EIS has been compiled and lodged with the Coordinator-General's office, the Coordinator-General will release an evaluation report. Following the release of this report, the redevelopment of Toondah Harbour can proceed with individual IDAS approvals under the Redland City Planning Scheme. Assessment officers will use the Coordinator General's report as a guiding document. All development applications lodged against the Planning Scheme should review the available overlays. The Toondah site is shown under these overlays to be susceptible to acid sulphate soils and storm tides.

5.2.1 Relevant legislation and policy requirements

Key Commonwealth and state legislation that will need to be considered with regard to intended project activities will include, but not be limited to, the following:

5.2.2 Commonwealth Legislation

- ▶ *Environment Protection and Biodiversity Conservation Act 1999 (EPBCA)*
- ▶ *Native Title Act 1993*
- ▶ *Environment Protection (Sea Dumping Act) 1981*

5.2.3 State Legislation

- ▶ *State Development and Public Works Organisation Act 1971*
- ▶ Bilateral agreement
- ▶ *Environmental Protection Act 1994*
- ▶ *Sustainable Planning Act 2009*
- ▶ *Transport Infrastructure Act 1994*
- ▶ *Water Act 2000*
- ▶ *Vegetation Management Act 1999*
- ▶ *Coastal Protection and Management Act 1995*
- ▶ *Fisheries Act 1994*



- ▶ *Land Act 1994*
- ▶ *Nature Conservation Act 1992*

5.2.4 Local Government Statutory Instruments

Redland City Council Planning Scheme 2006:

- ▶ Desired Environmental Outcomes
- ▶ Environmental Constraint Overlays
- ▶ Material Change of Use
- ▶ Plumbling and Drainage Works
- ▶ Operational Works
- ▶ Reconfiguring a Lot

A summary of the purpose of these pieces of legislation and their scope in the context of this project is contained in **Appendix 3**.

5.2.5 Other Matters for Consideration

Paramount to achieving assessment success is an ability to demonstrate justifiable need for the project to proceed as identified. Consideration of need will have to address how alternative approaches (e.g. diversified development, different design, alternative footprint) do not satisfy the project's requirements and identify the proposed project as the viable solution. Projection of marina and ferry demand within the local area and region will be required to establish the requirement for the marina and offshore facilities. This reflects our finding in Section 4 that a review of future ferry and taxi demand is required to provide a needs case for expanded ferry and taxi facilities.

Justification of the project against a "no development progressed" scenario will be required from a strategic, economic, environmental and social implications perspective considering technical feasibility and commercial viability. Coupled to this, consideration will have to be given to all potential construction approaches to justify the selected option of cut-to-fill dredging works. Significant dredging works are proposed and marina construction is provided as a dredged material management strategy. Alternative dredge material management solutions will need to be given due consideration, including use of existing reclamation sites and disposal grounds.

It is expected that to meet project information needs to address expected approval requirements; works including the following would be required:

- ▶ Detailed marine ecological benthic assessments to describe likely marine ecology impacts
- ▶ Detailed hydrodynamic modelling and coastal process assessments to demonstrate negligible impacts from the project on water quality, potential for coastal erosion and existing sediment transport regimes
- ▶ Social impact and community consultation assessments to understand potential conflicts related to intended construction works and land uses



- ▶ Transport modelling to discern most appropriate transport (land and marine) options for the proposed development for safe construction and operation of the facility
- ▶ Terrestrial ecology and waste impact assessments to describe likely impacts resulting from construction and operational works.

To achieve the level of detail required for assessment of the project in accordance with (at a minimum) *EPBC Act* requirements, a significant level of field and other investigations will be required. Given the location of the proposed works, a thorough assessment of coastal environmental impacts will be required.

5.3 Summary of findings

- ▶ The project is likely to require an EIS as it will be declared a controlled action under the EPBC
- ▶ The project will benefit from being declared a significant project under the SDPWO Act 1971
- ▶ Land Use Agreements may be required under the *NT Act 1993*
- ▶ A sea dumping permit may be required under the *Coastal Act* for any reclamation and dredging works
- ▶ The project will require assessment under SPA for works such as material change of use, reconfiguring lots and operational works such as tidal works
- ▶ Clearing native vegetation as part of the foreshore redevelopment will trigger the need for a vegetation clearing permit under the VMA
- ▶ The removal, damage or destruction of marine plants such as seagrasses will trigger assessment under the *Fisheries Act 1994*
- ▶ Works within the tidal area including dredging will require assessment under the *Coastal Act*

It is likely that the above work can be undertaken on an incremental basis such that initial investigations will inform a revised conceptual master plan, followed by full detailed environmental, social and economic assessment adequate for the likely EIS process.

Accordingly, more investigations are needed to inform a revised master plan that identifies the most appropriate dredge disposal strategy so as to underpin the design footprint/configuration of the ferry and marina infrastructure. This is a critical issue that needs further supporting information. The previous work was based on a dredge-to-fill balance approach which led to the 'IMC option' and the increase in the size of the reclaimed area, with no reference to the future land requirements of the ferry operators or marina requirements.



6. Property market

6.1 Market overview

Savills Research and Consultancy has prepared a report into the broad viability of the proposed level of development at Toondah Harbour in the context of the current and likely future property market. A summary of its findings is set out below and the full report is attached at **Appendix 4**.

The historic bayside suburb of Cleveland contains a diverse mix of housing styles, ranging from older weatherboard homes, townhouses and villas, to the prestigious waterfront houses located in Raby Bay. In recent years unit development has transformed parts of Cleveland's shoreline. As well as being able to commute into Brisbane via the Cleveland train station, residents often find employment in the area with major employers such as the Department of Primary Industries, Redland City Council, two hospitals, an industrial estate and many other small businesses.

Sales of residential units generally matched supply through to 2006, but in 2006 – 2007 the rate of development accelerated, with a record 276 new units completed that year. Sales numbers peaked in 2007 with 175 sales for the year, and median prices went on to climb to \$442,500 before declining to \$410,000 in 2010, a fall of 7.34%. The rate of sale subsequently dropped by more than 50%, leaving more than 180 units on the market with some having been for sale for more than a year.

Looking specifically at the sale of units and townhouses in 2010, it is noted that sales dropped significantly in the last Quarter as buyers tended to forsake new product for older stock, driven by the affordability of established product.

Development activity in Cleveland has dramatically slowed as current projects come to a close. New starts are few as developers struggle to either obtain finance or achieve the level of pre-sales required by the banks. Those who do obtain finance are finding interest costs considerably higher or are required to provide collateral security. Despite some reduction in site values and a more competitive construction environment, the viability of new residential projects is being tested by a slowing take-up of the new product.

Census data for Cleveland indicates population growth of 1.9% per annum over the ten year period from 1996 to 2006. The 5 year average growth rate, from 2001 to 2006 was more subdued at 1.3% per annum. Medium projections released in 2008 by the Office of Economic and Statistical Research, Queensland Treasury indicate that by 2016, the expected population of Redland City Council will grow by 1.8% per annum. Based on this data, it is estimated that Cleveland will be in line with the OESR Redland City Council projections with forecast growth in population of 1.8% per annum.

Cleveland has a slightly higher proportion of home owners (64.2%) than the Brisbane Metro area (63%), which is indicative of an area that is marginally less transitory, dominated by mature families and empty nester household types.

Overall, it is clear that the residential market has been more subdued since the GFC and there are signs that it will remain so in the near-term as the market continues to adjust to changing market conditions. Both new development and sales are subdued, with purchasers tending to prefer second hand stock. However, population growth remains robust and on trend, so at some stage latent demand from both first time buyers and investors will return.



6.2 Residential take-up

Savills has identified that sales for the eight month period up to August 2010 were 213, which equates to about 320 units for the year if the monthly rate is extrapolated. Taking account of “churn” in the market (the resale of existing stock), the available sales of new stock would be about 80 compared with organic growth demand of about 109 dwellings (or new households).

It appears that the current market is not delivering the required amount of dwellings due to poor market conditions, so some demand is being suppressed as latent demand that will come forward as the market returns to more normal conditions. If the market recovered to 2009 conditions, then the data from that year would indicate an investment quota of up to 104 dwellings per annum: if organic demand is added, the total sales could be 213 per annum.

Savills’ concludes that based on the above figures, it is considered reasonable to accept that new apartments in the area could attract up to 100 sales annually. Savills has also advised that the sales numbers are likely to trend upwards (or accelerate) as an increasing number of baby-boomers retire, peaking in 2016: accordingly, the sales numbers could double over this period.

With an estimated yield for Toondah of 877 residential dwellings (apartments) (EY option), the development period would be between 8.7 and 7.5 years, and possibly less if based on an accelerated rate of sales. These estimates assume that the market returns to 2009 levels and is maintained over the development period, and that Toondah attracts the majority of the available demand based on a more attractive price point and/or market profile.

The analyses suggest that the market will dictate a relatively long development and sales period, but that careful staging will assist in maintaining a viable rate of sale. Savills’ also suggests that the area has several advantages over other development locations, which should assist in maintaining its viability:

- ▶ A superior location with waterfront amenity, bay views, marina / ferry activity and access to Stradbroke Island
- ▶ The potential to create a precinct with a unique character into which investors and local residents will want to buy at a variety of price points

A variety of unit / apartment types will therefore be important so as to meet the changing market profile: this can be achieved with a relatively long planning and development period. Savills’ also expects the market to improve as more “baby-boomers” start to retire and exercise property investment choices, peaking in 2015.

6.3 Retail / commercial take-up

Savills’ has concluded that the potential number of residents in the immediate area will not support the scale of retail and commercial space envisaged in the development yield calculated by GHD based on the ‘EY option’ (i.e. 15,288 sq m). Retail will be a necessary catalyst in attracting residents to the proposed Toondah Harbour development, but it will be difficult to establish a viable business until most of the potential residents have moved in. Even at this point, it is difficult to see any more than 500 square metres of retail required initially.

Savills has advised that ultimately, a gym, a hotel, general medical practice as well as a convenience store, restaurants and coffee shops could possibly be supported by residents, visitors and a high ferry trade. This would still be considerably less than 2,000 sq m. This assessment indicates that the scale of commercial / retail development may need to be scaled back and revert to residential. This may also



have implications for the overall scale of development at Toondah in the context of achieving an overall feasible and viable development.



7. Town Planning and Delivery

7.1 Development scale

The concept master plan options referred to in Section 2 of this report were derived from the three identified approaches, namely minimal change, general improvement, and major changes to maximise potential (may include radical change which pushes the boundaries). The Redland City Planning Scheme (April 2010) zones the land “Marine Activity Zone – Sub Area MA1”, except the existing open car park to the north of Middle Street (adjacent to the CSIRO land), which is zoned “Open Space”. Under the guidance of overall outcomes seeking to maintain respect for the foreshore, the Marine Activity Zone – Sub Area (MA1) allows for a range of land use types, including commercial development, apartments and tourist accommodation. The overall outcomes established within the Zone Code seek to minimise visual impacts in relation to building heights, bulk and form. The Code continues this theme through the establishment of a specific outcome for building heights. This specific outcome is linked to a probable solution that requires maximum building heights of 14m when mixed-use development is proposed.

The zone provisions allow for mixed-use development including apartments, commercial, boat industry, marine services, tourist accommodation and shops within an urban design framework of building heights up to 14m. The HPS report interpreted this as 4 – 5 storeys.

The preceding EY / Hassel report investigated a range of developable areas and plot ratios, but it is difficult to relate these to the Planning Scheme parameter of allowing development up to 14m in height. However, the report indicates that 5-storey buildings may equate to a plot ratio of up to 2.5.

The five conceptual options devised by Hassel include two with building heights of 4 – 5 storeys, and three with heights of 5 – 7 storeys justified to some extent by the SEQRP's objective of optimising the potential of infill development so as to ensure better utilisation and efficiencies in the provision of infrastructure, particularly public transport. In the absence of any serious public transport provision at Toondah and no planned provision, it may be difficult to justify the higher densities envisaged in two of the concept options and the ‘EY option’: the HPS report notes this issue. The implications of the two building height ranges in terms of floorspace are:

- ▶ 4 – 5 storey 63,000 sqm
- ▶ 5 – 7 storey 158,000 sqm.

The EY report discusses the benefits of applying bonus plot ration to development yield above that provided for in the Planning Scheme. In the absence of a strong nexus between residential occupancy and the new harbour facilities, it is difficult to see how any such charges could be justified in the Priority Infrastructure Plan (PIP). It seems that the justification for the increase in density relates entirely to the objective of optimising the infill potential. However, Council staff have advised GHD that the increase in density may have related to the need to ensure sufficient infrastructure charges to fund the waterfront upgrade: infrastructure charges related to waterfront amenity upgrading would be justifiable, but the scale of development needed to fund these works will need more thorough investigation.

The ER report notes that the “optimal density of development will need to be firmed up in the next phase of the project, having regard to public consultation”. The HPS report notes that the scale of development envisaged by the Planning Scheme “is in itself quite substantial and consistent with the current visioning for Toondah harbour”. It goes on to conclude that the scale of development should be in line with that

envisaged in the Planning Scheme given concerns raised by the former Office of Urban Management at DIP, the lack of public transport provision and the need to improve infrastructure provision to meet the current Scheme provision, let alone any increase.

For these reasons, GHD has reassessed the potential development yield for the land identified for development in the 'EY option, within the parameters of the Sub Area 1 provisions. This includes some land north of Middle Street that is zoned "Open Space", acknowledging that this will need to be reassessed through the next phase master planning. Reassessing the site yield was considered necessary in order to provide the property consultant (Savills) with a firm basis for assessing the likely market response to the scale of development envisaged by the Planning Scheme. Taking these land parcels, GHD made several assumptions as to the nature / scale of development that might be appropriate. The approach envisaged the taller buildings in the central part of the development area, tapering off to the margins. The resulting land use plan is shown below in Figure 17.

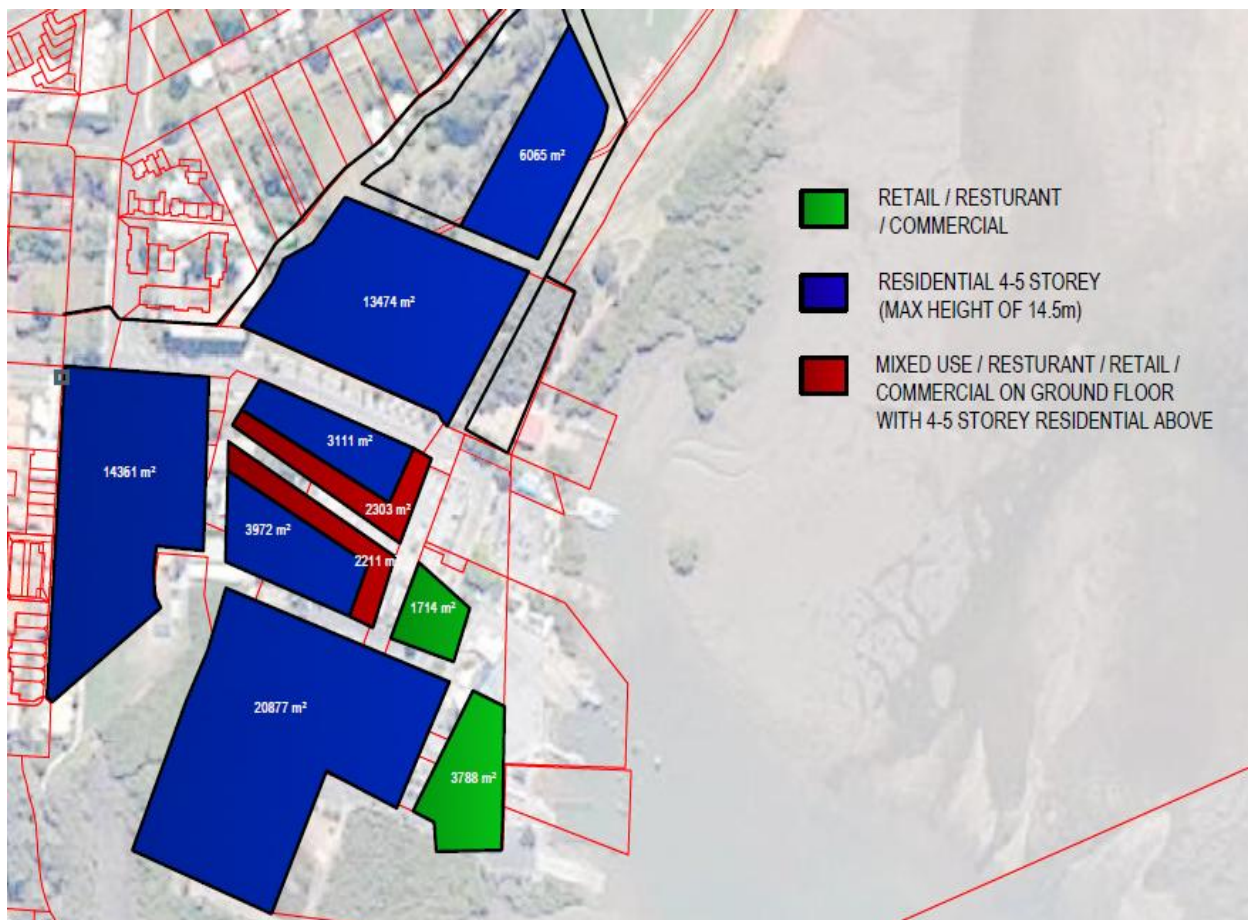


Figure 17 Block Land Use Plan



The full assessment of the development yield is shown in the schedule at **Appendix 5**. The summary is shown below:

Table 7 Development Yields

Development Component	Development Yield
Residential units	877
Car parks	1,728
Residential GFA	90,287
Mixed-use dining / retail GFA	2,751
Mixed-use commercial GFA	12,536
Building heights	1 – 4 storey
Total developable land	71,867 (7.18 ha)

The total developable area of about 7.2 ha is very close to that provided in the EY report of 6.77 ha. However, the resultant Gross Floor Area (GFA) of about 105,500 sq m lies in between the range noted in the HPS report of 63,000 sq m to 158,000 sq m. The maximum building heights achieved was 4-storey based on a typical floor stud height of 3.7 m, but it may be possible to increase this to 5-storeys with careful design.

The overall scale of development will need to be reassessed as part of future master planning and urban design exercises. These exercises should incorporate appropriate public and stakeholder consultation phases. The density of development, range of building heights and the final urban morphology will need to respond to the surroundings, take account of views and vistas, as well as establish a new relationship with Moreton Bay and create an urban place of distinct style. The ultimate solution can then be translated into suitable planning provisions, and infrastructure requirements within the PIP⁵.

A broad review of the urban design work undertaken by Hassel is set out in Section 7.2 below: this provides a starting point for further master planning work building on the concepts already identified.

7.2 Urban design review of options

An urban design review has been undertaken of the options in the EY report so as to assess whether the broad approach, investigations and analysis formed a suitable basis for taking the project into a master planning phase.

From an urban design and planning point of view the location of the proposed waterfront development is in a strategic bayside precinct and offers a significant redevelopment opportunity with a number of social, economic and environmental benefits. Marina activities developed in conjunction with the regeneration of strategic sites, including mixed-use development and an improved transport facility for the ferries would

⁵ This land use assessment and Figure 17 have been adapted from areas previously included in reviews by EY and HPS. It will be necessary to reassess the inclusion of land currently zoned as open space before proceeding with any further planning land use work.



activate the Toondah Harbour waterfront and add to the amenity of this important tourist destination point.

A key element of the precinct is the current transport function of Toondah Harbour, which is the primary access point between greater Brisbane and North Stradbroke Island. While this role defines the precinct at present and will remain as an integral part of the area, the natural beauty of the site's bayside setting offers the potential opportunity for improved amenity for the local population, a visiting population of tourists to North Stradbroke Island and day trippers from the broader regions. It is this opportunity that has driven the development concepts for the precinct.

Toondah Harbour is approximately 1.4 kilometres from the commercial and retail core of Cleveland Principal Activity Centre. The Hassel urban design concepts appear to make an over provision in terms of floor space. It is recommended that the appropriate provision of retail and commercial floorspace within the proposed mixed-use waterfront precinct be revised so that it does not undermine or compete with the Cleveland Centre commercial core. Future development within the precinct should focus on leisure, restaurant facilities and convenience commercial activities. Improved public transport services between the harbour and the core are vital to ensure adequate access between centres, strengthen the relationship between the centres, and curtail the need for the provision of a generous commercial floorspace within the precinct.

7.2.1 Comments on Option 3a (EY option)

In principle, the 'EY option' appears to promote an integrated development that has the potential to create a unique character for the precinct focused on access to the waterfront as well as access to the islands. A number of issues have not been addressed at this high level concept stage: these include improved access to the site by means of public transport to both improve connectivity and reduce the need for parking provision for visitors to the islands; provision of parking; extent of retail and commercial floorspace required to activate the high street without undermining the Cleveland commercial core; review of heights appropriate to the precinct; extent of scale of the marina, and the landside extent of the ferry facility requirements.

7.2.2 Consideration of Future Master Planning

The urban design review highlighted the need for detailed master planning for the site. Future work will need to resolve the functional aspects around a number of potentially conflicting activities listed below:

Maintaining the transport function considerations

- ▶ Potential conflicts with commercial water-based activities and marina activities will need to be resolved
- ▶ Review of extent of ferry transport, landside and waterside needs
- ▶ Provision of long stay parking for visitors to North Stradbroke Island

Mixed-use considerations

- ▶ Review the extent of retail and commercial floorspace provision to ensure that a realistic provision in this location does not undermine the Cleveland commercial core



- ▶ Review the implications of a reduced business activity in this location as it may reduce the attractiveness of the future development of the precinct and have an impact on the ability to activate a high street character
- ▶ Investigate potential specialised land uses related to tourism and visitors' needs, which may provide an alternative business or retail attraction and provide a point of difference to the precinct

Increased residential intensity considerations

- ▶ Identify sub precincts and establish appropriate built form, scale and typology parameters based on precinct character
- ▶ Review proposed heights in relation to achieving an appropriate human scale along the waterfront edge
- ▶ Investigate the potential to terrace building heights up from the bayside, and back down to the adjacent residential area. This morphology will enhance the maximum viewing opportunities to the bay as well as preventing a narrow wall of buildings fronting the bay.
- ▶ Seek to use public owned land as catalyst sites for rejuvenation of the precinct

Marina considerations

- ▶ The development of a marina should be integrated with future recreational and mixed-use development
- ▶ Large structures associated with a marina could have a negative impact on waterfront, residential, retail and commercial development and should not be encouraged in this vicinity
- ▶ The scale and density of the marina should not negatively impact on views out to the bay. In principle, scale and density of the marina should be used to frame views from the landside as opposed to obliterating views to the water
- ▶ Although a well located precinct, visual impacts on bay views would require careful consideration, so a visual impact assessment should be undertaken
- ▶ Potential conflicts between the marina and the boat ramp will need to be resolved

Visual Considerations

- ▶ Maintain visual connection to Moreton Bay
- ▶ Celebrate and enhance views from the bay
- ▶ Utilise local landmarks and natural features for wayfinding purposes.

Access and movement considerations

- ▶ Develop a connectivity plan for active modes, transport function, public transport and vehicular traffic
- ▶ Strengthen connection between Cleveland centre and this precinct through improved public transport and active modes
- ▶ Ensure that the future cycle routes along the waterfront are well integrated with local cycle routes to encourage more trips between Cleveland centre and the precinct.



Public realm

- ▶ Provide wide pedestrian footpaths along the water's edge
- ▶ Provide a network of open spaces that connect with surrounding open spaces.

Heritage

- ▶ Retain some visual signals on indicators of the area's heritage as providing a long standing ferry service

In addition the master planning process should also factor in potential environmental impacts associated with climate change such as coastal erosion and increased sea levels. While the foreshore of Toondah Harbour is already largely developed any works should seek to minimise further changes to the natural landscape in accordance with the Draft SEQ Coastal Plan.

7.2.3 Key findings

Overall, the urban design and master planning work undertaken by Hassel has provided a starting point for further work to develop an informed and feasible master plan for the area. The listed considerations take account of the further technical, land use and urban design investigations that will need to be undertaken to develop the concept. The previous reports recognise that there needs to be further investigations so as to "prove up" the various options. In relation to the 'IMC option', it is considered that whilst this has some merit, further work is needed to identify the most appropriate concept given that:

- ▶ There are a range of uncertainties as noted above
- ▶ It was adapted for the 'EY option' (Option 3a), which was acknowledged as needing to be proved up
- ▶ It proposed building heights adopted from the 'EY Option' that need to be tested in urban design, amenity, transport and infrastructure terms
- ▶ Its scale (harbour facilities) was derived from a dredge-to-reclamation balance approach
- ▶ It includes a dry stack building for 300 berths that could have significant visual / scenic amenity impacts and needs careful treatment in urban design terms

The above findings suggest the need for further technical investigations and the development of a design brief before a more rigorous and inclusive master planning and urban design exercise is undertaken.

7.3 Statutory planning delivery framework

There are two components that need to be delivered through a statutory planning framework:

- ▶ The harbour infrastructure – ferry terminal, boat ramps and marina
- ▶ The mixed-use and residential development at Toondah

7.3.1 Harbour infrastructure

For the harbour infrastructure, the requirements for an EIS and environmental approvals have been set out in this report. How this work is managed and funded will need to be considered further in the context of more consultation with Council officers and State Government. Once the approvals are in place, detailed design and construction can commence either as a State infrastructure project or by a private developer following a tender exercise.



7.3.2 Mixed-use development

In relation to the mixed-use development, the 2007/2008 reports address the approach to delivering the development on a holistic basis, emphasising the need for a single-developer approach. It was also critical that, as a minimum, agreement in principle is reached with the various landholders, landowners and stakeholders, particularly in relation to shared commercial outcomes and return expectations. In this way, a “whole of precinct” outcome can be put in place via a master plan exercise.

There are a number of potential town planning mechanisms that could be employed to bring forward the development in planning terms. The options include:

- ▶ An Urban Development Area (UDA) under the *Urban Land Development Authority Act 2007 (ULDAA)* – with planning administered by the Urban Land Development Authority (ULDA)
- ▶ A State Development Area (SDA) under the *State Development and Public Works Organisation Act 1971 (SDPWOA)* – with planning and funding administered by the State Government (DIP)
- ▶ A Master Planned Area (MPA) under the *Sustainable Planning Act 2009 (SPA)* – requiring a Structure Plan to be undertaken as the basis for managing development applications
- ▶ A Local Area Plan (LAP) under the *Sustainable Planning Act (SPA)* – to be prepared by Council and incorporated into its Planning Scheme
- ▶ A non-statutory master planning process to be developed as a mechanism for guiding future development
- ▶ A project plan outlining a strategy for developing Toondah Harbour and providing guidance on statutory planning, approvals and design

UDAs are identified by the Minister for Planning and relate to areas of high growth and housing stress, areas containing high proportions of crown land and areas near to public transport and employment opportunities. Based on recent UDA designations and these criteria, there appears to be little prospect of Toondah Harbour being designated a UDA.

SDAs are designated to promote economic development and address areas of market failure in the development of industrial land and multi-user infrastructure corridors. The Toondah area would not fit this justification profile, so an SDA would not be an appropriate model for planning delivery.

MPAs are declared under the *SPA* where state and local government work together to achieve long term planning for the area in a structured and coordinated way. Master plans provide for more detailed local area planning, often for large greenfield development sites. A structure plan is prepared for the entire master plan area. This plan sets out the broad environmental, infrastructure and development intent to guide further detailed planning in the area. After a structure plan has been finalised it is incorporated into the local government planning scheme and location-specific master plans will be produced where necessary. It should be noted that as the Toondah site is relatively compact, a master plan without an associated structure plan would be an appropriate means of guiding future development.

Master planning allows for State and local policy issues to be resolved when plans are prepared rather than at the time individual development applications are made. This is expected to make the development assessment process more efficient and have a positive impact on housing affordability.

An alternative would be for Council to undertake a Local Area Plan (LAP) based on the master plan work and incorporate this into its Planning Scheme as the basis for managing development applications. A further option would be to develop a Project Plan that would act to:



- ▶ set out development outcomes;
- ▶ prepare a brief for future tenders; and
- ▶ initiate the involvement of the public sector.

The final statutory planning model will need to be discussed further with Council and with key State Government stakeholders. Council has asked GHD to prepare a Project Plan and this will be investigated in consultation with Council.

7.4 Overall delivery model

The reports from 2007/2008 investigated possible project delivery models, concluding that the State Government was unlikely to want to take “ownership” of the project and act as the lead authority to take the project forward. The alternative model was a shared lead role between the State (DERM) and Redland City Council. As Council now has control of the former CSIRO land, its involvement is fully justified as a key primary stakeholder. The HPS report offered a complex project management and delivery structure based loosely on that adopted for the Mooloolaba Spit project.

It is understood that the State Government has been maintaining an interest on the future planning of the Toondah Harbour area. This is therefore an appropriate time to be engaging with the State Government (DIP and DERM) to discuss the options for a delivery platform to manage the delivery of the proposals through the master planning and statutory processes.



8. Conclusions

8.1 Introduction

The reports from 2007 and 2008 assessed a number of options for the redevelopment of the Toondah Harbour area, arriving at an option comprising a substantial reclamation to accommodate a new ferry terminal, boat marina and related facilities. This form of development would enable the redevelopment of the vacated ferry facilities and other land in the area for mixed-use purposes.

Whilst the studies set out the rationale for the options developed and the selection of the 'IMC option', GHD's investigations have identified a number of gaps and uncertainties that need to be addressed before the project can progress to a master planning phase. To some degree, these gaps were acknowledged in the IMC report, and included:

- ▶ The Council's objectives contained in its LGMS have not been reflected in the SEQRP
- ▶ The assessment of environmental impacts was not sufficient to fully inform the identification of a preferred master plan option
- ▶ Given the gaps in investigations, further work is required to inform a revised concept for the harbour infrastructure as a basis for a detailed master planning phase
- ▶ The reports' findings on delivery and implementation need to be updated in the context of more high level discussions with State Government
- ▶ The density of the mixed-use development will need to be reassessed via a master plan exercise and in the context of acceptable planning parameters and property market considerations.

Toondah Harbour is identified as an "Area of State Significance – Social and Economic" as the "Toondah Marine Transport Facilities" in the South East Queensland Coastal Management Plan (SEQCMP). This provides a significant policy platform from which to justify significant improvements to the Harbour facilities.

8.2 Demand and financial appraisal

The assessment of demand for marina berths found that in the long term, demand for marina berths should remain strong and grow. In the current market, demand for the rental of berths is moderate, whilst demand for the sale of berths remains low. However, it is expected that demand will grow as the economy returns to more normal market conditions.

There is little if any information on the future demand for ferry services, and this forms a major weakness of the previous and current investigative work. It will be important to understand the future demand profile for ferry services so that the infrastructure and related land requirements can be identified.

The financial appraisal of the proposed Harbour infrastructure indicates that the viability of the 'IMC option' may be marginal. The sensitivity analyses indicated that the viability of this option is vulnerable to increases in costs and reductions in revenue. If the cost contingency is excluded from the appraisal, then the viability is positive. A modest level of berth sales would significantly improve the overall viability, but such a trend is difficult to predict in the current market.



From the findings of the viability analysis, it is also likely that the other EY options would not be viable in view of:

1. Increased costs associated with dredge disposal if a second channel were included
2. Reduced revenue potential from a smaller marina and marine employment and accommodation opportunities associated with the ferry and marina facilities

A key component of the project must therefore, be providing a concept with sufficient land to accommodate a marina and commercial marine and accommodation opportunities as a viable package.

It is considered that more work is necessary as part of developing a more robust master plan. The following work is recommended:

- ▶ More detailed design work to arrive at robust project cost estimates
- ▶ An assessment of future ferry service land requirements
- ▶ A review of the market for berth sales
- ▶ Consultation with State Government over suitable/acceptable viability parameters
- ▶ Further consideration of the price and demand relationship, and their effect on alternative demand management strategies, so as to allow for adequate pricing policies
- ▶ Consideration should be given to funding options and associated loan details

The viability model should be reassessed once the above issues have been addressed.

8.3 Engineering

The assessment concluded that there is a lack of information on the suitability of the dredge material for the proposed reclamation. Accordingly, a preliminary geotechnical study is needed to investigate this issue further. Also, there is no bathymetry or wave / hydrodynamic modelling: preliminary work in these areas may be necessary to firm up a final design option as part of a master planning exercise.

8.4 Environmental

The site for the proposed Harbour facilities lies in a very sensitive marine environment. The site lies within the Moreton Bay Marine Park, an extensive RAMSAR site that is afforded a high level of protection from harmful development or change.

Based on the number of protected matters, it would be appropriate to refer the project for assessment under the *EPBC Act*. It is likely the proposal would be declared a controlled action, most likely requiring assessment by Environmental Impact Statement (EIS). It may also be beneficial to seek declaration of the project as a Significant Project under the *SDPWOA Act*. This would enable the EIS to be completed so as to satisfy both Federal and State requirements.

To achieve a successful outcome under the assessment process, it will be important to demonstrate a justifiable need for the project to proceed. This will require a consideration of the need for the project; how alternative approaches do not satisfy the project's requirements, and a justification of the proposed project as the most viable solution. Projection of marina and ferry service demand within the local area and region will therefore be required to establish a requirement for the marina and offshore facilities.



More investigations are needed to inform a revised master plan that identifies the most appropriate dredge disposal strategy so as to underpin the design footprint/configuration of the ferry and marina infrastructure. This is a critical issue that needs further supporting information. The previous work was based on a dredge-to-fill balance approach which led to the 'IMC option' and the increase in the size of the reclaimed area, with no reference to the future land requirements of the ferry operators or marina requirements. Any future planning, including a non-statutory master plan, will also need to address the potential impacts of climate change on the coastline, including increased sea levels and erosion.

8.5 Property market

An analysis of the current and future property market was undertaken to establish if the likely scale of housing could be supported by the market.

In relation to housing, the analysis suggested that the market will dictate a relatively long development and sales period, but that careful staging would assist in maintaining a viable rate of sale. The area also has several advantages over other development options, which should assist it in maintaining its viability.

A variety of unit / apartment types will therefore be important so as to meet the changing market profile: this can be achieved with a relatively long planning and development period. It is also expected that the market will improve as more "baby-boomers" start to retire and exercise property investment choices, peaking in 2015.

In relation to the proposed retail / commercial development, it is concluded that the scale of development envisaged by the 'EY option' or 'IMC option' under the Planning Scheme provisions would be considerably in excess of what the market would support, and would conflict with the role and function of Cleveland centre. Any master plan, either in a statutory or non-statutory format, will need to redress this by providing for a far more modest level of commercial / retail / entertainment development comprising a gym, a hotel, general medical practice as well as a convenience store, restaurants and coffee shops.

8.6 Town Planning and Delivery

The overall scale of development will need to be reassessed in future planning and urban design exercises, including appropriate public and stakeholder consultation. The density of development, range of building heights and the final urban morphology will need to respond to the surroundings, as well as provide a new relationship with Moreton Bay. The ultimate solution can then be translated into suitable planning provisions, and infrastructure requirements within the PIP.

In urban design terms, the concepts prepared by Hassel appear to promote an integrated development that has the potential to create a unique character for the precinct focused on access to the waterfront as well as to the islands. A number of issues have not been addressed at this high level concept stage, i.e. improved access to the site by means of public transport; provision of parking; extent of retail and commercial floorspace; review of heights appropriate to the precinct; extent of scale of the marina, and the landside extent of the ferry facility requirements.

The previous work has therefore provided a starting point for further work to develop an informed and feasible master plan for the area. The listed considerations take account of the further technical, land use and urban design investigations that will need to be undertaken to develop the concept. The previous reports recognised that there needs to be further investigations so as to "prove up" the various options. In relation to the 'EY option', it is considered that whilst this has some merit, it should not be seen as



necessarily the most appropriate concept given the need to “prove up” the previous work; the need to test the building heights in urban design terms; the need to review the scale of the harbour infrastructure, and the need to accommodate the proposed dry stack facilities in visual terms.

The above findings suggest the need for further technical investigations and the development of a design brief before a more rigorous and inclusive master planning and urban design exercise is undertaken.

In relation to the delivery model, it is worth considering a non-statutory master plan as the basis for future planning and development. An alternative would be a Local Area Plan (LAP) approach. These options will be assessed in consultation with Council and the State Government and detailed further through a Project Plan being undertaken by GHD.

8.7 Next steps

The Project Plan being undertaken by GHD will provide a clear road map for taking the project forward in terms of the planning and design processes. At this stage, it is apparent that the key stages are likely to be (precise sequencing to be assessed in Project Plan):

1. Further preliminary investigations to inform the harbour infrastructure concept design
2. Consultation with key stakeholders, Council and in State Government over viability, delivery and the management structure
3. A review of the harbour infrastructure concept design and viability
4. Decide on approach to project delivery through a Project Plan Process:
 - ▶ Non statutory master planning exercise
 - ▶ Infrastructure consent path: Significant project status and EIS/ approvals for harbour infrastructure
 - ▶ Harbour facilities: proceed with delivery through detailed design and construction
 - ▶ Urban development: proceed with delivery through master planning process
 - ▶ Involvement of private sector expertise and funding via EOI and/or PPP processes

Whichever option is selected, the various approvals and statutory requirements noted in Sections 5 will need to be addressed.

8.8 Overall conclusion

Overall, it is apparent that the previous work from 2007 / 2008 identified a number of matters that required further investigation in order to “prove up” the ‘IMC option’ identified so as to provide a robust basis for a master plan phase. Further issues have been identified in this study, and these need to be investigated further in order to arrive at a firm development concept. In particular, the following issues emerged:

- ▶ More understanding of the environmental constraints and how these might impact on the scale and design of the Harbour facilities
- ▶ The need for a number of preliminary technical studies to inform master planning, and leading to more detailed studies at the EIS stage:
 - A geotechnical review
 - A dredge and disposal options review



- An ecological impacts review - investigations to determine the ecological values of the key sensitive environments, e.g mangroves and sea grass
- A preliminary transport, parking and traffic review
- ▶ Revised cost estimates once a revised option has been identified
- ▶ A review of project viability based on revised cost and revenue data
- ▶ Consultation with State Government over how the proposals should be taken forward and managed
- ▶ The need to reassess the scale of the residential and commercial / retail / dining components to afford a feasible concept in planning and property market terms
- ▶ The need for an assessment of future ferry demand and related land requirements

GHD has been commissioned to undertake a detailed Project Plan in order to set out the process and stages of further work in more detail.

From the viability perspective, it is considered that the 'IMC option' is marginally viable. It is considered that the other options may not be viable in view of the reduced scope for revenue raising development, and higher disposal costs if a second channel were included. It was for these reasons that IMC amended these options to include the second channel and double the size of the marina so as to achieve a viable package that could deliver all the marine, public amenity and infrastructure benefits sought by Council and other important interests. If the critical marine infrastructure is to be delivered as part of a commercially viable development, then the optimum solution will need to include adequate land for commercial marine and accommodation development allied to the ferry and marina activities to meet future needs.



Appendix 1

Financial Analysis General Assumptions (Inputs and Calculations Model Sections) and Results

Inputs

Click here to go back to Menu

After setting an scenario set of parameters click here to Update All Values in the Spreadsheet

Cells Colour Codes	Inputs manually updated	Note: If the dropdown menu does not contain the value you require, please: 1-Update the value in Table 4 DropDown Lists (empty blue cells); 2-Select the appropriate value from the updated dropdown menu calculation value (yellow cell)
	Sensitivity Analysis Range	
	Nil value -Item not included	
	Macro - Click only if relevant Calculation	

Parameter (Non-timeline related)	Input Value	Minimum Value	Maximum Value	Calculation	Source	Assumptions / Comments
Table 1 Non-timeline Related Parameters						
Scenario BaseCase (Dmd80%)						
OPERATING REVENUE						
Rates escalation factor - Blended CPI* -base case	4.6%				*RCC - Blended CPI Calculation	NOTE: To change base case rates escalation factors over time: Change cell values in the relevant year in Table 2 Timeline Related Parameters
Operating Revenue from Marina Berths Rented						
Total Number of Berths	400	0	400			
Average Annual Occupancy Rate - Rented Berths	80%	65%	100%			Assumes average occupancy rate summarises overall demand
Initial Annual Permit Rate year0 - Berths (\$/y)	\$10,000					Assumed average value (tariff might include a combination of charges per day, week, month, year, etc). NOTE: Stepped pricing sensitivity is estimated by changing rates escalation factors in Table 2 Timeline Related Parameters
Berths Annual rate typical value for comparison purposes (\$/y)				\$10,000		Assumed average value (tariff might include a combination of charges per day, week, month, year, etc)
Operating Revenue from Marina Drystack Rented						
Total Number of Drystacks	300					Base Case Scenario
Average Annual Occupancy Rate - Rented Drystacks	80%	65%	100%			Assumes average occupancy rate summarises overall demand
% Berths/Drystacks rate value	50%	10%	100%			NOTE: To change base case average daily occupancy rate over time: Change cell values in the relevant year in Table 2 Timeline Related Parameters 50% Base Case Scenario
Theoretical Initial Annual Permit Rate (2009) - Drystacks				\$5,000	Calculation	Assumed average value (tariff might include a combination of charges per day, week, month, year, etc)
Months/year for indicative monthly rate values	12					day/year assumed to estimate indicative average daily value
Indicative Average Monthly Value				\$833.33		
Revenue from Marina Berths and Drystacks Long Term Lease (LTL)						
Berths and Drystacks selling rate (berths LTL/yr)	0.0%	0%	20%			Assumes average selling rate summarises overall constant annual demand
Marina Berths selling price (year0)	\$130,000					Assumed average value
Marina Berths LTL Body Corporate fee (year0)	\$1,000					Assumed average value
Drystacks selling price (year0)				\$65,000		
Drystacks LTL Body Corporate fee (year0)				\$500		
Ferry/Boat Ramp Revenue						
Include Ferry/Boat Ramp Revenue	No					211000 Ferries land/wet lease - GHD Estimate
Ferry/Boat Ramp Revenue	\$14,000,000			\$0		14,000,000 Ferry Revenue - GHD Estimate
CAPITAL EXPENDITURE						
Marina Base Capex						
Excluding Environmental Allowances						
Capex Estimate Original Year	2010					
Capex escalation factor				4.6%	*RCC - Blended CPI Calculation	
Project Management (Project Delivery Group)	\$2,180,000			\$2,180,000	GHD Estimates	Assumed as Year0 expenditure only
Engineering, Architecture, Landscape Design Preliminaries	\$1,700,000			\$1,700,000	GHD Estimates	Assumed as Year0 expenditure only
Dredging / Reclamation	\$3,730,000			\$3,730,000	GHD Estimates	Assumed as Year0 expenditure only
Revetment / Breakwater	\$7,490,000			\$7,490,000	GHD Estimates	Assumed as Year1 & 2 expenditure (see Opex also)
Marina Berths (400)	\$9,800,000			\$9,800,000	GHD Estimates	Assumed as Year1 & 2 expenditure (see Opex also)
Drystack (300)	\$9,200,000			\$9,200,000	GHD Estimates	Assumed as Year1 & 2 expenditure (see Opex also)
Marina Parking	\$2,550,000			\$2,550,000	GHD Estimates	Assumed as Year1 & 2 expenditure (see Opex also)
Sewage Pumpout / Fuel Facilities	\$1,430,000			\$1,430,000	GHD Estimates	Assumed as Year1 & 2 expenditure (see Opex also)
Marina Administration & Amenities Buildings	\$600,000			\$600,000	GHD Estimates	Assumed as Year1 & 2 expenditure (see Opex also)
Other Capex Items	\$770,000			\$770,000	GHD Estimates	Assumed as Year1 & 2 expenditure (see Opex also)
Marina Base Capex	\$0			\$0		Assumed as Year1 & 2 expenditure (see Opex also)
Year1 berths availability				\$39,450,000	Calculation	Base Capex does not include 15% Contingency as this is evaluated within the sensitivity analysis
Year2 berths availability	0%	0%	100%			Assumed no berths/drystacks are available during construction period (Year1 and Year2)
Availability (excluding year 1 & 2 construction interruptions)	100%					Assumed all berths/drystacks are available except during year 1 & 2 (see Availability rates above for year 1 & 2)
Marina Construction Percentage (For Capex %) in Construction year1	60%	0%	100%			Base case assumes 60% of Capital works is completed in year1 and remaining in year2
Capex sensitivity - excluding "Provisional Allowances"	100%	85%	135%			
Marina Provisional Allowances Capex						
Include Landscaping	Yes					
Include Sewer & Water	Yes					
Include Main Entry Intersection Works	Yes					
Include Allowance for Environmental Studies, Consultation and Approvals	Yes					
Include Ferry Infrastructure	No					
Include Other Provisional Capex Items	No					
Landscaping	\$250,000			\$250,000	GHD Estimates	
Sewer & Water	\$700,000			\$700,000	GHD Estimates	
Main Entry Intersection Works	\$300,000			\$300,000	GHD Estimates	
Allowance for Environmental Studies, Consultation and Approvals	\$1,450,000			\$1,450,000	GHD Estimates	
Ferry Infrastructure	\$11,650,000			\$0	GHD Estimates	GHD estimates on Ferry Infrastructure at Toondah Harbour (excluding capital replacement items for ferry)
Other Provisional Capex Items	\$0			\$0	GHD Estimates	
Marina Provisional Allowances Capex				\$2,700,000	Calculation	
Capex sensitivity - "Provisional Allowances" only	100%	85%	135%			

Parameter (Non-timeline related)	Input Value	Minimum Value	Maximum Value	Source	Assumptions / Comments
OPERATING EXPENDITURE					
Marina Base Opex					
Opex escalation factor - Blended CPI*				4.6%	Opex increased by the RCC CPI each year
Opex as % Capex	1.5%				Provisional Allowances operational costs assumed as 1.5% of the facility capex
Dredging / Reclamation				\$112,350	
Revetment / Breakwater				\$147,000	
Marina Berths (400)				\$138,000	
Drystack (300)				\$38,250	
Marina Parking				\$21,450	
Sewage Pumpout / Fuel Facilities				\$9,000	
Marina Administration & Amenities Buildings				\$11,550	
Other Capex Items				\$0	
Base Opex (Year0) - excluding Provisional Allowances				\$477,600	Calculation
Opex sensitivity - excluding Provisional Allowances	100%	85%	135%		

Marina Provisional Allowances Opex

Landscaping				\$3,750	
Sewer & Water				\$10,500	
Main Entry Intersection Works				\$4,500	
Allowance for Environmental Studies, Consultation and Approvals				\$21,750	
Ferry Infrastructure	\$11,900,000			\$0	Estimated ferry operation expenditure (in addition to ferry infrastructure GHD capex estimates) to achieve IRR of 10% in ferry only. Not included in ferry lease scenario.
Other Provisional Capex Items				\$0	
Provisional Allowances Opex (Year0)				\$40,500	Calculation
Opex sensitivity - Provisional Allowances only	100%	85%	135%		

LOAN

Loan amount (present value)				\$ 42,150,000	CapexCalculation	Assumed the project will be predominately funded by a loan. Assume it can borrow an amount equivalent to the capex cost.
Loan period (years)	15					While loan will typically be paid quarterly, calculations are based on annual payments for simplicity
Loan Fixed Interest Rate	6.1%				RCC rate at Jan 2010	Assumed fixed interest

DEPRECIATION

Revetment/Breakwater Depreciation	80			\$122,500	Calculation	Base Case except Revetment/breakwater Project Management and Preliminaries Provisional Allowances except Environmental allowances
Base Capex Items Depreciation (except Revetment/Breakwater)	25			\$881,600	Calculation	
Provisional Allowances CapexItems	25			\$50,000	Calculation	
Additional Capex Items	25			\$0	Calculation	

BREAK-EVEN ESCALATION FACTOR

Use a break-even escalation factor?	No					Breakeven(B113), Goal(B114), EscalationFactor(C115), Sol_GS_C(C116) & Sol_GS_C_Dep(C117) cells linked to macro
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Click here to run Break Even Value CashFlow Macro	4.0%	Value not used				Goal seek Cash Flow
Click here to run Break Even Value Reserve: CashFlow and Depreciation Macro	5.7%	Value not used				Goal seek Reserve: Cash Flow and Depreciation
Goal Seek - Goal Value at end of period			\$0	\$0	Value not used	Value goal-seeked at

Table 2 Timeline Related Parameters

Parameter (Timeline related)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Modelling notes	
Financial Year	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/2024	2024/25	2025/26		
Marina OPERATING REVENUE TIMELINE																	
Escalation factor for Break Even value (See Macro above)	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%		
Marina Berths Operating Revenue																	
Berths Rates' yearly escalation factor if different from CPI* (%)																To ramp price up set a factor in selected year(s)	
Case 1																	
Case 2																	
Case 3																	
Berths Occupancy Rate% if different from Average Occupancy Rate (e.g. less occupancy due to price ramp up)																	
Case 1																	
Case 2																	
Case 3																	
Berths Rates escalation factor	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%		
Berths Occupancy Rate (%)	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%		
Berths Annual Rates (\$/berth/yr)	\$10,000	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632	
Indicative Berths Average Monthly Value (\$/berth/month)	\$833.33	\$871.67	\$911.76	\$953.70	\$997.57	\$1,043.46	\$1,091.46	\$1,141.67	\$1,194.19	\$1,249.12	\$1,306.58	\$1,366.68	\$1,429.55	\$1,495.31	\$1,564.09	\$1,636.04	Assumes 12 days/yr
Berths Annual rate typical value for comparison purposes (\$/y) (Equivalent Future Values)	\$0	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632	Net present value (rate[blended cpi], year, 2009 public submission value)
Ferry Revenue Escalation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Number of Berths LTL /year if not leased at constant rate																	
Case 1																	
Case 2																	
Case 3																	
Berths available for rent		400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	
Maximum # Berths LTL per year		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Berths LTL per year		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Berths LTL in previous years - available for Body Corporate		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Price Berths Long Term Lease (LTL)	\$130,000	\$135,980	\$142,235	\$148,778	\$155,622	\$162,780	\$170,268	\$178,101	\$186,293	\$194,863	\$203,826	\$213,202	\$223,010	\$233,268	\$243,998	\$255,222	
Berths LTL - Body Corporate Revenue	\$1,000	\$1,046	\$1,094	\$1,144	\$1,197	\$1,252	\$1,310	\$1,370	\$1,433	\$1,499	\$1,568	\$1,640	\$1,715	\$1,794	\$1,877	\$1,963	
Revenue from Berths LTL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Body Corporate from Berths LTL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Marina Drystacks Operating Revenue																	
Drystacks Rates' yearly escalation factor if different from CPI* (%)																	To ramp price up set a factor in selected year(s)
Case 1																	
Case 2																	
Case 3																	
Drystacks Occupancy Rate% if different from Average Occupancy Rate (e.g. less occupancy due to price ramp up)																	
Case 1																	
Case 2																	
Case 3																	
Drystacks Rates yearly escalation factor	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	
Drystacks Occupancy Rate (%)	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	
Drystacks Annual Rates (\$/drystack/yr)	\$5,000	\$5,230	\$5,471	\$5,722	\$5,985	\$6,261	\$6,549	\$6,850	\$7,165	\$7,495	\$7,839	\$8,200	\$8,577	\$8,972	\$9,385	\$9,816	
Indicative Drystacks Average Monthly Value (\$/drystack/month)	\$416.67	\$435.83	\$455.88	\$476.85	\$498.79	\$521.73	\$545.73	\$570.83	\$597.09	\$624.56	\$653.29	\$683.34	\$714.77	\$747.65	\$782.05	\$818.02	Assumes 12 days/yr
Number of Drystacks LTL /year if not leased at constant rate																	
Case 1																	
Case 2																	
Case 3																	
Drystacks available for rent		300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	
Maximum # Drystacks LTL per year		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Drystacks LTL per year		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Drystacks LTL in previous years - available for Body Corporate		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Price Drystacks Long Term Lease	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	
Drystacks LTL - Body Corporate Revenue	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	

Inputs

Revenue from Drystack LTL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Body Corporate from Drystack LTL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Marina OPEX TIMELINE

Equipment Replacement & Maintenance Schedules

R&M factor - increase in opex costs due to replacement & maintenance (e.g.maintenance contract details)									10.0%					10.0%			
Case 1	10.0%																
Case 2	10.0%																
Case 3																	
Opex R&M factor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	100.0%

Set a factor in selected year(s)
Assume 5years maintenance contract -
indicatively 10% extra every 5 years for
base case

Table 3 General Assumptions

General Assumptions

- » All amounts are exclusive of GST;
- » No cash flow values associated with interest rates to be earned/payed from short term cash accumulation or overdraft have been included in the model;
- » No tax liabilities have been included in the model
- » A fixed loan amount and term has been assumed. No allowances have been made for different borrowed amounts or term conditions (e.g. earlier loan repayment);
- » Cost sensitivity of capital (capex) and operational (opex) expenditure - including provisional allowances - can be adjusted for scenario modelling
- » Additional Capex items can be included for scenario modelling;
- » The Profit & Loss calculation represents the financial performance for the proposed facility over the period of funding;
- » Capital Budget decision calculations do not include financing costs (only "free" cash flow generated by the assets);

*RCC - Blended CPI Calculation

Cost	09/10 Forecast \$m	Expense Proportion	Weighted CPI %	Assumptions (Source RCC original model: Access Economics - September 2009)
General	86,458	43.23%	0.0%	Underlying CPI forecast for 2010/11 @ 3.3%.
General Construction	23,561	11.78%	0.0%	Based on historical measure provided by LGAQ.
Roads & Bridges	16,026	8.01%	0.0%	Based on historical measure provided by LGAQ.
Employee	73,949	36.98%	0.0%	As per current RCC EBA (2009), 4% each year 2009, 2010, 2011
Total	199,993	100.00%	0.0%	

**RCC - Blended CPI Calculation, Construction period

Cost	Assumptions (Source RCC model)
Cost of debt	RCC rate at Jan 2010
Maintenance	
Depreciation	
Total	

Table 4 DropDown Lists

0
0
0

Yes/No Option List

Yes
No

	Rented Occupancy Rate	Berths	Selling Rate	Berths Rates		Availability	Capex/Opex Sensitivity	Reserve % Available	Goal Seek Value	Goal Seek Value Comment
				Initial Scale Factor	Over Drystack Initial Rates					
	Drystack & Berths	Total Number	Drystack & Berths	Over Drystack Initial Rates	Construction Rate	Provisional Allowances and others	2009 Balance	Goal	Goal	
1	65%	0	0%	10%	0%	85%	20%			\$0 Nil reserve value at end of 15yr period
2	70%	100	1.0%	20%	10%	90%	40%			\$0 Equivalent to Current Reserve (15yr Future Value)
3	75%	200	2.0%	30%	20%	95%	60%			
4	80%	300	5.0%	40%	30%	100%	80%			
5	85%	400	10.0%	50%	40%	105%	100%			
6	90%		15.0%	60%	50%	110%				
7	95%		20.0%	70%	60%	115%				
8	100%			80%	70%	120%				
9				90%	80%	125%				
10				100%	90%	130%				
11					100%	135%				
12										
13										
14										
15										

Uses loan fixed interest rate to estimate future value

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A. Base Calculations															Modelling notes and assumptions		
Stage	Design	Construction	Construction	3	4	5	6	7	8	9	10	11	12	13	14	15	
Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Starting Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Financial Year	-	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	
Inflows																	
Operating Revenue																	
Marina																	
Availability (e.g. decreased during construction)		0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Operating Revenue from Marina Berths Rented	\$0	\$0	\$3,662,225	\$3,830,687	\$4,006,899	\$4,191,216	\$4,384,012	\$4,585,677	\$4,796,618	\$5,017,262	\$5,248,057	\$5,489,467	\$5,741,983	\$6,006,114	\$6,282,395	=(Year0Capex*CapexEscalationFactor*(year-CapexEstimateOriginalYr))*CapexSensitivity*%Construction	
Operating Revenue from Marina Drystack Rented	\$0	\$0	\$1,373,334	\$1,436,508	\$1,502,587	\$1,571,706	\$1,644,005	\$1,719,629	\$1,798,732	\$1,881,473	\$1,968,021	\$2,058,550	\$2,153,244	\$2,252,293	\$2,355,898	=(Year0Capex*CapexEscalationFactor*(year-CapexEstimateOriginalYr))*CapexSensitivity*%Construction	
Revenue from Berths LTL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	=(Year0Capex*CapexEscalationFactor*(year-CapexEstimateOriginalYr))*CapexSensitivity*%Construction	
Revenue from Drystack LTL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	=(Year0Capex*CapexEscalationFactor*(year-CapexEstimateOriginalYr))*CapexSensitivity*%Construction	
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	=(Year0Capex*CapexEscalationFactor*(year-CapexEstimateOriginalYr))*CapexSensitivity*%Construction	
Total Revenue	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293		
Outflows																	
Capital Expenditure																	
Marina Base Capex																	
Construction Percentage (Capex)		60%	40%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Project Management (Project Delivery Group)	\$2,180,000																
Engineering, Architecture, Landscape Design Preliminaries	\$3,730,000																
Dredging / Reclamation		\$4,700,724	\$3,277,972														
Revetment / Breakwater		\$6,150,480	\$4,288,935														
Marina Berths (400)		\$5,773,920	\$4,026,347														
Drystack (300)		\$1,600,380	\$1,115,998														
Marina Parking		\$897,468	\$625,834														
Sewage Pumpout / Fuel Facilities		\$376,560	\$262,588														
Marina Administration & Amenities Buildings		\$483,252	\$336,988														
Other Capex Items		\$0	\$0														
Marina Provisional Allowances Capex																	
Landscaping		\$156,900	\$109,412														
Sewer & Water		\$439,320	\$306,352														
Main Entry Intersection Works		\$188,280	\$131,294														
Allowance for Environmental Studies, Consultation and Approvals		\$910,020	\$634,587														
Ferry Infrastructure		\$0	\$0														
Other Provisional Capex Items		\$0	\$0														
Total Capital Expenditure	\$7,610,000	\$21,677,304	\$15,116,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Operating Expenditure																	
Marina Base Opex																	
Dredging / Reclamation	\$0	\$0	\$128,578	\$134,493	\$140,680	\$147,151	\$153,920	\$161,000	\$168,406	\$176,153	\$184,256	\$192,732	\$201,597	\$210,871	\$220,571	=(Year0OpexAs%Capex)*OpexSensitivity*(OpexEscalationFactor*year#)*(Availability)	
Revetment / Breakwater	\$0	\$0	\$168,233	\$175,972	\$184,067	\$192,534	\$201,391	\$210,655	\$220,345	\$230,480	\$241,083	\$252,172	\$263,772	\$275,906	\$288,598		
Marina Berths (400)	\$0	\$0	\$157,933	\$165,198	\$172,798	\$180,746	\$189,061	\$197,757	\$206,854	\$216,369	\$226,322	\$236,733	\$247,623	\$259,014	\$270,928		
Drystack (300)	\$0	\$0	\$43,775	\$45,789	\$47,895	\$50,098	\$52,403	\$54,813	\$57,335	\$59,972	\$62,731	\$65,616	\$68,635	\$71,792	\$75,094		
Marina Parking	\$0	\$0	\$24,548	\$25,678	\$26,859	\$28,094	\$29,387	\$30,738	\$32,152	\$33,631	\$35,178	\$36,797	\$38,489	\$40,260	\$42,112		
Sewage Pumpout / Fuel Facilities	\$0	\$0	\$10,300	\$10,774	\$11,269	\$11,788	\$12,330	\$12,897	\$13,490	\$14,111	\$14,760	\$15,439	\$16,149	\$16,892	\$17,669		
Marina Administration & Amenities Buildings	\$0	\$0	\$13,218	\$13,826	\$14,462	\$15,128	\$15,824	\$16,551	\$17,313	\$18,109	\$18,942	\$19,814	\$20,725	\$21,678	\$22,676		
Other Capex Items	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Marina Provisional Allowances Opex																	
Landscaping	\$0	\$0	\$4,292	\$4,489	\$4,696	\$4,912	\$5,138	\$5,374	\$5,621	\$5,880	\$6,150	\$6,433	\$6,729	\$7,038	\$7,362		
Sewer & Water	\$0	\$0	\$12,017	\$12,569	\$13,148	\$13,752	\$14,385	\$15,047	\$15,739	\$16,463	\$17,220	\$18,012	\$18,841	\$19,708	\$20,614		
Main Entry Intersection Works	\$0	\$0	\$5,150	\$5,387	\$5,635	\$5,894	\$6,165	\$6,449	\$6,745	\$7,056	\$7,380	\$7,720	\$8,075	\$8,446	\$8,835		
Allowance for Environmental Studies, Consultation and Approvals	\$0	\$0	\$24,892	\$26,037	\$27,234	\$28,487	\$29,798	\$31,168	\$32,602	\$34,102	\$35,670	\$37,311	\$39,028	\$40,823	\$42,701		
Ferry Infrastructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Other Provisional Capex Items	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Total Operating Expenditure	\$0	\$0	\$592,937	\$620,212	\$648,742	\$678,584	\$708,779	\$742,450	\$776,602	\$812,326	\$849,662	\$888,779	\$929,663	\$972,427	\$1,017,159	OpexSum*R&Mfactor	
Finance Costs																	
QTC Loan amount (Year 1)																	
Loan (Fixed Payment)	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	
TOTAL OUTFLOWS (excl. depreciation)	\$11,978,282	\$26,045,586	\$19,484,588	\$4,961,219	\$4,988,494	\$5,017,024	\$5,046,866	\$5,149,060	\$5,110,731	\$5,144,884	\$5,180,608	\$5,302,944	\$5,297,061	\$5,297,944	\$5,340,709	\$5,385,441	
Positive/(Negative) Cash Flow per year	\$30,171,718	-\$26,045,586	-\$19,484,588	\$74,341	\$278,710	\$492,463	\$716,057	\$878,957	\$1,194,575	\$1,450,466	\$1,718,128	\$1,913,134	\$2,290,957	\$2,597,282	\$2,917,698	\$3,252,853	
Renewals/Depreciation Schedule																	
Revetment/Breakwater Depreciation			\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	\$122,500	
Base Capex Items Depreciation (except Revetment/Breakwater)			\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	\$881,600	
Provisional Allowances CapexItems			\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
Additional Capex Items			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Renewal/Depreciation			\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	
B. Cash Flow																	
Cash Opening Balance	\$0	\$30,171,718	\$4,126,133	-\$15,358,455	-\$15,284,114	-\$15,005,413	-\$14,512,950	-\$13,796,893	-\$12,917,937	-\$11,723,362	-\$10,272,896	-\$8,554,768	-\$6,641,634	-\$4,350,677	-\$1,753,396	\$1,164,302	Last year's closing balance
Inflows in the year (Operating Revenue + Loan)	\$42,150,000	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293	
Cash Funds Available	\$42,150,000	\$30,171,718	\$4,126,133	-\$10,322,896	-\$10,016,919	-\$9,495,927	-\$8,750,028	-\$7,768,876	-\$6,612,631	-\$5,128,012	-\$3,374,160	-\$1,338,690	\$906,383	\$3,544,549	\$6,505,011	\$9,802,595	Inflows in the year (Operating Revenue + Loan) + Cash Opening Balance
Outflows (excl depreciation)	\$11,978,282	\$26,045,586	\$19,484,588	\$4,961,219	\$4,988,494	\$5,017,024	\$5,046,866	\$5,149,060	\$5,110,731	\$5,144,884	\$5,180,608	\$5,302,944	\$5,297,061	\$5,297,944	\$5,340,709	\$5,385,441	
Cash Flow	\$30,171,718	\$4,126,133	-\$15,358,455	-\$15,284,114	-\$15,005,413	-\$14,512,950	-\$13,796,893	-\$12,917,937	-\$11,723,362	-\$10,272,896	-\$8,554,768	-\$6,641,634	-\$4,350,677	-\$1,753,396	\$1,164,302	\$4,417,155	Cash Funds Available - Total Outflows (excl depreciation), Cashflow Cell GoalSeekCash (Q90) linked to macro
C. Cash Flow + Renewal/Depreciation																	
Cash Opening Balance (incl. dpreciation)	\$0	\$30,171,718	\$4,126,133	-\$15,358,455	-\$16,338,214	-\$17,113,613	-\$17,675,250	-\$18,013,293	-\$18,188,437	-\$18,047,962	-\$17,651,596	-\$16,987,568	-\$16,128,534	-\$14,891,677	-\$13,348,496	-\$11,484,898	Last year's closing balance
Inflows in the year (Operating Revenue + Loan)	\$42,150,000	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293	
Cash Funds Available	\$42,150,000	\$30,171,718	\$4,126,133	-\$10,322,896	-\$11,071,019	-\$11,604,127	-\$11,912,328	-\$11,985,276	-\$11,883,131	-\$11,452,612	-\$10,752,860	-\$9,771,490	-\$8,580,517	-\$6,996,451	-\$5,090,089	-\$2,946,605	Inflows in the year (Operating Revenue + Loan) + Cash Opening Balance
Outflows + depreciation	\$11,978,282	\$26,045,586	\$19,484,588	\$6,015,319	\$6,042,594	\$6,071,124	\$6,100,966	\$6,203,160	\$6,164,831	\$6,198,984	\$6,234,708	\$6,357,044	\$6,311,161	\$6,352,044	\$6,394,809	\$6,439,541	Total Outflows + Depreciation
Cash Flow + Renew Deprec	\$30																

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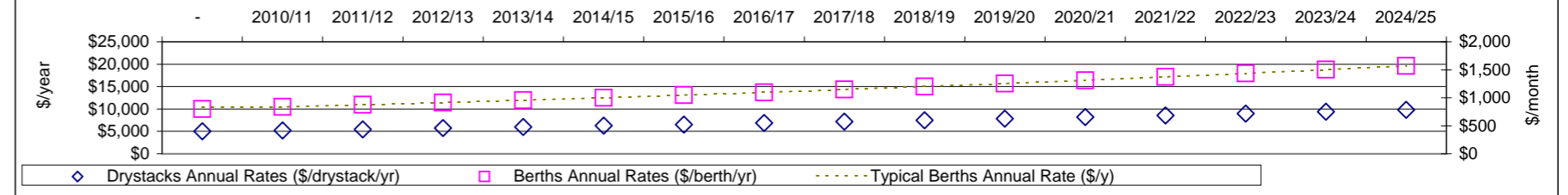
[Click here to Update All Values in the Spreadsheet](#)

Summary Inputs

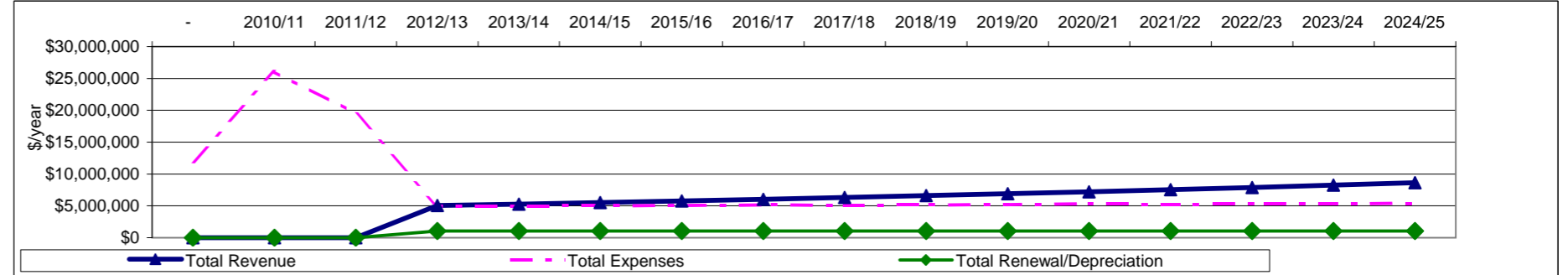
Scenario	BaseCase (Dmd80%)
Input Parameter (Non-timeline related)	Value
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	80%
Operating Revenue from Marina Drystacks Rented	
% Berths/Drystacks rate value	50%
Total Number of Drystacks	300
Average Annual Occupancy Rate - Rented Drystacks	80%
Revenue from Marina Berths and Drystacks Long Term Lease (LTL)	
Berths and Drystacks selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	No
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	100%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	No
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	100%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	4.0% Value not used
Goal seek Reserve: Cash Flow and Depreciation	5.7% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs

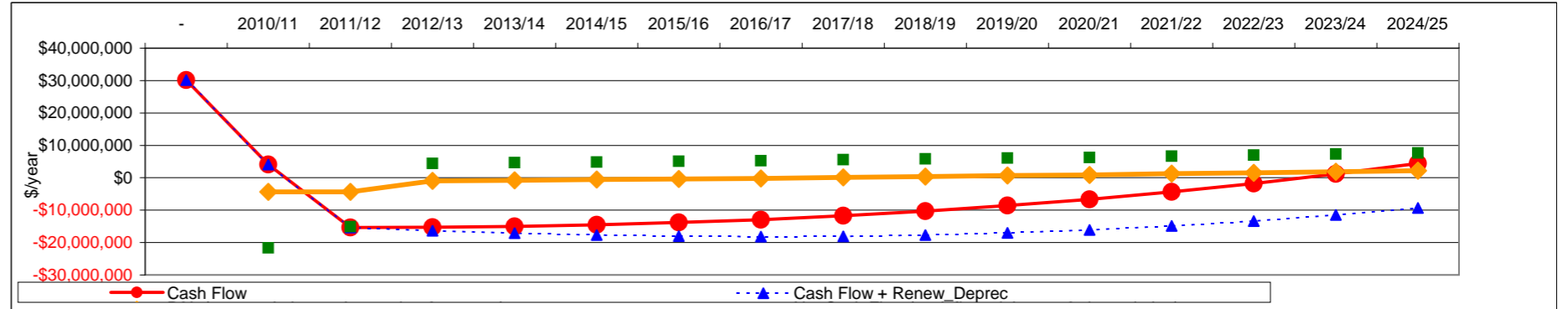
Graph 1 Rates



Graph 2 Revenue & Expenses



Graph 3 Cash Flow



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Berths Annual Rates (\$/berth/yr)	\$10,000	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632
Indicative Berths Average Monthly Value (\$/berth/month)	\$833	\$872	\$912	\$954	\$998	\$1,043	\$1,091	\$1,142	\$1,194	\$1,249	\$1,307	\$1,367	\$1,430	\$1,495	\$1,564	\$1,636
Price Berths Long Term Lease (LTL)	\$130,000	\$135,980	\$142,235	\$148,778	\$155,622	\$162,780	\$170,268	\$178,101	\$186,293	\$194,863	\$203,826	\$213,202	\$223,010	\$233,268	\$243,998	\$255,222
Berths LTL - Body Corporate Revenue	\$1,000	\$1,046	\$1,094	\$1,144	\$1,197	\$1,252	\$1,310	\$1,370	\$1,433	\$1,499	\$1,568	\$1,640	\$1,715	\$1,794	\$1,877	\$1,963
Marina Drystacks Operating Revenue																
Drystacks Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystacks Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Drystacks Annual Rates (\$/drystack/yr)	\$5,000	\$5,230	\$5,471	\$5,722	\$5,985	\$6,261	\$6,549	\$6,850	\$7,165	\$7,495	\$7,839	\$8,200	\$8,577	\$8,972	\$9,385	\$9,816
Indicative Drystacks Average Monthly Value (\$/drystack/month)	\$417	\$436	\$456	\$477	\$499	\$522	\$546	\$571	\$597	\$625	\$653	\$683	\$715	\$748	\$782	\$818
Price Drystacks Long Term Lease	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Drystacks LTL - Body Corporate Revenue	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystacks rented	\$0	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293
Revenue from Marina Berths and Drystacks Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293
Total Capital Expenditure	\$7,610,000	\$21,677,304	\$15,116,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$592,937	\$620,212	\$648,742	\$678,584	\$780,779	\$742,450	\$776,602	\$812,326	\$934,662	\$888,779	\$929,663	\$972,427	\$1,017,159
Loan (Fixed Payment)	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282
Total Expenses	\$11,978,282	\$26,045,586	\$19,484,588	\$4,961,219	\$4,988,494	\$5,017,024	\$5,046,866	\$5,149,060	\$5,110,731	\$5,144,884	\$5,180,608	\$5,302,944	\$5,257,061	\$5,297,944	\$5,340,709	\$5,385,441
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100
Cash Flow	\$30,171,718	\$4,126,133	-\$15,358,455	-\$15,284,114	-\$15,005,413	-\$14,512,950	-\$13,796,893	-\$12,917,937	-\$11,723,362	-\$10,272,896	-\$8,554,768	-\$6,641,634	-\$4,350,677	-\$1,753,396	\$1,164,302	\$4,417,155
Cash Flow + Renew_Deprec	\$30,171,718	\$4,126,133	-\$15,358,455	-\$16,338,214	-\$17,113,613	-\$17,675,250	-\$18,013,293	-\$18,188,437	-\$18,047,962	-\$17,651,596	-\$16,987,568	-\$16,128,534	-\$14,891,677	-\$13,348,496	-\$11,484,898	-\$9,286,145
Reserve exc. extra expenses & dep	\$30,171,718	\$4,126,133	\$0	\$74,341	\$353,042	\$845,505	\$1,561,562	\$2,440,518	\$3,635,093	\$5,085,559	\$6,803,687	\$8,716,821	\$11,007,778	\$13,605,060	\$16,522,757	\$19,775,610
Closing Balance of Borrowings		\$40,352,868	\$38,446,112	\$36,423,043	\$34,276,567	\$31,999,156	\$29,582,824	\$27,019,094	\$24,298,977	\$21,412,934	\$18,350,841	\$15,101,961	\$11,654,899	\$7,997,566	\$4,117,136	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$4,368,282	-\$4,368,282	-\$979,759	-\$775,399	-\$561,637	-\$338,043	-\$175,143	\$140,475	\$396,366	\$664,028	\$859,034	\$1,236,857	\$1,543,182	\$1,863,598	\$2,198,753
Net Cash Flow (excl. financial costs & depreciation)		-\$21,677,304	-\$15,116,307	\$4,442,622	\$4,646,983	\$4,860,744	\$5,084,338	\$5,247,238	\$5,562,856	\$5,818,747	\$6,086,410	\$6,281,415	\$6,659,238	\$6,965,563	\$7,285,979	\$7,621,134
IRR		7.0%														
NPV		\$2,897,747														
Payback Period		8 years														

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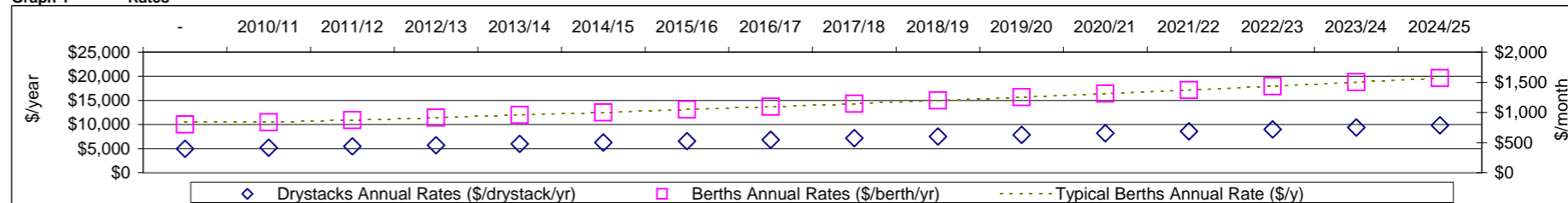
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Summary Inputs

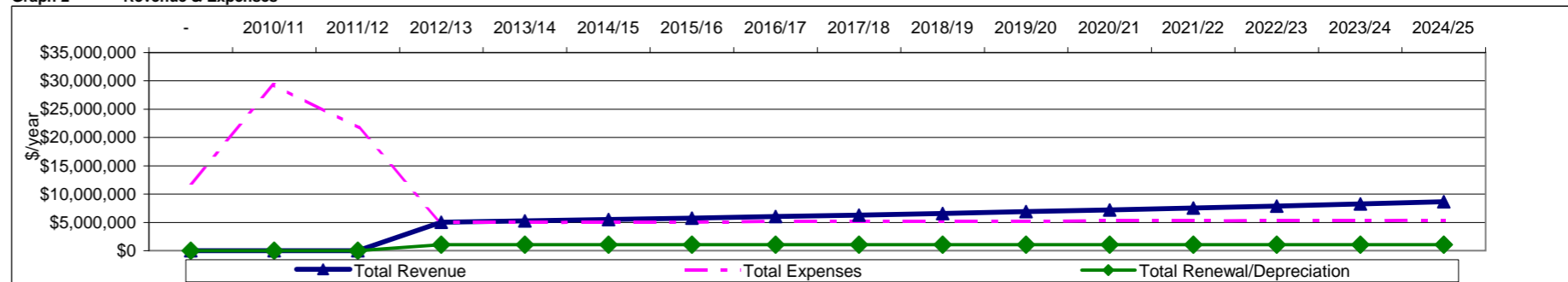
Scenario	Cpx115%
Input Parameter (Non-timeline related)	Value
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	80%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	80%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	No
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	115%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	No
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	115%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	4.7% Value not used
Goal seek Reserve: Cash Flow and Depreciation	6.3% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs

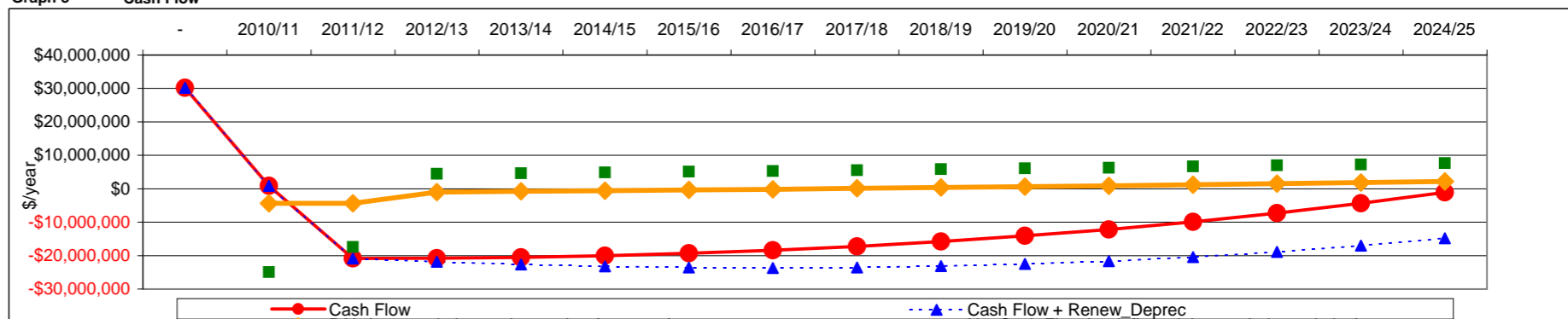
Graph 1 Rates



Graph 2 Revenue & Expenses



Graph 3 Cash Flow



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Berths Annual Rates (\$/berth/yr)	\$10,000	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632
Indicative Berths Average Monthly Value (\$/berth/month)	\$833	\$872	\$912	\$954	\$998	\$1,043	\$1,091	\$1,142	\$1,194	\$1,249	\$1,307	\$1,367	\$1,430	\$1,495	\$1,564	\$1,636
Price Berths Long Term Lease (LTL)	\$130,000	\$135,980	\$142,235	\$148,778	\$155,622	\$162,780	\$170,268	\$178,101	\$186,293	\$194,863	\$203,826	\$213,202	\$223,010	\$233,268	\$243,998	\$255,222
Berths LTL - Body Corporate Revenue	\$1,000	\$1,046	\$1,094	\$1,144	\$1,197	\$1,252	\$1,310	\$1,370	\$1,433	\$1,499	\$1,568	\$1,640	\$1,715	\$1,794	\$1,877	\$1,963
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Drystack Annual Rates (\$/drystack/yr)	\$5,000	\$5,230	\$5,471	\$5,722	\$5,985	\$6,261	\$6,549	\$6,850	\$7,165	\$7,495	\$7,839	\$8,200	\$8,577	\$8,972	\$9,385	\$9,816
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$417	\$436	\$456	\$477	\$499	\$522	\$546	\$571	\$597	\$625	\$653	\$683	\$715	\$748	\$782	\$818
Price Drystack Long Term Lease	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Drystack LTL - Body Corporate Revenue	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293
Total Capital Expenditure	\$7,610,000	\$24,928,900	\$17,383,753	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$592,937	\$620,212	\$648,742	\$678,584	\$780,779	\$742,450	\$776,602	\$812,326	\$934,662	\$888,779	\$929,663	\$972,427	\$1,017,159
Loan (Fixed Payment)	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282
Total Expenses	\$11,978,282	\$29,297,181	\$21,752,034	\$4,961,219	\$4,988,494	\$5,017,024	\$5,046,866	\$5,149,060	\$5,110,731	\$5,144,884	\$5,180,608	\$5,302,944	\$5,257,061	\$5,297,944	\$5,340,709	\$5,385,441
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100
Cash Flow	\$30,171,718	\$874,537	-\$20,877,497	-\$20,803,156	-\$20,524,455	-\$20,031,992	-\$19,315,935	-\$18,436,978	-\$17,242,404	-\$15,791,938	-\$14,073,810	-\$12,160,676	-\$9,869,719	-\$7,272,437	-\$4,354,740	-\$1,101,887
Cash Flow + Renew/Deprec	\$30,171,718	\$874,537	-\$20,877,497	-\$21,857,256	-\$22,632,655	-\$23,194,292	-\$23,532,335	-\$23,707,478	-\$23,567,004	-\$23,170,638	-\$22,506,610	-\$21,647,576	-\$20,410,719	-\$18,867,537	-\$17,003,940	-\$14,805,187
Reserve exc. extra expenses & dep	\$30,171,718	\$874,537	\$0	\$74,341	\$353,042	\$845,505	\$1,561,562	\$2,440,518	\$3,635,093	\$5,085,559	\$6,803,687	\$8,716,821	\$11,007,778	\$13,605,060	\$16,522,757	\$19,775,610
Closing Balance of Borrowings		\$40,352,868	\$38,446,112	\$36,423,043	\$34,276,567	\$31,999,156	\$29,582,824	\$27,019,094	\$24,298,977	\$21,412,934	\$18,350,841	\$15,101,961	\$11,654,899	\$7,997,566	\$4,117,136	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$4,368,282	-\$4,368,282	-\$979,759	-\$775,399	-\$561,637	-\$338,043	-\$175,143	\$140,475	\$396,366	\$664,028	\$859,034	\$1,236,857	\$1,543,182	\$1,863,598	\$2,198,753
Net Cash Flow (excl. financial costs & depreciation)		-\$24,928,900	-\$17,383,753	\$4,442,622	\$4,646,983	\$4,860,744	\$5,084,338	\$5,247,238	\$5,562,856	\$5,818,747	\$6,086,410	\$6,281,415	\$6,659,238	\$6,965,563	\$7,285,979	\$7,621,134
IRR		5.4%														
NPV		-\$2,181,121														
Payback Period		9 years														

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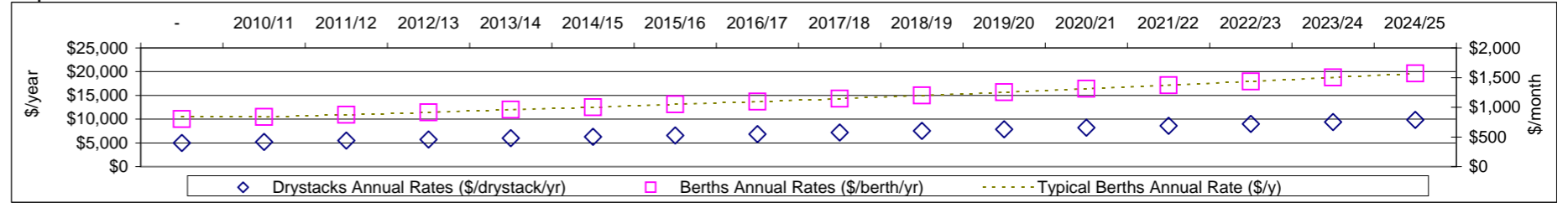
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Summary Inputs

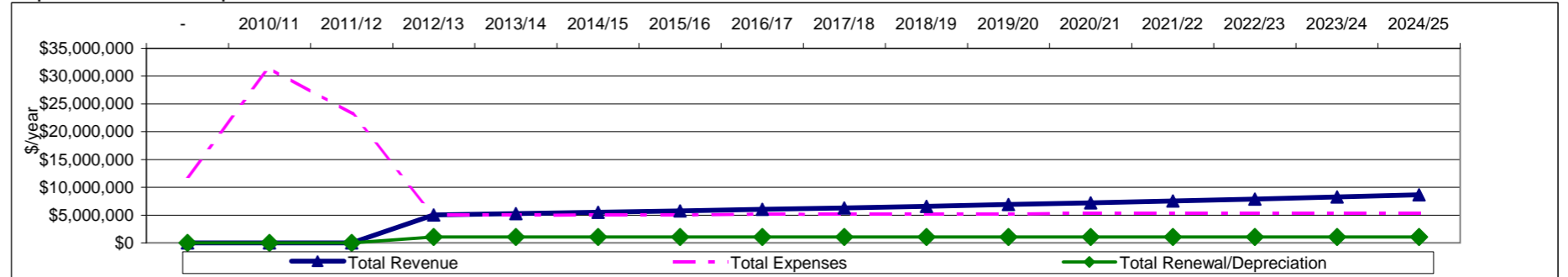
Scenario	Cpx125%
Input Parameter (Non-timeline related)	Value
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	80%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	80%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	No
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	125%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	No
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	125%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	5.2% Value not used
Goal seek Reserve: Cash Flow and Depreciation	6.7% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs

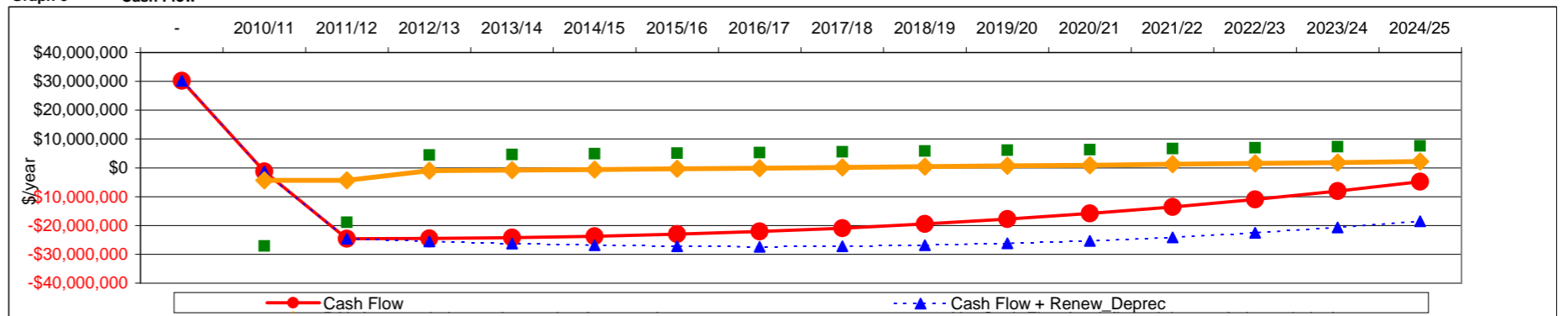
Graph 1 Rates



Graph 2 Revenue & Expenses



Graph 3 Cash Flow



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Berths Annual Rates (\$/berth/yr)	\$10,000	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632
Indicative Berths Average Monthly Value (\$/berth/month)	\$833	\$872	\$912	\$954	\$998	\$1,043	\$1,091	\$1,142	\$1,194	\$1,249	\$1,307	\$1,367	\$1,430	\$1,495	\$1,564	\$1,636
Price Berths Long Term Lease (LTL)	\$130,000	\$135,980	\$142,235	\$148,778	\$155,622	\$162,780	\$170,268	\$178,101	\$186,293	\$194,863	\$203,826	\$213,202	\$223,010	\$233,268	\$243,998	\$255,222
Berths LTL - Body Corporate Revenue	\$1,000	\$1,046	\$1,094	\$1,144	\$1,197	\$1,252	\$1,310	\$1,370	\$1,433	\$1,499	\$1,568	\$1,640	\$1,715	\$1,794	\$1,877	\$1,963
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Drystack Annual Rates (\$/drystack/yr)	\$5,000	\$5,230	\$5,471	\$5,722	\$5,985	\$6,261	\$6,549	\$6,850	\$7,165	\$7,495	\$7,839	\$8,200	\$8,577	\$8,972	\$9,385	\$9,816
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$417	\$436	\$456	\$477	\$499	\$522	\$546	\$571	\$597	\$625	\$653	\$683	\$715	\$748	\$782	\$818
Price Drystack Long Term Lease	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Drystack LTL - Body Corporate Revenue	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293
Total Capital Expenditure	\$7,610,000	\$27,096,630	\$18,895,383	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$592,937	\$620,212	\$648,742	\$678,584	\$780,779	\$742,450	\$776,602	\$812,326	\$934,662	\$888,779	\$929,663	\$972,427	\$1,017,159
Loan (Fixed Payment)	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282
Total Expenses	\$11,978,282	\$31,464,912	\$23,263,665	\$4,961,219	\$4,988,494	\$5,017,024	\$5,046,866	\$5,149,060	\$5,110,731	\$5,144,884	\$5,180,608	\$5,302,944	\$5,257,061	\$5,297,944	\$5,340,709	\$5,385,441
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100
Cash Flow	\$30,171,718	-\$1,293,193	-\$24,556,858	-\$24,482,517	-\$24,203,816	-\$23,711,353	-\$22,995,296	-\$22,116,339	-\$20,921,765	-\$19,471,299	-\$17,753,171	-\$15,840,037	-\$13,549,080	-\$10,951,798	-\$8,034,101	-\$4,781,248
Cash Flow + Renew_Deprec	\$30,171,718	-\$1,293,193	-\$24,556,858	-\$25,536,617	-\$26,312,016	-\$26,873,653	-\$27,211,696	-\$27,386,839	-\$27,246,365	-\$26,849,999	-\$26,185,971	-\$25,326,937	-\$24,090,080	-\$22,546,898	-\$20,683,301	-\$18,484,548
Reserve exc. extra expenses & dep	\$30,171,718	\$0	\$0	\$74,341	\$353,042	\$845,505	\$1,561,562	\$2,440,518	\$3,635,093	\$5,085,559	\$6,803,687	\$8,716,821	\$11,007,778	\$13,605,060	\$16,522,757	\$19,775,610
Closing Balance of Borrowings		\$40,352,868	\$38,446,112	\$36,423,043	\$34,276,567	\$31,999,156	\$29,582,824	\$27,019,094	\$24,298,977	\$21,412,934	\$18,350,841	\$15,101,961	\$11,654,899	\$7,997,566	\$4,117,136	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$4,368,282	-\$4,368,282	-\$979,759	-\$775,399	-\$561,637	-\$338,043	-\$175,143	\$140,475	\$396,366	\$664,028	\$859,034	\$1,236,857	\$1,543,182	\$1,863,598	\$2,198,753
Net Cash Flow (excl. financial costs & depreciation)		-\$27,096,630	-\$18,895,383	\$4,442,622	\$4,646,983	\$4,860,744	\$5,084,338	\$5,247,238	\$5,562,856	\$5,818,747	\$6,086,410	\$6,281,415	\$6,659,238	\$6,965,563	\$7,285,979	\$7,621,134
IRR		4.5%														
NPV		-\$5,567,034														
Payback Period		9 years														

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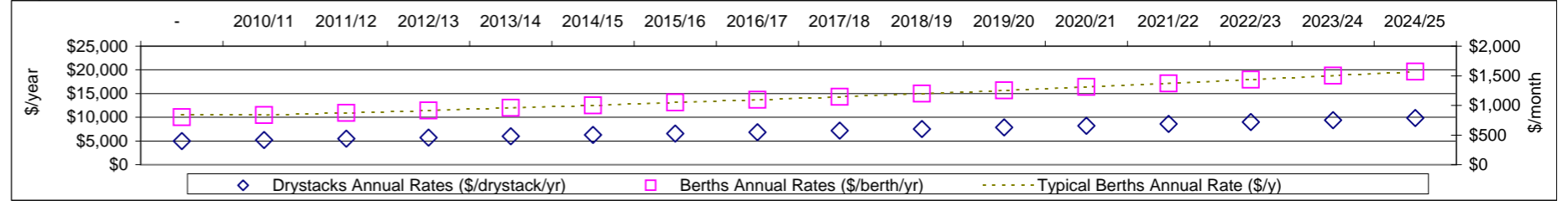
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Summary Inputs

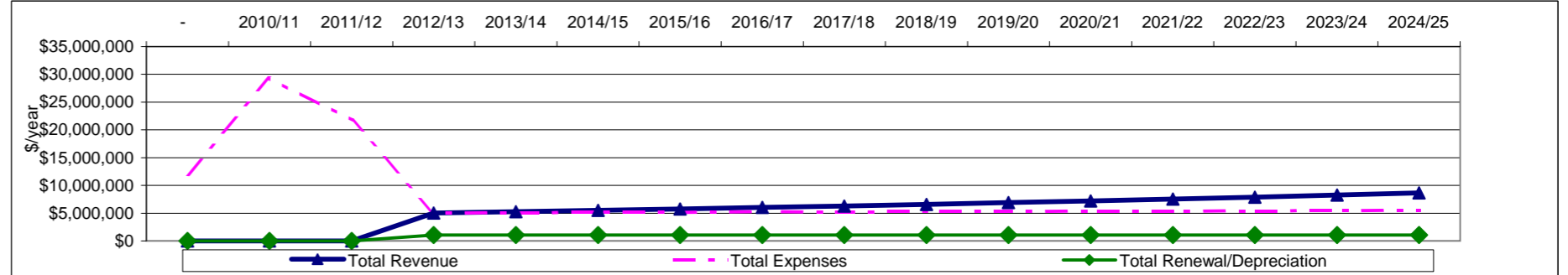
Scenario	CpxOpx115%
Input Parameter (Non-timeline related)	Value
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	80%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	80%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	No
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	115%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	No
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	115%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	115%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	4.9% Value not used
Goal seek Reserve: Cash Flow and Depreciation	6.5% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs

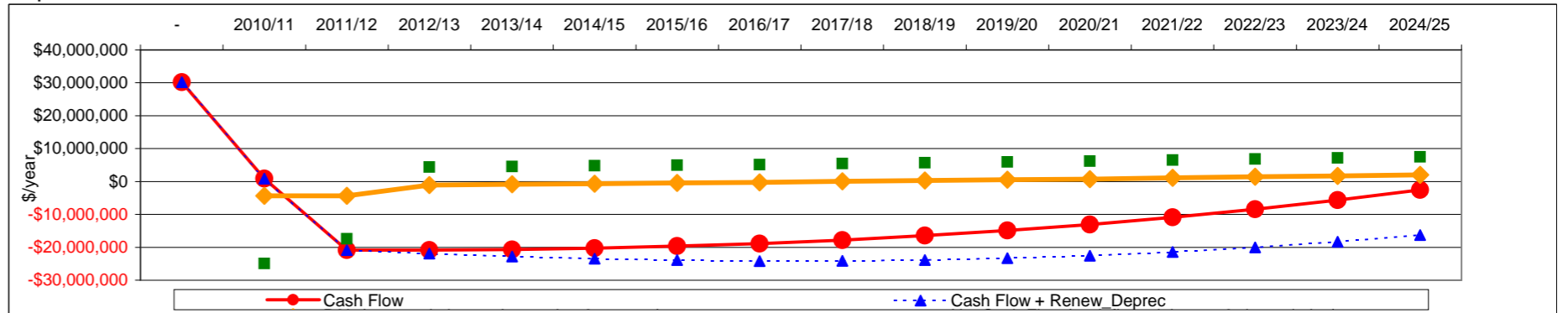
Graph 1 Rates



Graph 2 Revenue & Expenses



Graph 3 Cash Flow



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Berths Annual Rates (\$/berth/yr)	\$10,000	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632
Indicative Berths Average Monthly Value (\$/berth/month)	\$833	\$872	\$912	\$954	\$998	\$1,043	\$1,091	\$1,142	\$1,194	\$1,249	\$1,307	\$1,367	\$1,430	\$1,495	\$1,564	\$1,636
Price Berths Long Term Lease (LTL)	\$130,000	\$135,980	\$142,235	\$148,778	\$155,622	\$162,780	\$170,268	\$178,101	\$186,293	\$194,863	\$203,826	\$213,202	\$223,010	\$233,268	\$243,998	\$255,222
Berths LTL - Body Corporate Revenue	\$1,000	\$1,046	\$1,094	\$1,144	\$1,197	\$1,252	\$1,310	\$1,370	\$1,433	\$1,499	\$1,568	\$1,640	\$1,715	\$1,794	\$1,877	\$1,963
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Drystack Annual Rates (\$/drystack/yr)	\$5,000	\$5,230	\$5,471	\$5,722	\$5,985	\$6,261	\$6,549	\$6,850	\$7,165	\$7,495	\$7,839	\$8,200	\$8,577	\$8,972	\$9,385	\$9,816
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$417	\$436	\$456	\$477	\$499	\$522	\$546	\$571	\$597	\$625	\$653	\$683	\$715	\$748	\$782	\$818
Price Drystack Long Term Lease	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Drystack LTL - Body Corporate Revenue	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293
Total Capital Expenditure	\$7,610,000	\$24,928,900	\$17,383,753	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$674,925	\$705,972	\$738,446	\$772,415	\$888,741	\$845,112	\$883,987	\$924,650	\$1,063,902	\$1,011,674	\$1,058,212	\$1,106,889	\$1,157,806
Loan (Fixed Payment)	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282
Total Expenses	\$11,978,282	\$29,297,181	\$21,752,034	\$5,043,207	\$5,074,253	\$5,106,728	\$5,140,697	\$5,257,022	\$5,213,393	\$5,252,268	\$5,292,932	\$5,432,184	\$5,379,956	\$5,426,493	\$5,475,171	\$5,526,088
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100
Cash Flow	\$30,171,718	\$874,537	-\$20,877,497	-\$20,885,144	-\$20,692,202	-\$20,289,444	-\$19,667,218	-\$18,896,223	-\$17,804,310	-\$16,461,229	-\$14,855,424	-\$13,071,531	-\$10,903,469	-\$8,434,736	-\$5,651,500	-\$2,539,295
Cash Flow + Renew_Deprec	\$30,171,718	\$874,537	-\$20,877,497	-\$21,939,244	-\$22,800,402	-\$23,451,744	-\$23,883,616	-\$24,166,723	-\$24,128,910	-\$23,839,929	-\$23,288,224	-\$22,558,431	-\$21,444,469	-\$20,029,808	-\$18,300,700	-\$16,242,595
Reserve exc. extra expenses & dep	\$30,171,718	\$874,537	\$0	\$0	\$192,942	\$595,700	\$1,217,926	\$1,988,921	\$3,080,834	\$4,423,915	\$6,029,720	\$7,813,613	\$9,981,675	\$12,450,408	\$15,233,644	\$18,345,849
Closing Balance of Borrowings		\$40,352,868	\$38,446,112	\$36,423,043	\$34,276,567	\$31,999,156	\$29,582,824	\$27,019,094	\$24,298,977	\$21,412,934	\$18,350,841	\$15,101,961	\$11,654,899	\$7,997,566	\$4,117,136	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$4,368,282	-\$4,368,282	-\$1,061,747	-\$861,158	-\$651,342	-\$431,874	-\$283,105	\$37,813	\$288,982	\$551,704	\$729,794	\$1,113,961	\$1,414,633	\$1,729,136	\$2,058,106
Net Cash Flow (excl. financial costs & depreciation)		-\$24,928,900	-\$17,383,753	\$4,360,634	\$4,561,223	\$4,771,040	\$4,990,508	\$5,139,276	\$5,460,194	\$5,711,363	\$5,974,086	\$6,152,175	\$6,536,343	\$6,837,015	\$7,151,517	\$7,480,487
IRR		5.2%														
NPV		-\$3,014,200														
Payback Period		9 years														

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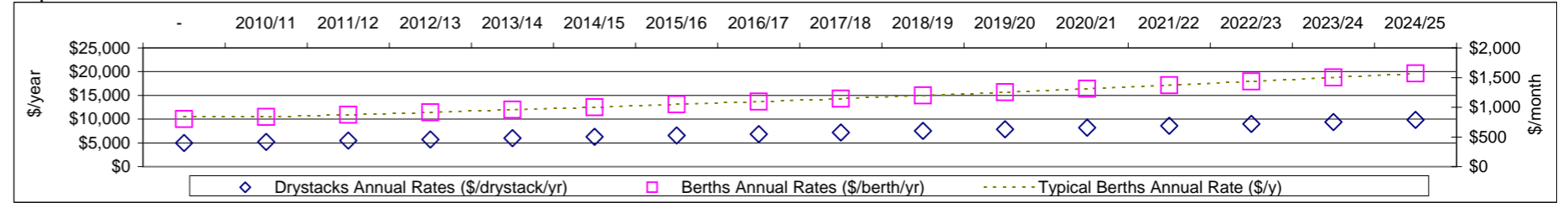
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Summary Inputs

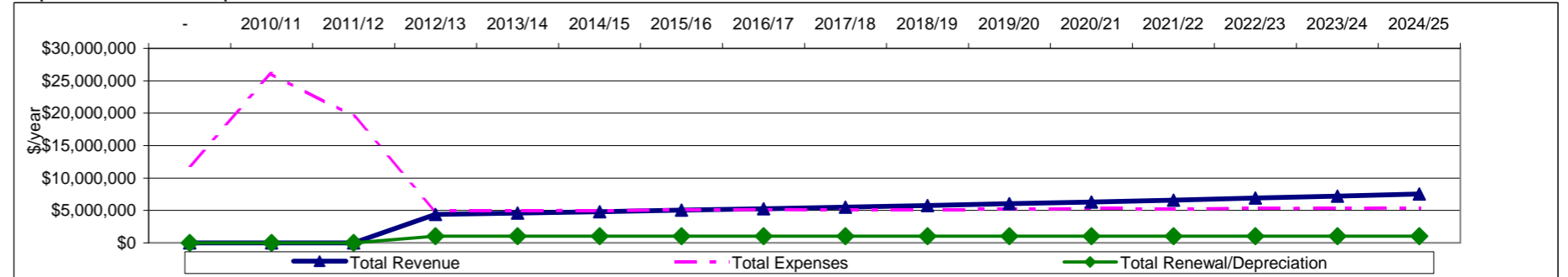
Scenario	Dmd70%
Input Parameter (Non-timeline related)	Value
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	70%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	70%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	No
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	100%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	No
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	100%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	5.5% Value not used
Goal seek Reserve: Cash Flow and Depreciation	7.1% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs

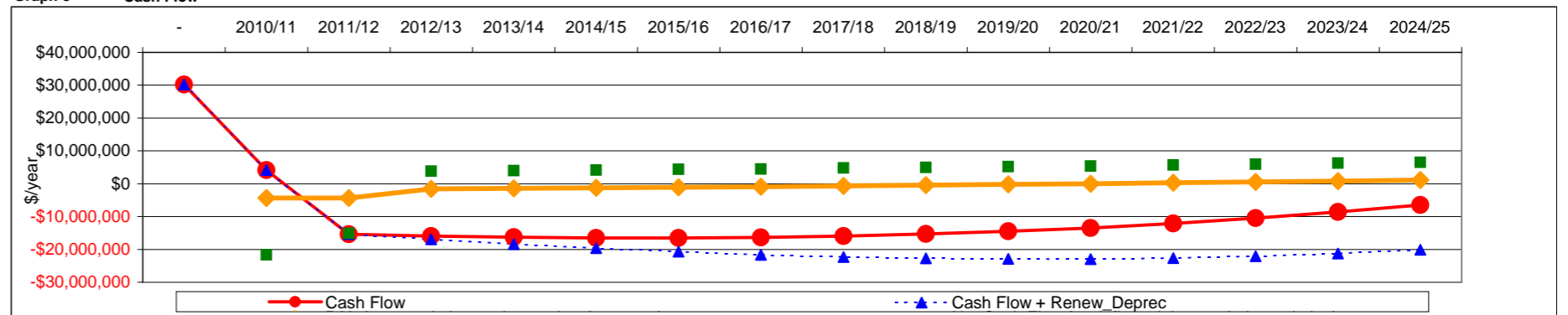
Graph 1 Rates



Graph 2 Revenue & Expenses



Graph 3 Cash Flow



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Berths Annual Rates (\$/berth/yr)	\$10,000	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632
Indicative Berths Average Monthly Value (\$/berth/month)	\$833	\$872	\$912	\$954	\$998	\$1,043	\$1,091	\$1,142	\$1,194	\$1,249	\$1,307	\$1,367	\$1,430	\$1,495	\$1,564	\$1,636
Price Berths Long Term Lease (LTL)	\$130,000	\$135,980	\$142,235	\$148,778	\$155,622	\$162,780	\$170,268	\$178,101	\$186,293	\$194,863	\$203,826	\$213,202	\$223,010	\$233,268	\$243,998	\$255,222
Berths LTL - Body Corporate Revenue	\$1,000	\$1,046	\$1,094	\$1,144	\$1,197	\$1,252	\$1,310	\$1,370	\$1,433	\$1,499	\$1,568	\$1,640	\$1,715	\$1,794	\$1,877	\$1,963
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Drystack Annual Rates (\$/drystack/yr)	\$5,000	\$5,230	\$5,471	\$5,722	\$5,985	\$6,261	\$6,549	\$6,850	\$7,165	\$7,495	\$7,839	\$8,200	\$8,577	\$8,972	\$9,385	\$9,816
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$417	\$436	\$456	\$477	\$499	\$522	\$546	\$571	\$597	\$625	\$653	\$683	\$715	\$748	\$782	\$818
Price Drystack Long Term Lease	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Drystack LTL - Body Corporate Revenue	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$4,406,115	\$4,608,796	\$4,820,800	\$5,042,557	\$5,274,515	\$5,517,143	\$5,770,931	\$6,036,394	\$6,314,068	\$6,604,515	\$6,908,323	\$7,226,106	\$7,558,507
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$4,406,115	\$4,608,796	\$4,820,800	\$5,042,557	\$5,274,515	\$5,517,143	\$5,770,931	\$6,036,394	\$6,314,068	\$6,604,515	\$6,908,323	\$7,226,106	\$7,558,507
Total Capital Expenditure	\$7,610,000	\$21,677,304	\$15,116,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$592,937	\$620,212	\$648,742	\$678,584	\$780,779	\$742,450	\$776,602	\$812,326	\$934,662	\$888,779	\$929,663	\$972,427	\$1,017,159
Loan (Fixed Payment)	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282
Total Expenses	\$11,978,282	\$26,045,586	\$19,484,588	\$4,961,219	\$4,988,494	\$5,017,024	\$5,046,866	\$5,149,060	\$5,110,731	\$5,144,884	\$5,180,608	\$5,302,944	\$5,257,061	\$5,297,944	\$5,340,709	\$5,385,441
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100
Cash Flow	\$30,171,718	\$4,126,133	-\$15,358,455	-\$15,913,559	-\$16,293,257	-\$16,489,480	-\$16,493,789	-\$16,368,334	-\$15,961,923	-\$15,335,876	-\$14,480,090	-\$13,468,966	-\$12,121,511	-\$10,511,132	-\$8,625,736	-\$6,452,669
Cash Flow + Renew/Deprec	\$30,171,718	\$4,126,133	-\$15,358,455	-\$16,967,659	-\$18,401,457	-\$19,651,780	-\$20,710,189	-\$21,638,834	-\$22,286,523	-\$22,714,576	-\$22,912,890	-\$22,955,866	-\$22,662,511	-\$22,106,232	-\$21,274,936	-\$20,155,969
Reserve exc. extra expenses & dep	\$30,171,718	\$4,126,133	\$0	\$0	\$0	\$0	\$0	\$125,454	\$531,866	\$1,157,913	\$2,013,699	\$3,024,823	\$4,372,278	\$5,982,656	\$7,868,053	\$10,041,119
Closing Balance of Borrowings		\$40,352,868	\$38,446,112	\$36,423,043	\$34,276,567	\$31,999,156	\$29,582,824	\$27,019,094	\$24,298,977	\$21,412,934	\$18,350,841	\$15,101,961	\$11,654,899	\$7,997,566	\$4,117,136	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$4,368,282	-\$4,368,282	-\$1,609,204	-\$1,433,798	-\$1,250,323	-\$1,058,408	-\$928,646	-\$647,689	-\$428,053	-\$198,314	-\$42,976	\$293,355	\$556,278	\$831,297	\$1,118,966
Net Cash Flow (excl. financial costs & depreciation)		-\$21,677,304	-\$15,116,307	\$3,813,177	\$3,988,584	\$4,172,058	\$4,363,973	\$4,493,736	\$4,774,693	\$4,994,329	\$5,224,068	\$5,379,406	\$5,715,736	\$5,978,660	\$6,253,678	\$6,541,348
IRR		4.9%														
NPV		-\$3,401,214														
Payback Period		9 years														

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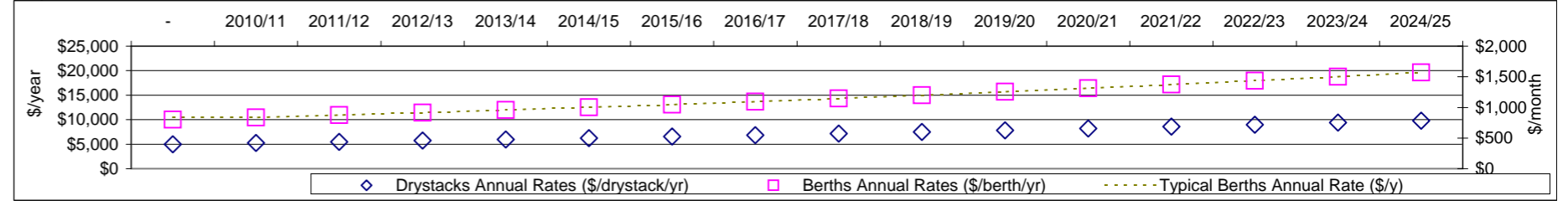
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Summary Inputs

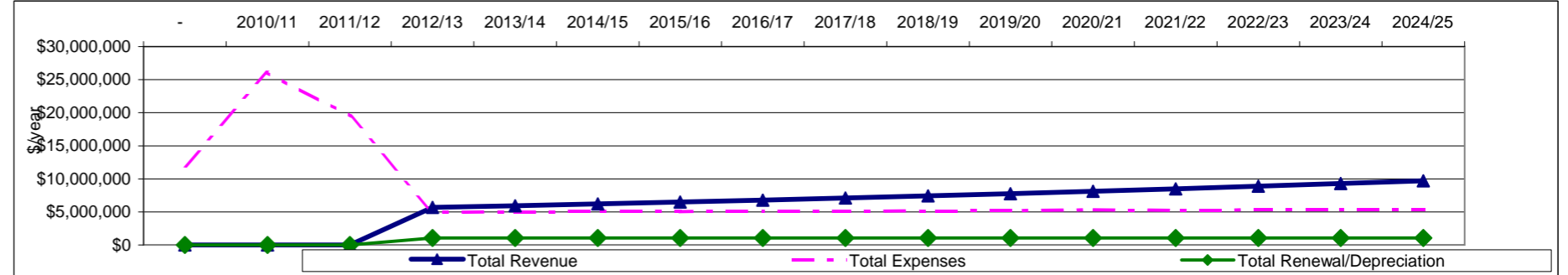
Scenario	Dmd90%
Input Parameter (Non-timeline related)	
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	90%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	90%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	No
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	100%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	No
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	100%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	2.7% Value not used
Goal seek Reserve: Cash Flow and Depreciation	4.4% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs

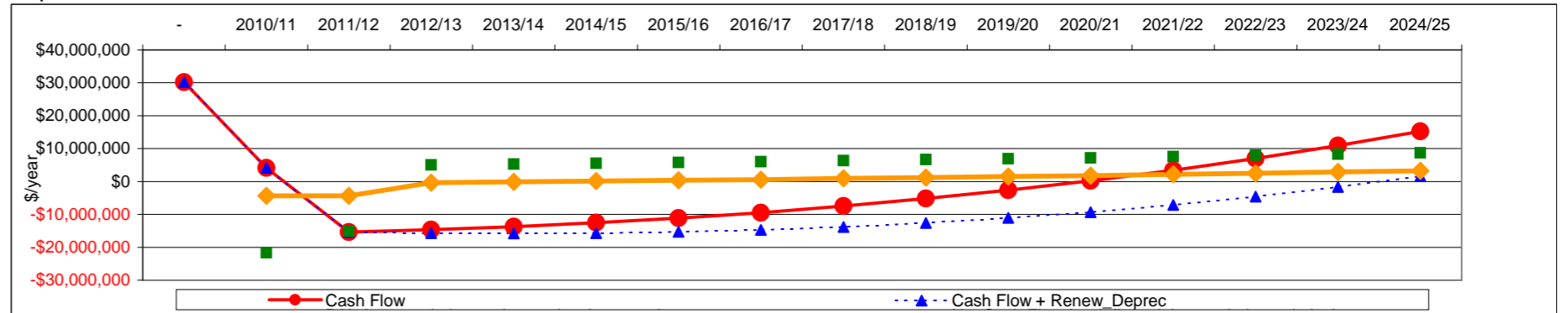
Graph 1 Rates



Graph 2 Revenue & Expenses



Graph 3 Cash Flow



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Berths Annual Rates (\$/berth/yr)	\$10,000	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632
Indicative Berths Average Monthly Value (\$/berth/month)	\$833	\$872	\$912	\$954	\$998	\$1,043	\$1,091	\$1,142	\$1,194	\$1,249	\$1,307	\$1,367	\$1,430	\$1,495	\$1,564	\$1,636
Price Berths Long Term Lease (LTL)	\$130,000	\$135,980	\$142,235	\$148,778	\$155,622	\$162,780	\$170,268	\$178,101	\$186,293	\$194,863	\$203,826	\$213,202	\$223,010	\$233,268	\$243,998	\$255,222
Berths LTL - Body Corporate Revenue	\$1,000	\$1,046	\$1,094	\$1,144	\$1,197	\$1,252	\$1,310	\$1,370	\$1,433	\$1,499	\$1,568	\$1,640	\$1,715	\$1,794	\$1,877	\$1,963
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Drystack Annual Rates (\$/drystack/yr)	\$5,000	\$5,230	\$5,471	\$5,722	\$5,985	\$6,261	\$6,549	\$6,850	\$7,165	\$7,495	\$7,839	\$8,200	\$8,577	\$8,972	\$9,385	\$9,816
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$417	\$436	\$456	\$477	\$499	\$522	\$546	\$571	\$597	\$625	\$653	\$683	\$715	\$748	\$782	\$818
Price Drystack Long Term Lease	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Drystack LTL - Body Corporate Revenue	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$5,665,004	\$5,925,595	\$6,198,172	\$6,483,288	\$6,781,519	\$7,093,469	\$7,419,769	\$7,761,078	\$8,118,088	\$8,491,520	\$8,882,129	\$9,290,707	\$9,718,080
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$5,665,004	\$5,925,595	\$6,198,172	\$6,483,288	\$6,781,519	\$7,093,469	\$7,419,769	\$7,761,078	\$8,118,088	\$8,491,520	\$8,882,129	\$9,290,707	\$9,718,080
Total Capital Expenditure	\$7,610,000	\$21,677,304	\$15,116,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$592,937	\$620,212	\$648,742	\$678,584	\$780,779	\$742,450	\$776,602	\$812,326	\$934,662	\$888,779	\$929,663	\$972,427	\$1,017,159
Loan (Fixed Payment)	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282
Total Expenses	\$11,978,282	\$26,045,586	\$19,484,588	\$4,961,219	\$4,988,494	\$5,017,024	\$5,046,866	\$5,149,060	\$5,110,731	\$5,144,884	\$5,180,608	\$5,302,944	\$5,257,061	\$5,297,944	\$5,340,709	\$5,385,441
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100
Cash Flow	\$30,171,718	\$4,126,133	-\$15,358,455	-\$14,654,669	-\$13,717,569	-\$12,536,420	-\$11,099,998	-\$9,467,539	-\$7,484,801	-\$5,209,917	-\$2,629,447	\$185,697	\$3,420,156	\$7,004,341	\$10,954,339	\$15,286,979
Cash Flow + Renew_Deprec	\$30,171,718	\$4,126,133	-\$15,358,455	-\$15,708,769	-\$15,825,769	-\$15,698,720	-\$15,316,398	-\$14,738,039	-\$13,809,401	-\$12,588,617	-\$11,062,247	-\$9,301,203	-\$7,120,844	-\$4,590,759	-\$1,694,861	\$1,583,679
Reserve exc. extra expenses & dep	\$30,171,718	\$4,126,133	\$0	\$703,786	\$1,640,887	\$2,822,035	\$4,258,457	\$5,890,916	\$7,873,654	\$10,148,538	\$12,729,009	\$15,544,152	\$18,778,611	\$22,362,796	\$26,312,795	\$30,645,434
Closing Balance of Borrowings		\$40,352,868	\$38,446,112	\$36,423,043	\$34,276,567	\$31,999,156	\$29,582,824	\$27,019,094	\$24,298,977	\$21,412,934	\$18,350,841	\$15,101,961	\$11,654,899	\$7,997,566	\$4,117,136	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$4,368,282	-\$4,368,282	-\$350,314	-\$116,999	\$127,048	\$382,322	\$578,359	\$928,638	\$1,220,785	\$1,526,370	\$1,761,044	\$2,180,359	\$2,530,085	\$2,895,899	\$3,278,539
Net Cash Flow (excl. financial costs & depreciation)		-\$21,677,304	-\$15,116,307	\$5,072,067	\$5,305,382	\$5,549,430	\$5,804,704	\$6,000,740	\$6,351,019	\$6,643,166	\$6,948,752	\$7,183,425	\$7,602,740	\$7,952,467	\$8,318,280	\$8,700,921
IRR		9.0%														
NPV		\$9,196,708														
Payback Period		7 years														

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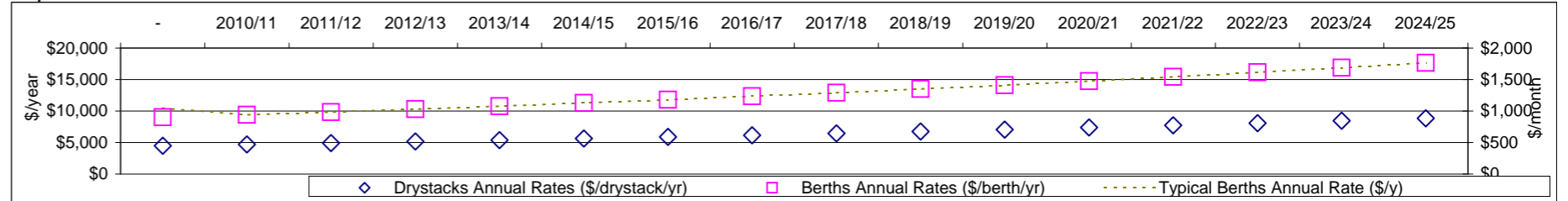
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Summary Inputs

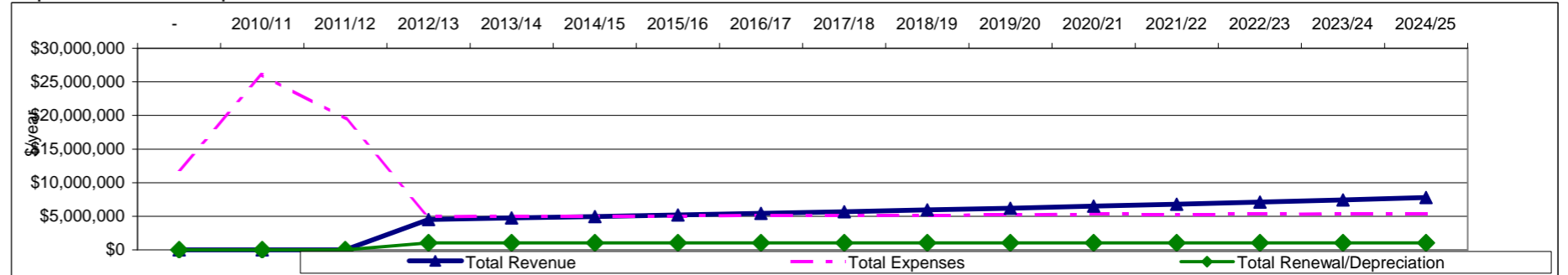
Scenario	Rates90%
Input Parameter (Non-timeline related)	
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	80%
Operating Revenue from Marina Drystackes Rented	
% Berths/Drystackes rate value	50%
Total Number of Drystackes	300
Average Annual Occupancy Rate - Rented Drystackes	80%
Revenue from Marina Berths and Drystackes Long Term Lease (LTL)	
Berths and Drystackes selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	No
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	100%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	No
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	100%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	5.2% Value not used
Goal seek Reserve: Cash Flow and Depreciation	6.8% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs

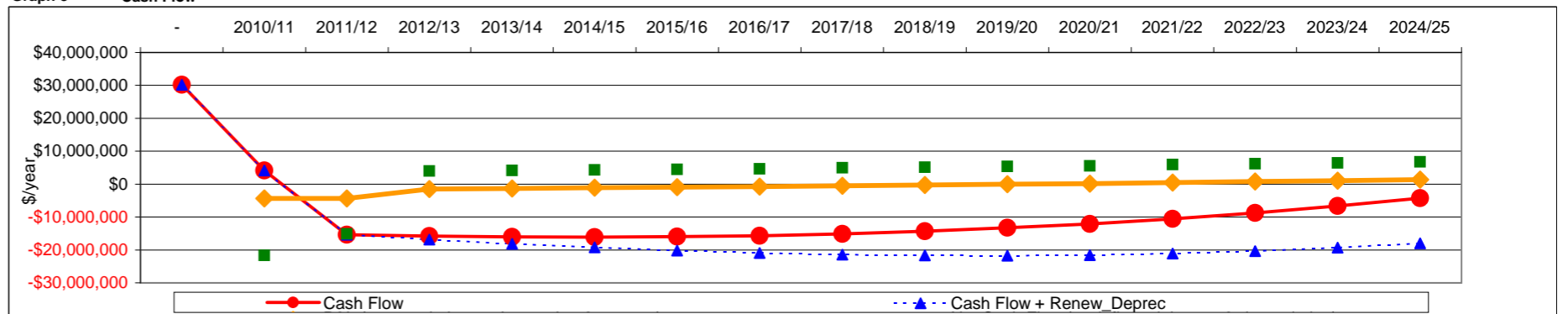
Graph 1 Rates



Graph 2 Revenue & Expenses



Graph 3 Cash Flow



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Berths Annual Rates (\$/berth/yr)		\$9,000	\$9,414	\$9,847	\$10,300	\$10,774	\$11,269	\$11,788	\$12,330	\$12,897	\$13,490	\$14,111	\$14,760	\$15,439	\$16,149	\$16,892
Indicative Berths Average Monthly Value (\$/berth/month)		\$750	\$785	\$821	\$858	\$898	\$939	\$982	\$1,028	\$1,075	\$1,124	\$1,176	\$1,230	\$1,287	\$1,346	\$1,408
Price Berths Long Term Lease (LTL)	\$117,000	\$122,382	\$128,012	\$133,900	\$140,060	\$146,502	\$153,241	\$160,290	\$167,664	\$175,376	\$183,444	\$191,882	\$200,709	\$209,941	\$219,599	\$229,700
Berths LTL - Body Corporate Revenue	\$900	\$941	\$985	\$1,030	\$1,077	\$1,127	\$1,179	\$1,233	\$1,290	\$1,349	\$1,411	\$1,476	\$1,544	\$1,615	\$1,689	\$1,767
Marina Drystackes Operating Revenue																
Drystackes Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystackes Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Drystackes Annual Rates (\$/drystack/yr)		\$4,500	\$4,707	\$4,924	\$5,150	\$5,387	\$5,635	\$5,894	\$6,165	\$6,449	\$6,745	\$7,056	\$7,380	\$7,720	\$8,075	\$8,446
Indicative Drystackes Average Monthly Value (\$/drystack/month)		\$375	\$392	\$410	\$429	\$449	\$470	\$491	\$514	\$537	\$562	\$588	\$615	\$643	\$673	\$704
Price Drystackes Long Term Lease	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500
Drystackes LTL - Body Corporate Revenue	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystackes rented	\$0	\$0	\$0	\$4,532,004	\$4,740,476	\$4,958,538	\$5,186,630	\$5,425,215	\$5,674,775	\$5,935,815	\$6,208,862	\$6,494,470	\$6,793,216	\$7,105,704	\$7,432,566	\$7,774,464
Revenue from Marina Berths and Drystackes Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$4,532,004	\$4,740,476	\$4,958,538	\$5,186,630	\$5,425,215	\$5,674,775	\$5,935,815	\$6,208,862	\$6,494,470	\$6,793,216	\$7,105,704	\$7,432,566	\$7,774,464
Total Capital Expenditure	\$7,610,000	\$21,677,304	\$15,116,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$592,937	\$620,212	\$648,742	\$678,584	\$780,779	\$742,450	\$776,602	\$812,326	\$934,662	\$888,779	\$929,663	\$972,427	\$1,017,159
Loan (Fixed Payment)	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282
Total Expenses	\$11,978,282	\$26,045,586	\$19,484,588	\$4,961,219	\$4,988,494	\$5,017,024	\$5,046,866	\$5,149,060	\$5,110,731	\$5,144,884	\$5,180,608	\$5,302,944	\$5,257,061	\$5,297,944	\$5,340,709	\$5,385,441
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100
Cash Flow	\$30,171,718	\$4,126,133	-\$15,358,455	-\$15,787,670	-\$16,035,688	-\$16,094,174	-\$15,954,410	-\$15,678,255	-\$15,114,211	-\$14,323,280	-\$13,295,025	-\$12,103,499	-\$10,567,344	-\$8,759,585	-\$6,667,728	-\$4,278,705
Cash Flow + Renewal/Deprec	\$30,171,718	\$4,126,133	-\$15,358,455	-\$16,841,770	-\$18,143,888	-\$19,256,474	-\$20,170,810	-\$20,948,755	-\$21,438,811	-\$21,701,980	-\$21,727,825	-\$21,590,399	-\$21,108,344	-\$20,354,685	-\$19,316,928	-\$17,982,005
Reserve exc. extra expenses & dep	\$30,171,718	\$4,126,133	\$0	\$0	\$0	\$0	\$139,765	\$415,920	\$979,963	\$1,770,894	\$2,799,149	\$3,990,675	\$5,526,830	\$7,334,589	\$9,426,446	\$11,815,470
Closing Balance of Borrowings		\$40,352,868	\$38,446,112	\$36,423,043	\$34,276,567	\$31,999,156	\$29,582,824	\$27,019,094	\$24,298,977	\$21,412,934	\$18,350,841	\$15,101,961	\$11,654,899	\$7,997,566	\$4,117,136	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$4,368,282	-\$4,368,282	-\$1,483,315	-\$1,302,118	-\$1,112,586	-\$914,335	-\$777,945	-\$490,056	-\$263,169	-\$25,845	\$137,426	\$482,055	\$753,659	\$1,037,757	\$1,334,923
Net Cash Flow (excl. financial costs & depreciation)		-\$21,677,304	-\$15,116,307	\$3,939,066	\$4,120,263	\$4,309,796	\$4,508,046	\$4,644,436	\$4,932,325	\$5,159,212	\$5,396,536	\$5,559,808	\$5,904,437	\$6,176,041	\$6,460,139	\$6,757,305
IRR		5.4%														
NPV		-\$2,141,422														
Payback Period		9 years														

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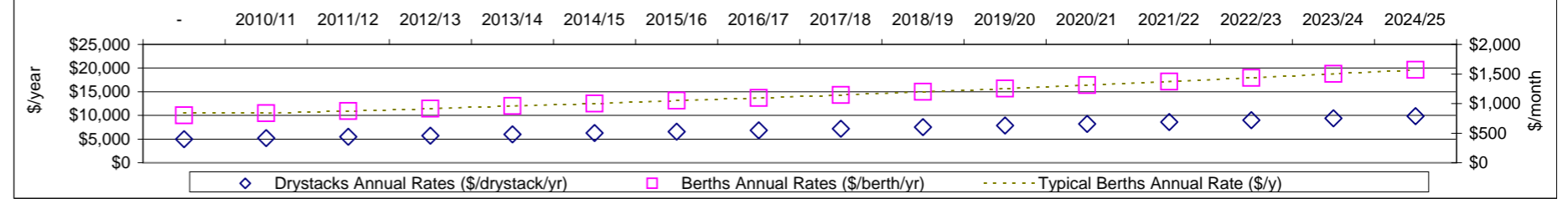
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Summary Inputs

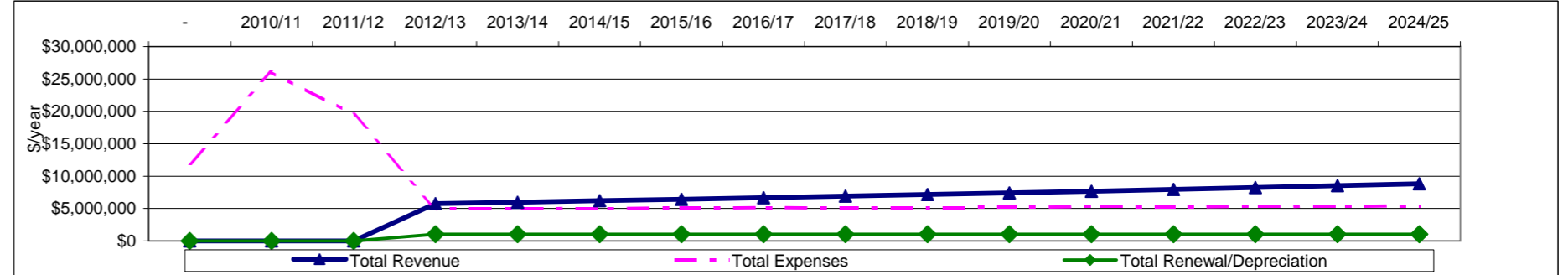
Scenario	BCSell1%
Input Parameter (Non-timeline related)	Value
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	80%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	80%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	1%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	No
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	100%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	No
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	100%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	3.1% Value not used
Goal seek Reserve: Cash Flow and Depreciation	4.9% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs

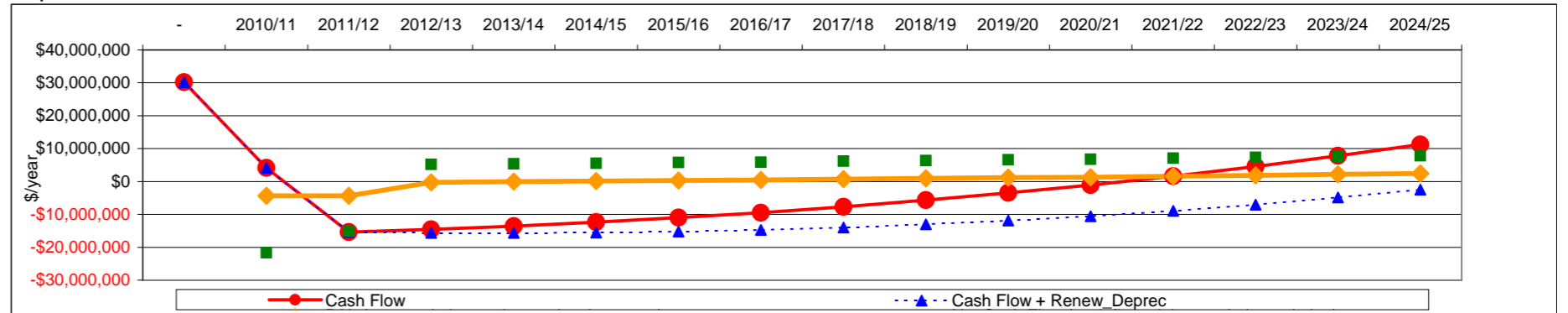
Graph 1 Rates



Graph 2 Revenue & Expenses



Graph 3 Cash Flow



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Berths Annual Rates (\$/berth/yr)	\$10,000	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632
Indicative Berths Average Monthly Value (\$/berth/month)	\$833	\$872	\$912	\$954	\$998	\$1,043	\$1,091	\$1,142	\$1,194	\$1,249	\$1,307	\$1,367	\$1,430	\$1,495	\$1,564	\$1,636
Price Berths Long Term Lease (LTL)	\$130,000	\$135,980	\$142,235	\$148,778	\$155,622	\$162,780	\$170,268	\$178,101	\$186,293	\$194,863	\$203,826	\$213,202	\$223,010	\$233,268	\$243,998	\$255,222
Berths LTL - Body Corporate Revenue	\$1,000	\$1,046	\$1,094	\$1,144	\$1,197	\$1,252	\$1,310	\$1,370	\$1,433	\$1,499	\$1,568	\$1,640	\$1,715	\$1,794	\$1,877	\$1,963
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Drystack Annual Rates (\$/drystack/yr)	\$5,000	\$5,230	\$5,471	\$5,722	\$5,985	\$6,261	\$6,549	\$6,850	\$7,165	\$7,495	\$7,839	\$8,200	\$8,577	\$8,972	\$9,385	\$9,816
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$417	\$436	\$456	\$477	\$499	\$522	\$546	\$571	\$597	\$625	\$653	\$683	\$715	\$748	\$782	\$818
Price Drystack Long Term Lease	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Drystack LTL - Body Corporate Revenue	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results																
Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$4,985,204	\$5,161,851	\$5,344,202	\$5,532,406	\$5,726,616	\$5,926,987	\$6,133,675	\$6,346,837	\$6,566,631	\$6,793,216	\$7,026,751	\$7,267,398	\$7,515,315
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$790,112	\$823,775	\$859,138	\$896,290	\$935,322	\$976,333	\$1,019,425	\$1,064,706	\$1,112,290	\$1,162,295	\$1,214,847	\$1,270,078	\$1,328,125
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$5,775,315	\$5,985,626	\$6,203,340	\$6,428,695	\$6,661,938	\$6,903,320	\$7,153,100	\$7,411,543	\$7,678,921	\$7,955,511	\$8,241,598	\$8,537,475	\$8,843,440
Total Capital Expenditure	\$7,610,000	\$21,677,304	\$15,116,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$592,937	\$620,212	\$648,742	\$678,584	\$780,779	\$742,450	\$776,602	\$812,326	\$934,662	\$888,779	\$929,663	\$972,427	\$1,017,159
Loan (Fixed Payment)	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282	\$4,368,282
Total Expenses	\$11,978,282	\$26,045,586	\$19,484,588	\$4,961,219	\$4,988,494	\$5,017,024	\$5,046,866	\$5,149,060	\$5,110,731	\$5,144,884	\$5,180,608	\$5,302,944	\$5,257,061	\$5,297,944	\$5,340,709	\$5,385,441
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100	\$1,054,100
Cash Flow	\$30,171,718	\$4,126,133	-\$15,358,455	-\$14,544,358	-\$13,547,226	-\$12,360,909	-\$10,979,080	-\$9,466,202	-\$7,673,613	-\$5,665,396	-\$3,434,461	-\$1,058,484	\$1,639,966	\$4,583,620	\$7,780,386	\$11,238,386
Cash Flow + Renew_Deprec	\$30,171,718	\$4,126,133	-\$15,358,455	-\$15,598,458	-\$15,655,426	-\$15,523,209	-\$15,195,480	-\$14,736,702	-\$13,998,213	-\$13,044,096	-\$11,867,261	-\$10,545,384	-\$8,901,034	-\$7,011,480	-\$4,868,814	-\$2,464,914
Reserve exc. extra expenses & dep	\$30,171,718	\$4,126,133	\$0	\$814,097	\$1,811,229	\$2,997,546	\$4,379,376	\$5,892,253	\$7,684,843	\$9,693,059	\$11,923,995	\$14,299,971	\$16,998,421	\$19,942,075	\$23,138,841	\$26,596,841
Closing Balance of Borrowings		\$40,352,868	\$38,446,112	\$36,423,043	\$34,276,567	\$31,999,156	\$29,582,824	\$27,019,094	\$24,298,977	\$21,412,934	\$18,350,841	\$15,101,961	\$11,654,899	\$7,997,566	\$4,117,136	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$4,368,282	-\$4,368,282	-\$240,003	-\$56,967	\$132,216	\$327,730	\$458,778	\$738,489	\$954,116	\$1,176,836	\$1,321,877	\$1,644,350	\$1,889,554	\$2,142,666	\$2,403,900
Net Cash Flow (excl. financial costs & depreciation)		-\$21,677,304	-\$15,116,307	\$5,182,378	\$5,365,414	\$5,554,598	\$5,750,111	\$5,881,159	\$6,160,871	\$6,376,498	\$6,599,217	\$6,744,258	\$7,066,732	\$7,311,935	\$7,565,048	\$7,826,281
IRR		8.5%														
NPV		\$7,277,142														
Payback Period		7 years														

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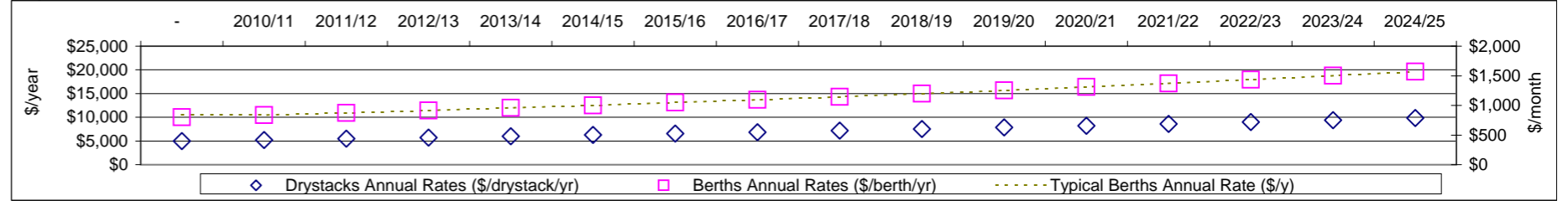
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Summary Inputs

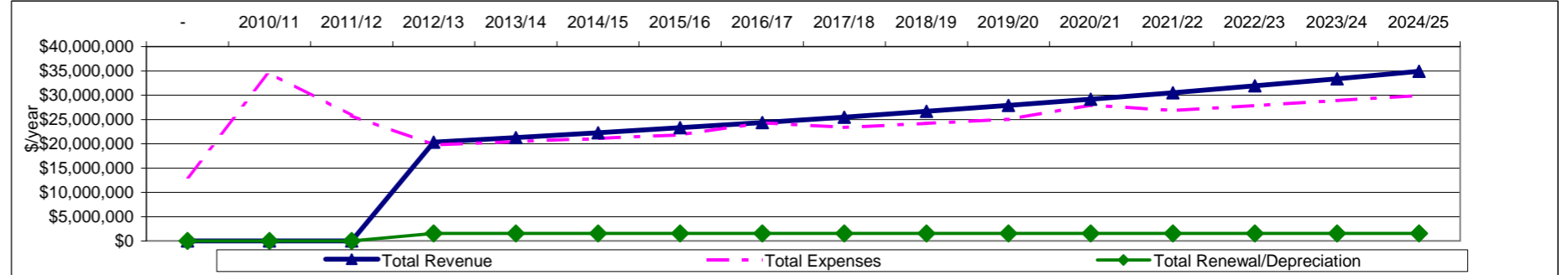
Scenario	BC&FerryRev
Input Parameter (Non-timeline related)	Value
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	80%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	80%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	Yes
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	100%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	Yes
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	100%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	4.3% Value not used
Goal seek Reserve: Cash Flow and Depreciation	4.9% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs

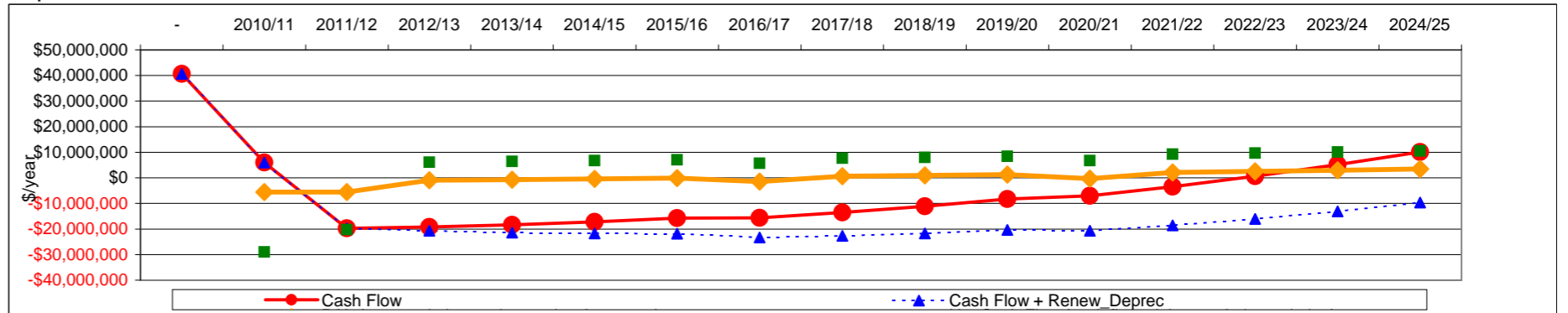
Graph 1 Rates



Graph 2 Revenue & Expenses



Graph 3 Cash Flow



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Berths Annual Rates (\$/berth/yr)	\$10,000	\$10,460	\$10,941	\$11,444	\$11,971	\$12,522	\$13,098	\$13,700	\$14,330	\$14,989	\$15,679	\$16,400	\$17,155	\$17,944	\$18,769	\$19,632
Indicative Berths Average Monthly Value (\$/berth/month)	\$833	\$872	\$912	\$954	\$998	\$1,043	\$1,091	\$1,142	\$1,194	\$1,249	\$1,307	\$1,367	\$1,430	\$1,495	\$1,564	\$1,636
Price Berths Long Term Lease (LTL)	\$130,000	\$135,980	\$142,235	\$148,778	\$155,622	\$162,780	\$170,268	\$178,101	\$186,293	\$194,863	\$203,826	\$213,202	\$223,010	\$233,268	\$243,998	\$255,222
Berths LTL - Body Corporate Revenue	\$1,000	\$1,046	\$1,094	\$1,144	\$1,197	\$1,252	\$1,310	\$1,370	\$1,433	\$1,499	\$1,568	\$1,640	\$1,715	\$1,794	\$1,877	\$1,963
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Drystack Annual Rates (\$/drystack/yr)	\$5,000	\$5,230	\$5,471	\$5,722	\$5,985	\$6,261	\$6,549	\$6,850	\$7,165	\$7,495	\$7,839	\$8,200	\$8,577	\$8,972	\$9,385	\$9,816
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$417	\$436	\$456	\$477	\$499	\$522	\$546	\$571	\$597	\$625	\$653	\$683	\$715	\$748	\$782	\$818
Price Drystack Long Term Lease	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Drystack LTL - Body Corporate Revenue	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$5,035,559	\$5,267,195	\$5,509,486	\$5,762,923	\$6,028,017	\$6,305,306	\$6,595,350	\$6,898,736	\$7,216,078	\$7,548,017	\$7,895,226	\$8,258,407	\$8,638,293
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$15,317,624	\$16,022,235	\$16,759,258	\$17,530,183	\$18,336,572	\$19,180,054	\$20,062,337	\$20,985,204	\$21,950,523	\$22,960,248	\$24,016,419	\$25,121,174	\$26,276,748
Total Revenue	\$0	\$0	\$0	\$20,353,183	\$21,289,430	\$22,268,744	\$23,293,106	\$24,364,589	\$25,485,360	\$26,657,686	\$27,883,940	\$29,166,601	\$30,508,265	\$31,911,645	\$33,379,581	\$34,915,041
Total Capital Expenditure	\$7,610,000	\$28,988,844	\$20,214,887	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$14,211,837	\$14,865,581	\$15,549,398	\$16,264,670	\$18,714,129	\$17,795,436	\$18,614,026	\$19,470,271	\$22,402,494	\$21,302,735	\$22,282,661	\$23,307,663	\$24,379,816
Loan (Fixed Payment)	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648
Total Expenses	\$13,185,648	\$34,564,492	\$25,790,535	\$19,787,484	\$20,441,229	\$21,125,045	\$21,840,318	\$24,289,777	\$23,371,083	\$24,189,673	\$25,045,919	\$27,978,141	\$26,878,383	\$27,858,309	\$28,883,311	\$29,955,463
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100
Cash Flow	\$40,614,352	\$6,049,861	-\$19,740,674	-\$19,174,975	-\$18,326,773	-\$17,183,075	-\$15,730,287	-\$15,655,475	-\$13,541,199	-\$11,073,186	-\$8,235,165	-\$7,046,705	-\$3,416,823	\$636,514	\$5,132,784	\$10,092,362
Cash Flow + Renew_Deprec	\$40,614,352	\$6,049,861	-\$19,740,674	-\$20,695,075	-\$21,366,973	-\$21,743,375	-\$21,810,687	-\$23,255,975	-\$22,661,799	-\$21,713,886	-\$20,395,965	-\$20,727,605	-\$18,617,823	-\$16,084,586	-\$13,108,416	-\$9,668,938
Reserve exc. extra expenses & dep	\$40,614,352	\$6,049,861	\$0	\$565,699	\$1,413,900	\$2,557,599	\$4,010,387	\$4,085,199	\$6,199,475	\$8,667,488	\$11,505,509	\$12,693,969	\$16,323,851	\$20,377,188	\$24,873,458	\$29,833,036
Closing Balance of Borrowings		\$51,506,152	\$49,072,380	\$46,490,148	\$43,750,399	\$40,843,526	\$37,759,333	\$34,487,005	\$31,015,065	\$27,331,336	\$23,422,900	\$19,276,050	\$14,876,241	\$10,208,044	\$5,255,087	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$5,575,648	-\$5,575,648	-\$954,401	-\$671,899	-\$376,402	-\$67,312	-\$1,445,288	\$594,176	\$947,913	\$1,317,921	-\$331,640	\$2,109,782	\$2,533,237	\$2,976,170	\$3,439,478
Net Cash Flow (excl. financial costs & depreciation)		-\$28,988,844	-\$20,214,887	\$6,141,347	\$6,423,849	\$6,719,346	\$7,028,436	\$5,650,459	\$7,689,924	\$8,043,661	\$8,413,669	\$6,764,107	\$9,205,530	\$9,628,984	\$10,071,917	\$10,535,226
IRR		7.7%														
NPV		\$6,382,227														
Payback Period		8 years														

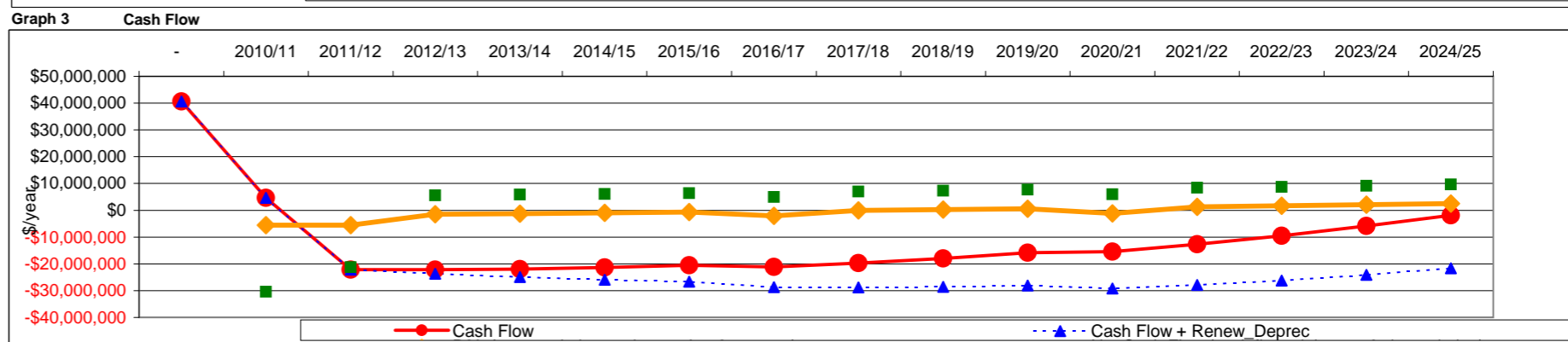
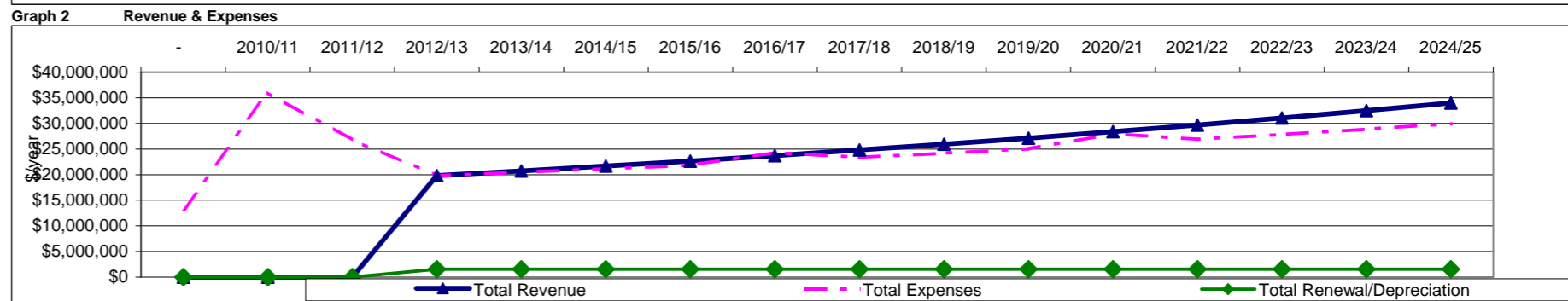
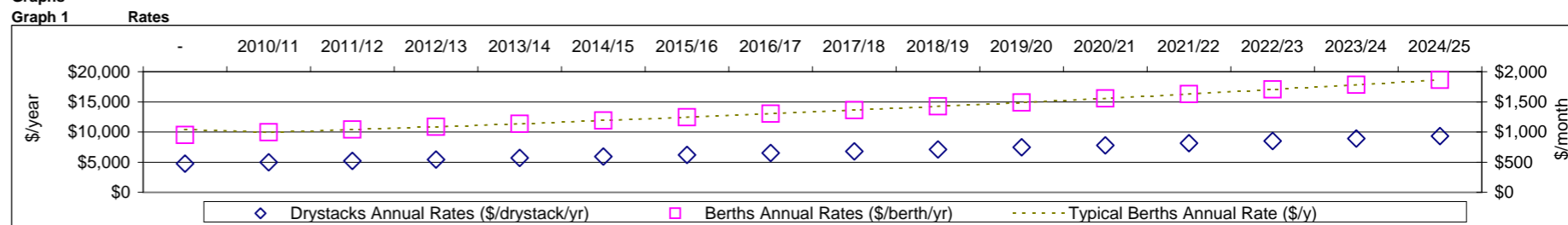
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Summary Inputs

Scenario	Pr95%Dmd75%Capex105%
Input Parameter (Non-timeline related)	Value
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	75%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	75%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	Yes
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	105%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	Yes
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	105%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	4.7% Value not used
Goal seek Reserve: Cash Flow and Depreciation	5.3% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Berths Annual Rates (\$/berth/yr)	\$9,500	\$9,937	\$10,394	\$10,872	\$11,372	\$11,895	\$12,443	\$13,015	\$13,614	\$14,240	\$14,895	\$15,580	\$16,297	\$17,047	\$17,831	\$18,651
Indicative Berths Average Monthly Value (\$/berth/month)	\$792	\$828	\$866	\$906	\$948	\$991	\$1,037	\$1,085	\$1,134	\$1,187	\$1,241	\$1,298	\$1,358	\$1,421	\$1,486	\$1,554
Price Berths Long Term Lease (LTL)	\$123,500	\$129,181	\$135,123	\$141,339	\$147,841	\$154,641	\$161,755	\$169,195	\$176,978	\$185,119	\$193,635	\$202,542	\$211,859	\$221,605	\$231,798	\$242,461
Berths LTL - Body Corporate Revenue	\$950	\$994	\$1,039	\$1,087	\$1,137	\$1,190	\$1,244	\$1,302	\$1,361	\$1,424	\$1,489	\$1,558	\$1,630	\$1,705	\$1,783	\$1,865
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Drystack Annual Rates (\$/drystack/yr)	\$4,750	\$4,969	\$5,197	\$5,436	\$5,686	\$5,948	\$6,221	\$6,508	\$6,807	\$7,120	\$7,447	\$7,790	\$8,148	\$8,523	\$8,915	\$9,325
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$396	\$414	\$433	\$453	\$474	\$496	\$518	\$542	\$567	\$593	\$621	\$649	\$679	\$710	\$743	\$777
Price Drystack Long Term Lease	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750	\$61,750
Drystack LTL - Body Corporate Revenue	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$475
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$4,484,795	\$4,691,096	\$4,906,886	\$5,132,603	\$5,368,703	\$5,615,663	\$5,873,983	\$6,144,187	\$6,426,819	\$6,722,453	\$7,031,686	\$7,355,143	\$7,693,480
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$15,317,624	\$16,022,235	\$16,759,258	\$17,530,183	\$18,336,572	\$19,180,054	\$20,062,337	\$20,985,204	\$21,950,523	\$22,960,248	\$24,016,419	\$25,121,174	\$26,276,748
Total Revenue	\$0	\$0	\$0	\$19,802,419	\$20,713,330	\$21,666,144	\$22,662,786	\$23,705,274	\$24,795,717	\$25,936,320	\$27,129,391	\$28,377,343	\$29,682,700	\$31,048,105	\$32,476,318	\$33,970,228
Total Capital Expenditure	\$7,610,000	\$30,438,286	\$21,225,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$14,211,837	\$14,865,581	\$15,549,398	\$16,264,670	\$18,714,129	\$17,795,436	\$18,614,026	\$19,470,271	\$22,402,494	\$21,302,735	\$22,282,661	\$23,307,663	\$24,379,816
Loan (Fixed Payment)	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648
Total Expenses	\$13,185,648	\$36,013,934	\$26,801,279	\$19,787,484	\$20,441,229	\$21,125,045	\$21,840,318	\$24,289,777	\$23,371,083	\$24,189,673	\$25,045,919	\$27,978,141	\$26,878,383	\$27,858,309	\$28,883,311	\$29,955,463
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100
Cash Flow	\$40,614,352	\$4,600,419	-\$22,200,861	-\$22,185,926	-\$21,913,824	-\$21,372,726	-\$20,550,257	-\$21,134,760	-\$19,710,126	-\$17,963,480	-\$15,880,007	-\$15,480,806	-\$12,676,488	-\$9,486,692	-\$5,893,686	-\$1,878,921
Cash Flow + Renew_Deprec	\$40,614,352	\$4,600,419	-\$22,200,861	-\$23,706,026	-\$24,954,024	-\$25,933,026	-\$26,630,657	-\$28,735,260	-\$28,830,726	-\$28,604,180	-\$28,040,807	-\$29,161,706	-\$27,877,488	-\$26,207,792	-\$24,134,886	-\$21,640,221
Reserve exc. extra expenses & dep	\$40,614,352	\$4,600,419	\$0	\$14,935	\$287,037	\$828,135	\$1,650,603	\$1,066,101	\$2,490,734	\$4,237,381	\$6,320,853	\$6,720,054	\$9,524,372	\$12,714,168	\$16,307,175	\$20,321,940
Closing Balance of Borrowings		\$51,506,152	\$49,072,380	\$46,490,148	\$43,750,399	\$40,843,526	\$37,759,333	\$34,487,005	\$31,015,065	\$27,331,336	\$23,422,900	\$19,276,050	\$14,876,241	\$10,208,044	\$5,255,087	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$5,575,648	-\$5,575,648	-\$1,505,165	-\$1,247,998	-\$979,002	-\$697,631	-\$2,104,603	-\$95,466	\$226,547	\$563,372	-\$1,120,899	\$1,284,218	\$1,669,696	\$2,072,907	\$2,494,665
Net Cash Flow (excl. financial costs & depreciation)		-\$30,438,286	-\$21,225,632	\$5,590,583	\$5,847,749	\$6,116,746	\$6,398,116	\$4,991,145	\$7,000,281	\$7,322,294	\$7,659,120	\$5,974,849	\$8,379,965	\$8,765,444	\$9,168,654	\$9,590,412
IRR		5.7%														
NPV		-\$1,393,338														
Payback Period		9 years														

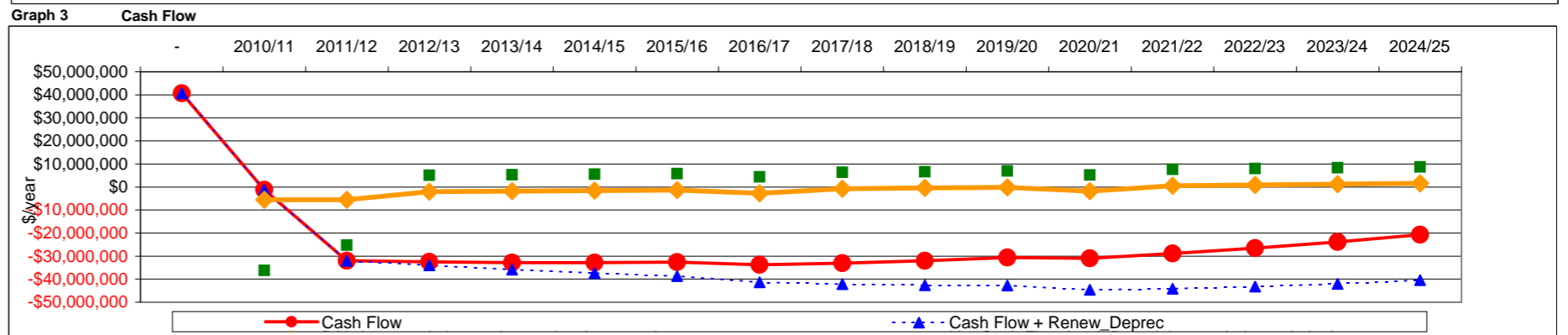
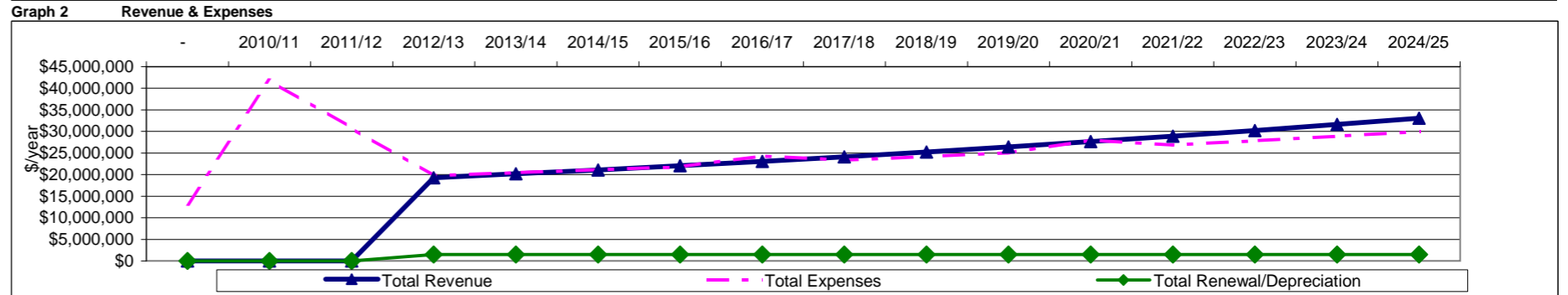
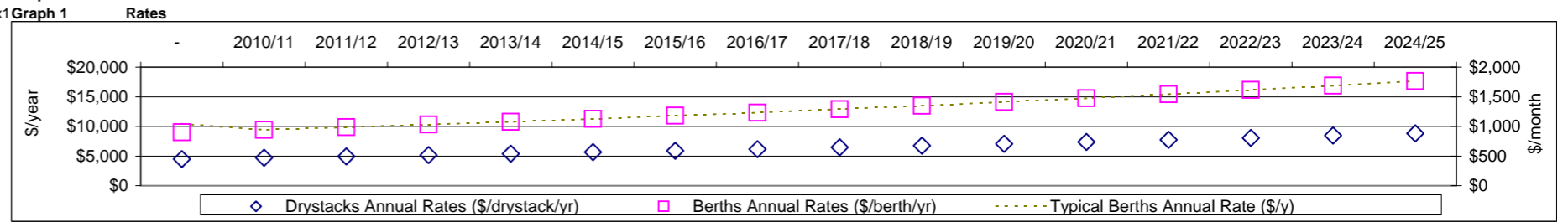
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Summary Inputs

Scenario	Critical: Rates90%&Dmd70%&Capex1
Input Parameter (Non-timeline related)	Value
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	70%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	70%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	0%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	Yes
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	125%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	Yes
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	125%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	5.3% Value not used
Goal seek Reserve: Cash Flow and Depreciation	6.0% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Berths Annual Rates (\$/berth/yr)	\$9,000	\$9,414	\$9,847	\$10,300	\$10,774	\$11,269	\$11,788	\$12,330	\$12,897	\$13,490	\$14,111	\$14,760	\$15,439	\$16,149	\$16,892	\$17,669
Indicative Berths Average Monthly Value (\$/berth/month)	\$750	\$785	\$821	\$858	\$898	\$939	\$982	\$1,028	\$1,075	\$1,124	\$1,176	\$1,230	\$1,287	\$1,346	\$1,408	\$1,472
Price Berths Long Term Lease (LTL)	\$117,000	\$122,382	\$128,012	\$133,900	\$140,060	\$146,502	\$153,241	\$160,290	\$167,664	\$175,376	\$183,444	\$191,882	\$200,709	\$209,941	\$219,599	\$229,700
Berths LTL - Body Corporate Revenue	\$900	\$941	\$985	\$1,030	\$1,077	\$1,127	\$1,179	\$1,233	\$1,290	\$1,349	\$1,411	\$1,476	\$1,544	\$1,615	\$1,689	\$1,767
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Drystack Annual Rates (\$/drystack/yr)	\$4,500	\$4,707	\$4,924	\$5,150	\$5,387	\$5,635	\$5,894	\$6,165	\$6,449	\$6,745	\$7,056	\$7,380	\$7,720	\$8,075	\$8,446	\$8,835
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$375	\$392	\$410	\$429	\$449	\$470	\$491	\$514	\$537	\$562	\$588	\$615	\$643	\$673	\$704	\$736
Price Drystack Long Term Lease	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500
Drystack LTL - Body Corporate Revenue	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Summary Results																
Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$3,965,503	\$4,147,916	\$4,338,720	\$4,538,302	\$4,747,063	\$4,965,428	\$5,193,838	\$5,432,755	\$5,682,661	\$5,944,064	\$6,217,491	\$6,503,495	\$6,802,656
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$15,317,624	\$16,022,235	\$16,759,258	\$17,530,183	\$18,336,572	\$19,180,054	\$20,062,337	\$20,985,204	\$21,950,523	\$22,960,248	\$24,016,419	\$25,121,174	\$26,276,748
Total Revenue	\$0	\$0	\$0	\$19,283,127	\$20,170,151	\$21,097,978	\$22,068,485	\$23,083,635	\$24,145,482	\$25,256,175	\$26,417,959	\$27,633,185	\$28,904,311	\$30,233,910	\$31,624,669	\$33,079,404
Total Capital Expenditure	\$7,610,000	\$36,236,055	\$25,268,609	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$14,211,837	\$14,865,581	\$15,549,398	\$16,264,670	\$18,714,129	\$17,795,436	\$18,614,026	\$19,470,271	\$22,402,494	\$21,302,735	\$22,282,661	\$23,307,663	\$24,379,816
Loan (Fixed Payment)	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648
Total Expenses	\$13,185,648	\$41,811,703	\$30,844,257	\$19,787,484	\$20,441,229	\$21,125,045	\$21,840,318	\$24,289,777	\$23,371,083	\$24,189,673	\$25,045,919	\$27,978,141	\$26,878,383	\$27,858,309	\$28,883,311	\$29,955,463
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100
Cash Flow	\$40,614,352	-\$1,197,350	-\$32,041,607	-\$32,545,964	-\$32,817,042	-\$32,844,109	-\$32,615,942	-\$33,822,084	-\$33,047,685	-\$31,981,184	-\$30,609,144	-\$30,954,101	-\$28,928,172	-\$26,552,571	-\$23,811,213	-\$20,687,272
Cash Flow + Renew_Deprec	\$40,614,352	-\$1,197,350	-\$32,041,607	-\$34,066,064	-\$35,857,242	-\$37,404,409	-\$38,696,342	-\$41,422,584	-\$42,168,285	-\$42,621,884	-\$42,769,944	-\$44,635,001	-\$44,129,172	-\$43,273,671	-\$42,052,413	-\$40,448,572
Reserve exc. extra expenses & dep	\$40,614,352	\$0	\$0	\$0	\$0	\$0	\$228,167	\$0	\$774,399	\$1,840,900	\$3,212,940	\$2,867,983	\$4,893,912	\$7,269,513	\$10,010,871	\$13,134,812
Closing Balance of Borrowings		\$51,506,152	\$49,072,380	\$46,490,148	\$43,750,399	\$40,843,526	\$37,759,333	\$34,487,005	\$31,015,065	\$27,331,336	\$23,422,900	\$19,276,050	\$14,876,241	\$10,208,044	\$5,255,087	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$5,575,648	-\$5,575,648	-\$2,024,457	-\$1,791,178	-\$1,547,168	-\$1,291,933	-\$2,726,242	-\$745,701	-\$453,599	-\$148,060	-\$1,865,057	\$505,829	\$855,501	\$1,221,258	\$1,603,841
Net Cash Flow (excl. financial costs & depreciation)		-\$36,236,055	-\$25,268,609	\$5,071,290	\$5,304,570	\$5,548,580	\$5,803,815	\$4,369,506	\$6,350,047	\$6,642,149	\$6,947,688	\$5,230,691	\$7,601,576	\$7,951,249	\$8,317,006	\$8,699,588
IRR		2.4%														
NPV		-\$15,645,874														
Payback Period		11 years														

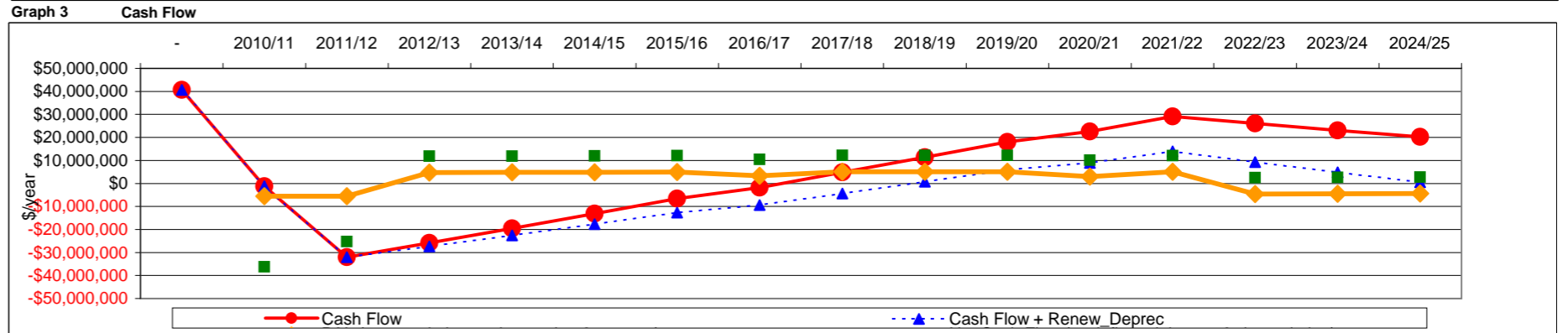
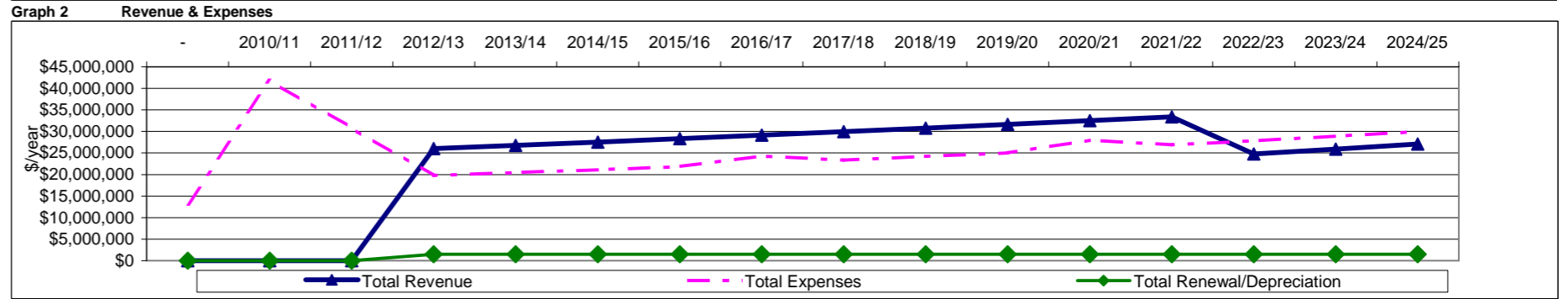
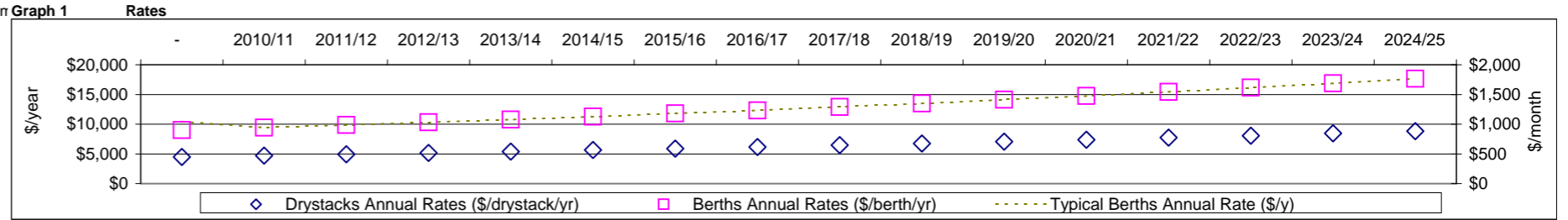
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Summary Inputs

Scenario	Value
LowRange&HighSales: Rates90%, Dr	
OPERATING REVENUE	
Rates escalation factor - Blended CPI* -base case	4.6%
Operating Revenue from Marina Berths Rented	
Total Number of Berths	400
Average Annual Occupancy Rate - Rented Berths	70%
Operating Revenue from Marina Drystack Rented	
% Berths/Drystack rate value	50%
Total Number of Drystack	300
Average Annual Occupancy Rate - Rented Drystack	70%
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	
Berths and Drystack selling rate (berths LTL/yr)	10%
Ferry/Boat Ramp Revenue	
Include Ferry/Boat Ramp Revenue	Yes
CAPITAL EXPENDITURE	
Marina Base Capex	
Construction years (1&2) average berths availability	0%
Marina Construction Percentage (For Capex %) in Construction year1	60%
Capex sensitivity - excluding "Provisional Allowances"	125%
Marina Provisional Allowances Capex	
Include Landscaping	Yes
Include Sewer & Water	Yes
Include Main Entry Intersection Works	Yes
Include Allowance for Environmental Studies, Consultation and Approvals	Yes
Include Ferry Infrastructure	Yes
Include Other Provisional Capex Items	No
Capex sensitivity - "Provisional Allowances" only	125%
OPERATING EXPENDITURE	
Marina Base Opex	
Opex as % Capex	1.5%
Opex sensitivity - excluding Provisional Allowances	100%
Opex sensitivity - Provisional Allowances only	100%
BREAK-EVEN ESCALATION FACTOR	
Use a break-even escalation factor?	No
Goal seek Cash Flow	3.9% Value not used
Goal seek Reserve: Cash Flow and Depreciation	4.6% Value not used
Goal Seek - Goal Value at end of period	\$0 Value not used

Graphs



Input Parameter (Timeline related)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	0	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Marina OPERATING REVENUE TIMELINE																
Marina Berths Operating Revenue																
Berths Rates escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Berths Occupancy Rate (%)		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Berths Annual Rates (\$/berth/yr)	\$9,000	\$9,414	\$9,847	\$10,300	\$10,774	\$11,269	\$11,788	\$12,330	\$12,897	\$13,490	\$14,111	\$14,760	\$15,439	\$16,149	\$16,892	\$17,669
Indicative Berths Average Monthly Value (\$/berth/month)	\$750	\$785	\$821	\$858	\$898	\$939	\$982	\$1,028	\$1,075	\$1,124	\$1,176	\$1,230	\$1,287	\$1,346	\$1,408	\$1,472
Price Berths Long Term Lease (LTL)	\$117,000	\$122,382	\$128,012	\$133,900	\$140,060	\$146,502	\$153,241	\$160,290	\$167,664	\$175,376	\$183,444	\$191,882	\$200,709	\$209,941	\$219,599	\$229,700
Berths LTL - Body Corporate Revenue	\$900	\$941	\$985	\$1,030	\$1,077	\$1,127	\$1,179	\$1,233	\$1,290	\$1,349	\$1,411	\$1,476	\$1,544	\$1,615	\$1,689	\$1,767
Marina Drystack Operating Revenue																
Drystack Rates yearly escalation factor		4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Drystack Occupancy Rate (%)		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Drystack Annual Rates (\$/drystack/yr)	\$4,500	\$4,707	\$4,924	\$5,150	\$5,387	\$5,635	\$5,894	\$6,165	\$6,449	\$6,745	\$7,056	\$7,380	\$7,720	\$8,075	\$8,446	\$8,835
Indicative Drystack Average Monthly Value (\$/drystack/month)	\$375	\$392	\$410	\$429	\$449	\$470	\$491	\$514	\$537	\$562	\$588	\$615	\$643	\$673	\$704	\$736
Price Drystack Long Term Lease	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500	\$58,500
Drystack LTL - Body Corporate Revenue	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450
Marina OPEX TIMELINE																
Equipment Replacement & Maintenance Schedules																
Opex R&M factor		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%	110.0%	100.0%	100.0%	100.0%

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Financial Year	-	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Revenue from Berths and Drystack rented	\$0	\$0	\$0	\$3,568,953	\$3,318,333	\$3,037,104	\$2,722,981	\$2,373,532	\$1,986,171	\$1,558,151	\$1,086,551	\$568,266	\$0	\$0	\$0	\$0
Revenue from Marina Berths and Drystack Long Term Lease (LTL)	\$0	\$0	\$0	\$7,111,004	\$7,413,976	\$7,732,245	\$8,066,608	\$8,417,899	\$8,786,997	\$9,174,826	\$9,582,356	\$10,010,608	\$10,460,654	\$780,973	\$810,688	\$841,769
Ferry/Boat Ramp Revenue	\$0	\$0	\$0	\$15,317,624	\$16,022,235	\$16,759,258	\$17,530,183	\$18,336,572	\$19,180,054	\$20,062,337	\$20,985,204	\$21,950,523	\$22,960,248	\$24,016,419	\$25,121,174	\$26,276,748
Total Revenue	\$0	\$0	\$0	\$25,997,581	\$26,754,543	\$27,528,607	\$28,319,772	\$29,128,002	\$29,953,222	\$30,795,314	\$31,654,111	\$32,529,397	\$33,420,902	\$24,797,392	\$25,931,862	\$27,118,518
Total Capital Expenditure	\$7,610,000	\$36,236,055	\$25,268,609	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenditure	\$0	\$0	\$0	\$14,211,837	\$14,865,581	\$15,549,398	\$16,264,670	\$18,714,129	\$17,795,436	\$18,614,026	\$19,470,271	\$22,402,494	\$21,302,735	\$22,282,661	\$23,307,663	\$24,379,816
Loan (Fixed Payment)	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648	\$5,575,648
Total Expenses	\$13,185,648	\$41,811,703	\$30,844,257	\$19,787,484	\$20,441,229	\$21,125,045	\$21,840,318	\$24,289,777	\$23,371,083	\$24,189,673	\$25,045,919	\$27,978,141	\$26,878,383	\$27,858,309	\$28,883,311	\$29,955,463
Total Renewal/Depreciation	\$0	\$0	\$0	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100	\$1,520,100
Cash Flow	\$40,614,352	-\$1,197,350	-\$32,041,607	-\$25,831,510	-\$19,518,195	-\$13,114,634	-\$6,635,180	-\$1,796,955	\$4,785,184	\$11,390,824	\$17,999,016	\$22,550,272	\$29,092,791	\$26,031,875	\$23,080,426	\$20,243,480
Cash Flow + Renew_Deprec	\$40,614,352	-\$1,197,350	-\$32,041,607	-\$27,351,610	-\$22,558,395	-\$17,674,934	-\$12,715,580	-\$9,397,455	-\$4,335,416	\$750,124	\$5,838,216	\$8,869,372	\$13,891,791	\$9,310,775	\$4,839,226	\$482,180
Reserve exc. extra expenses & dep	\$40,614,352	\$0	\$0	\$6,210,097	\$12,523,411	\$18,926,973	\$25,406,427	\$30,244,652	\$36,826,791	\$43,432,431	\$50,040,623	\$54,591,879	\$61,134,398	\$58,073,481	\$55,122,033	\$52,285,087
Closing Balance of Borrowings		\$51,506,152	\$49,072,380	\$46,490,148	\$43,750,399	\$40,843,526	\$37,759,333	\$34,487,005	\$31,015,065	\$27,331,336	\$23,422,900	\$19,276,050	\$14,876,241	\$10,208,044	\$5,255,087	-\$0
P&L (exc. capital costs, loan value & reserve)		-\$5,575,648	-\$5,575,648	\$4,689,997	\$4,793,215	\$4,883,461	\$4,959,354	\$3,318,125	\$5,062,039	\$5,085,540	\$5,088,092	\$3,031,156	\$5,022,419	-\$4,581,017	-\$4,471,549	-\$4,357,046
Net Cash Flow (excl. financial costs & depreciation)		-\$36,236,055	-\$25,268,609	\$11,785,744	\$11,888,962	\$11,979,209	\$12,055,102	\$10,413,873	\$12,157,786	\$12,181,288	\$12,183,840	\$10,126,903	\$12,118,167	\$2,514,731	\$2,624,199	\$2,738,702
IRR		10.0%														
NPV		\$15,410,512														
Payback Period		7 years														



Appendix 2
Revised Construction Costs

TOONDAH HARBOUR REDEVELOPMENT STUDY
ORDER OF MAGNITUDE COST ESTIMATE

Item	Description	UOM	Qty	Rate	Amount
1	PRELIMINARIES				
1.1	Mobilise & establish plant, equipment & facilities	Item			1,700,000
1.2	Survey setout and as-constructed drawings	Item			350,000
1.3	Insurance of the works	Item			780,000
1.4	Demobilisation and site clean up	Item			900,000
2	CONSTRUCTION				
2.1	Core material to bund walls	m3	247,000	26	6,422,000
2.2	Armour rock (outer bund wall) ex Mt Cotton Quarry	m3	15,600	85	1,326,000
2.3	Armour rock (inner bund walls) ex Mt Cotton Quarry	m3	11,220	85	953,700
2.4	Filter material (outer bund wall) ex Mt Cotton Quarry	m3	6,490	70	454,300
2.5	Filter material (inner bund walls) ex Mt Cotton Quarry	m3	6,300	70	441,000
2.6	Geotextile to outer bund face	m2	33,800	4.15	140,270
2.7	Dredging swing basin, marina & new channel	m3	585,200	7.50	4,389,000
2.8	Pump/dewater/place into new bunded areas	m3	585,200	3	1,755,600
2.9	ROQ capping to reclaimed areas	m3	45,000	30	1,350,000
2.10	Construct marina berths	No	400	23,000	9,200,000
2.11	Construct drystack facilities	No	300	8,500	2,550,000
2.12	Bitumen roads & carparking in new terminal area	m2	26,000	47	1,222,000
2.13	Traffic islands, signs, wheel stops, etc	Item			125,000
2.14	Drainage (pipes, gully pits, etc)	Item			80,000
2.15	Onshore road entry intersection works	Item			300,000
2.16	Grassing, landscaping, etc	Item			250,000
2.17	Marina administration & amenities building	m2	180	3,200	576,000
2.18	Piling to ferry berths	m	624	2,150	1,341,600
2.19	Concrete deck & beams to ferry berth ramps	m2	2,400	4,050	9,720,000
2.20	Deck infrastructure (fenders, bollards, ladders, etc)	Item			450,000
2.21	Armour rock (ferry berths) ex Mt Cotton Quarry	m3	1,160	105	121,800
2.22	Filter material (ferry berths) ex Mt Cotton Quarry	m3	620	90	55,800
2.23	Geotextile to dredged slope	m2	6,700	4.15	27,805
2.24	Mooring piles	Item			140,000
2.25	Ferry ticket & admin building	m2	60	3,300	198,000
2.26	Diesel and fuel facilities	Item			200,000
2.27	Power reticulation & connection to grid system	Item			350,000
2.28	Flood lighting for night time operation	Item			130,000
2.29	Sewer pipes, pump stn & connections to main	Item			400,000
2.30	Water connection and reticulation, incl hydrants	Item			120,000
2.31	Datalink & communication cabling	Item			100,000
	Sub Total				48,619,875
3	INDIRECTS				
3.1	EIS, geotech studies, bathymetry survey, etc	Item			1,250,000
3.2	Consultations & approvals	Item			200,000
3.3	Engineering, design & architecture	%	3.5		1,701,696
3.4	Procurement & construction management	%	4.5		2,187,894
3.5	Contingency	%	25		12,154,969
	TOTAL				66,114,434

Note : Costs exclude owner's costs, GST, any escalation beyond 3rd Qtr 2010 and any resale value of the marina berths & drystacks.



Appendix 3
Summary and Scope of Environmental
Legislation

Appendix 3 – Summary and scope of relevant environmental legislation

Commonwealth Legislation

Environment Protection and Biodiversity Conservation Act 1999 (EPBCA)

As the project may affect matters protected by the *EPBC Act*, assessment under this legislation will be required. Referral of the project to the Commonwealth (SEWPC) will be required.

Native Title Act 1993

The *Native Title Act 1993* (NT Act) recognises the rights and interests over land and water of Australian Indigenous people in accordance with traditional laws and customs. Consideration of the tenure and Native Title rights over the Lot/s to be affected by the project will be required. Any freeholding application will need to address native title rights and interests under a future act provision of the *NT Act*, and may involve entering into a Land Use Agreement with relevant indigenous parties.

Environment Protection (Sea Dumping Act) 1981

Dredging and reclamation works intended under the project may require consideration under the *Environment Protection (Sea Dumping) Act 1981* (*Seas Dumping Act*). The *Sea Dumping Act* is administered by SEWPC and applies in respect of all Australian waters (other than waters within the limits of a State or Territory), from the low water mark out to the limits of the Exclusive Economic Zone. The *National Assessment Guideline for Dredging* (2009) establishes a hierarchical assessment for dredged material management and includes procedures to determine if material is suitable for disposal at sea.

State Legislation

State Development and Public Works Organisation Act 1971

As noted above, given the proposal will likely require an EIA under the *EPBC Act*, it may be beneficial to also seek declaration as a significant project under the *SDPWOA Act*. Through this process, the Coordinator-General (CG) facilitates and coordinates the assessment process for all government departments, including an evaluation of the EIS and the preparation of an evaluation report. Under the *SDPWOA* the CG is empowered to make certain recommendations, as well as conditions of approval that must be imposed under certain approval processes.

Bilateral agreement

The *EPBCA* Bilateral Agreement between Queensland and the Australian Government came into effect on 13 August 2004. It is commonly referred to as the Bilateral Agreement, however the full title is *An Agreement between the Australian Government and the State of Queensland under Section 45 of the Australian Government Environment Protection and Biodiversity Conservation Act 1999 Relating to Environmental Assessment*.

The purpose of the agreement is to avoid assessment process duplications for proposals that (among other things) require assessment under the *EPBCA* and are undergoing an EIA process under State legislation.

The Bilateral Agreement applies only to three classes of actions, specifically those assessed by an EIS under: Chapter 3 of the *Environmental Protection Act 1994*; Part 4 of the *SDPWOA*; or the *Sustainable Planning Act 2009*. Consideration is needed as to whether this project requires an EIS assessment under any of these; it is likely required under Part 4 of the *SDPWOA*.

Environmental Protection Act 1994

The *Environmental Protection Act 1994 (EP Act)* places emphasis on managing Queensland's environment within the principles of ecologically sustainable development. The *EP Act* is administered by the Department of Environment and Resource Management (DERM). Under the *EP Act*, anyone undertaking an activity that may cause environmental harm must comply with the *EP Act's* general duty of care. This project will require assessment against this Act given that construction and operational aspects of the project have potential to result in material harm to environmental aspects that are governed by DERM.

Sustainable Planning Act 2009

The purpose of the *Sustainable Planning Act 2009 (SPA)* (formerly the *Integrated Planning Act 1997*) is to seek to achieve ecological sustainability by:

- ▶ Coordinating and integrating planning at the local, regional and State levels;
- ▶ Managing the process by which development occurs; and
- ▶ Managing the effects of development on the environment.

The SPA establishes the Integrated Development Assessment System (IDAS), which integrates a range of development approvals including, but not limited to, the *EP Act*, *Transport Infrastructure Act 1994*, *Coastal Protection and Management Act 1995*, *Fisheries Act 1994*, *Water Act 2000* and the *Vegetation Management Act 1999*. The proposed development will require development approvals that fall under the SPA including, as a minimum, Tidal Works applications.

Transport Infrastructure Act 1994

The overall objective of this Act, consistent with the objectives of the *Transport Planning and Coordination Act 1994*, is to provide a regime that allows for, and encourages, effective integrated planning and efficient management of a system of transport infrastructure. As the project includes development aspects related to transport, the conditions of this Act will need to be considered for the project's development and approval.

Water Act 2000

The *Water Act 2000* provides a regime for the licensing, regulation and management of water resources in Queensland. All work that may interfere with or impact on water courses, particularly within the bed and banks as will occur under this project, will comply with the requirements of the *Water Act 2000* and as necessary or desirable, will be discussed with DERM.

Vegetation Management Act 1999

The *Vegetation Management Act 1999 (VMA)*, in conjunction with the SPA, regulates the clearing of native vegetation, excluding grasses and mangroves. Works proposed under the project may result in the clearing of vegetation protected under this Act. DERM would be the assessment manager for any such activities.

Coastal Protection and Management Act 1995

The *Coastal Protection and Management Act 1995 (Coastal Act)* repealed the *Harbours Act 1955*, the *Canals Act 1958* and the *Beach Protection Act 1968*. The Coastal Act includes provisions to continue permissions and approvals given under the superseded coastal legislation. This project would be considered to be assessable development within a tidal areas and is, therefore, likely to trigger assessment of the development under the *Coastal Act* in circumstances such as the disposal of dredge material within tidal areas or construction within tidal areas. DERM administers the *Coastal Act*.

Fisheries Act 1994

The *Fisheries Act 1994* and *Fisheries Regulation 1995* are administered by the Department of Employment, Economic Development and Innovation (DEEDI). Section 8 of the *Fisheries Act 1994* describes marine plants, which include mangroves, seagrass, saltcouch and samphire vegetation species. A marine plant does not include a declared plant under the *Land Protection Act 2002*.

All marine plants in Queensland are protected and given the project, will likely impact upon marine plants: therefore a development approval for works involving the disturbance of marine plants will be required.

Land Act 1994

The DERM administers the *Land Act 1994 (Land Act)*. The object of the *Land Act* is to ensure that land to which the Act applies is managed for the benefit of the people of Queensland. The Land Act applies to all land, including land below high-water mark. Unallocated state lands and lands subject to reclamation will need to be considered in accordance with the Act and Resource Allocation requirements.

Nature Conservation Act 1992

DERM manages the *Nature Conservation Act 1992 (NCA)*. Any activity that may have, or may have the potential to, impact on wildlife or its values in an area, may be seen as a threatening process and will be referred to DERM as part of the development approval process.



Appendix 4
Report by Savills

SUB-CONSULTANTS REPORT

Report into the commercial viability of proposed development potential of specified land at Toondah Harbour, Cleveland

October 2010

Savills Research and Consultancy

Brisbane

Contents

1. Objective
2. The suburb: Cleveland
3. Current situation: Residential Units
4. Development: Residential Units
5. Sales: Residential Units
6. Home Unit Sales
7. Demographic Overview
8. Residential Units: Take up rates
9. Supply
10. Retail - Commercial
11. Summary

Appendices

Appendix 1 – Lot Plan

Appendix 2 – Current Units for Sale

Appendix 3 – REIQ Article

Appendix 4 – Development Applications

1. Objective

To test the viability of mixed use developments on 8 sites at Toondah Harbour adjoining the Stradbroke Ferries embarking and disembarking areas and designated "A" through "H" on a plan allocating lot sizes as supplied by the lead consultant, GHD.

A copy of this lot plan is included as **Appendix 1** and designates the lots as follows:

Sites A, B, C - 3 storeys - 6,065sqm, 14,361sqm and 20,877sqm – Residential

Sites F, G, H – 4 storeys - 6,183sqm, 5,417sqm and 13,471sqm – Mixed use
(Residential/Retail/Commercial)

Indicative yields are 90,287 square metres of Residential (equivalent 877 units of say 90sqm) and up to 15,288 square metres of Retail/Restaurants/Commercial Offices which would be on ground level of buildings on sites D,E,F,G,H.

Supply and demand factors will be investigated, particularly in regard to the proposed residential component which is sizeable at 90,287 square metres of Gross Floor Area.

The objective being to investigate the potential success of the project in terms of take-up of the completed product. This study will not assess the financial viability.

2. The Suburb: Cleveland

Cleveland is located approximately 33 kilometres east of the Brisbane CBD. The suburb is mainly a residential area, with some commercial areas and an industrial area in the south-west. It is bounded by Finucane Road, Shore Street West, Endeavour Canal and Moreton Bay in the north, Moreton Bay in the east, South Street in the south, and Hilliards Creek in the west.

The historic bayside suburb contains a diverse mix of housing styles, ranging from older weatherboard homes, townhouses and villas, to the prestigious waterfront houses located in Raby Bay. In recent years there has been a lot of unit development which has transformed parts of Cleveland's shoreline.

Population was minimal and rose gradually until the late 1800s, spurred by the construction of the railway line. Rapid growth took place from the 1960s into the 1980s, including the development of the Raby Bay canal estate in the early 1980s. The population continued to increase from the 1990s, a result of new dwellings being added to the area.

As well as being able to commute into Brisbane via the Cleveland train station, residents often find employment in the area with the Department of Primary Industries being located there, as is the Redlands Shire Council, two hospitals, an industrial estate and many other small businesses.

Major features of the area include Stockland Cleveland Shopping Centre, Cleveland Town Centre, Redland Hospital, Mater Private Hospital Redland, Raby Bay Marina, Cleveland Pool, Cleveland Redland Showground, Redland Museum, Cleveland Community Cultural Centre, Redland Performing Arts Centre, Redland Art Gallery, Cleveland Cemetery, Redlands Lighthouse, Black Swamp Wetlands, G J Walter Park, Henry Ziegenfusz Park, Norfolk Park, Raby Bay Harbour Park, William Ross Park, Car/Passenger Ferry to North Stradbroke Island and two schools.

3. Current Situation: Residential Units

Cleveland has a stock of 2,180 units and townhouses in the suburb as at 30 June 2010. Currently there are 184 units/townhouses listed for sale, representing approximately 8.5% of the total stock.

Looking at units in particular, the suburb has a stock of 1,155 units which has grown by an average 86 units annually over the last 10 years.

Sales of units had generally matched supply through to 2006 when new developments really started to take off and a record 276 new units were completed in 2006 and 2007.

Sales numbers peaked in 2007 with 175 sales for the year and median prices went on to climb to \$442,500 before declining to \$410,000 in the current year, a fall of 7.34% and sales have dropped off by more than 50%, leaving more than 180 units on the market with some having been for sale for more than a year.

A full list of units currently for sale is shown at **Appendix 2**.

4. Development: Residential Units

As is the case with all significant development everywhere, development activity in Cleveland has dramatically slowed as current projects come to a close. New starts are few as developers struggle to either obtain finance or achieve the level of pre-sales required by the banks. Those who do obtain finance are finding interest cost considerably higher or are required to provide collateral security.

Despite some reduction in site values and a more competitive construction environment, the viability of new residential projects, in particular, is being tested by a slowing take-up of the new product.

In a recent report by the REIQ, they noted:

“The highest numbers of preliminary sales over the quarter were in Redbank Plains in Ipswich, Eagleby in Logan, Redcliffe in Moreton Bay and Cleveland in Redland. While Cleveland has had strong sales of waterfront stock over the past 12 months, it was the established older unit market that was more popular during the June quarter” (see **Appendix 3** for full article).

A check of development applications, either under consideration or approved by the Redland City Council, reveals the following planned projects for 10 units or more with an anticipated completion date. Those projects which have been abandoned and/or site placed on the market for sale are now regarded as not able to have product enter the market until 2014 or later.

A table of development applications is shown on below and a detailed list is included at **Appendix 4**:

Residential Development Applications				
Address	No. Storeys	No. Units	Expected Completion	Status
140-146 Queen St	6	92	2013	DAL
18-20 Passage St	5	20	2012	DAP
52-56 Shore St East	6	35	2013	DAP Deferred
148 Smith St Stage 4 ILUs	1	30	2012	DAP Deferred
136 Smith St Stage 5 ILUs	4	40	2013	DAP Deferred
7-13 Taylor Cres	6	72	2012	DAL with Council
4-6 Wharf St, Queen & Passage St	4	26	2012	DAP Deferred
45-51 North St	4	30	2013	DAP Deferred
140-142 Middle St & 4 Fitzroy	7	48	2011	DAP UC
237-239 Bloomfield St	2	10	2011	DAP UC
7,9,13 Shore St	6	48	2011	DAP UC
9-10 Michelle Crt	2	10	2011	DAL with Council
13 North St	3	10	2012	DAP Deferred
14 Masthead Dr	2	24	na	DA - abandoned
29-31 Shore St East	5	20	na	DA - abandoned
134 Queen St	6	24	na	DA - abandoned
219-221 Bloomfield St	4	182	na	DAL - abandoned
18-20 Waterloo St	6	44	na	DAP - site sold
21-13 Island St	3	24	2010	DAP UC
12 Wharf St cnr Middle St	2	32	na	DAP - abandoned
65-69 Shore St East	4	64	na	Site
27 Passage St	3	13	na	DAP - abandoned

DAP Development Approved, DAL Development Lodged, UC Under Construction

Many of the prospective residential developments have been approved but deferred awaiting either improved demand or availability of finance. However, expected completion dates have still been adopted as these dates can still be met if construction starts by early 2011.

A summary of the yields from these potential developments by year is shown below. Any prospective developments, now noted as "abandoned", have been grouped under a 2014 or later completion date:

Planned Developments per year					
Year of expected completion	2010	2011	2012	2013	2014+
Residential 10 units +	24	116	158	197	403
Residential <10 units	34	na	na	na	na

In addition to the above developments, there are many sites in the suburb capable of being activated for residential development. Two such sites, 7,120 square metres (includes a marine lease of 2,550 square metres) and a two hectare site, currently owned by CSIRO, were recently offered up for tender, closing August 2010, by Ray White.

These parcels are at Toondah Harbour and the larger site is improved by some laboratory buildings and offices. It has been suggested that a further 4,000 square metres of commercial would be possible. Clearly, however, the highest and best use of the site would be residential for at least the majority of the

site and undoubtedly this will be the eventual outcome. The unit yield is conservatively estimated at 180 units for this property

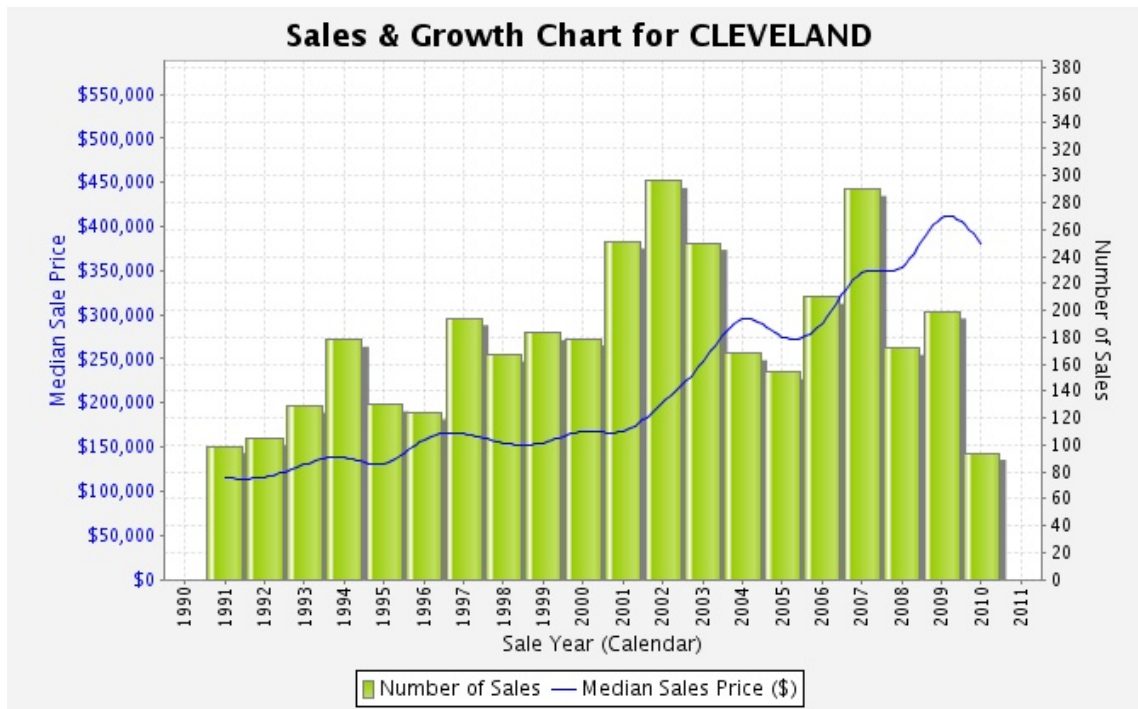
The other CSIRO site sits between Site “H” of the proposed development plan, which is the subject of this report, and the waterfront. This site also includes a marine lease which would potentially facilitate a marina, making it ideal for up market residential, however, it is understood the Redland City Council is buying this land for control of the foreshore. This is to be confirmed, but if that is the case, the value of Site “H” will be considerably enhanced.

5. Sales: Residential Units

Sales of Units and Townhouses peaked in 2002, registering just under 300 sales for the year, however, sales of home units numbered only 84 or 28% of these transactions.

By 2007, sales of Units and Townhouses came close to the 2002 peak with 290 sales but home unit sales numbered 175 or 60% of the transactions.

Sales of Units and Townhouses from 2000 to 2010 are shown on the following chart which also tracks the median prices over that period:



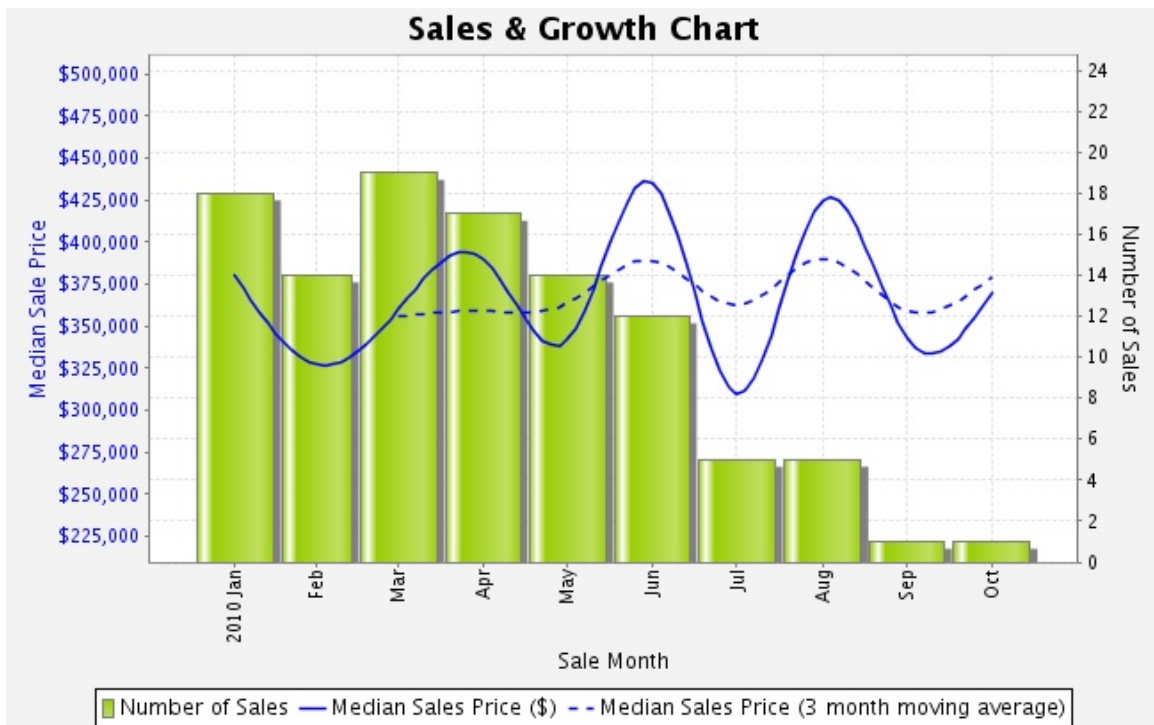
Source: Price Finder (PDS)

The chart shows sales have been falling since the strong 2007 year, although the data for 2010 takes in sales only through to August 2010 together with a few “Agent reported transactions” in September and October. Nevertheless, the indication is that sales activity is continuing to ease.

Looking specifically at the current year, sales have dropped significantly in the last Quarter and buyers have tended to forsake new product for older stock, driven by the affordability of established product.

Note that September and October sales are based upon preliminary notices from agents and subject to change when normal data comes through. Home units continue to represent about 60% of the combined Unit and Townhouse sales. It should also be noted that median price for Units (\$410,000 for 2010) is slightly higher than the median price for combined sales with Townhouses (\$380,000 for 2010):

2010 - Cleveland Units and Townhouse



Source: Price Finder (PDS)

Local agents advise that Home Units and Townhouses are different markets with families more likely to target townhouses if unable to secure a separate dwelling. However, we believe there are other factors that come into the decision process such as location within the suburb. An inspection of the area confirmed that, apart from luxury canal-front attached dwellings, townhouses tended to be located in areas near schools and shops, while units tended to be located in areas affording better views.

6. Home Unit Sales

Annual sales of all dwellings are tracked by type in the following table:

Year	No. of House Sales	Median Price of Houses	No. of T/House Sales	Median Price of T/Houses	Number of Unit Sales	Median Price of Units
2010*	117	\$520,000	39	\$340,000	57	\$410,000
2009	246	\$500,000	67	\$340,000	140	\$442,500
2008	212	\$535,000	66	\$325,500	97	\$430,000
2007	288	\$465,000	101	\$300,000	175	\$425,000
2006	242	\$422,500	61	\$270,000	101	\$385,000
2005	182	\$387,000	56	\$263,000	53	\$340,000
2004	156	\$411,000	40	\$246,750	54	\$340,000
2003	193	\$370,000	58	\$228,500	70	\$338,600
2002	177	\$284,000	59	\$165,000	84	\$265,000
2001	189	\$230,000	56	\$142,500	59	\$205,500
2000	151	\$200,000	30	\$136,500	36	\$174,500

Source: RPData

*8 months sales only

The average annual sales over the past 5 years, which coincides with the strongest period of unit sales ever, is 113 home units and at the peak in 2007, sales numbered 175 home units.

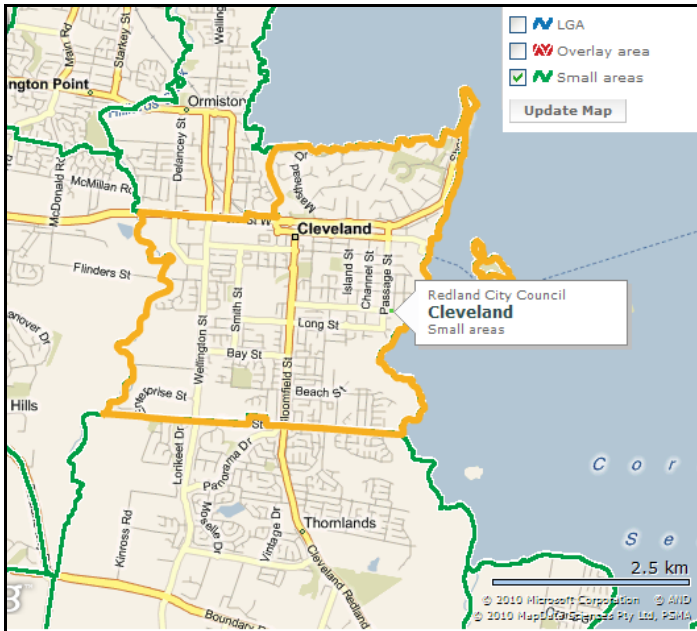
It is noted that home units only comprised 19% of total dwelling sales in the 200-2001 period but this share grew to peak at 31% in 2007, responding to changing tastes, increasing number of “over 55s” moving into the area and superior new product offered.

Subsequent to the economic downturn, the share of home unit sales has fallen back to 27% and purchasers are reported to be seeking older established units which offer better value. We consider that the reduction of new product entering the market, following the deferring of many projects, has had much to do with this.

7. Demographic Overview

Cleveland (outlined in orange) & Surrounding Suburbs:

Total Land Area: 1,185 HA Density: 11.48 people per HA (2006)



Source: Brisbane City Community Profile

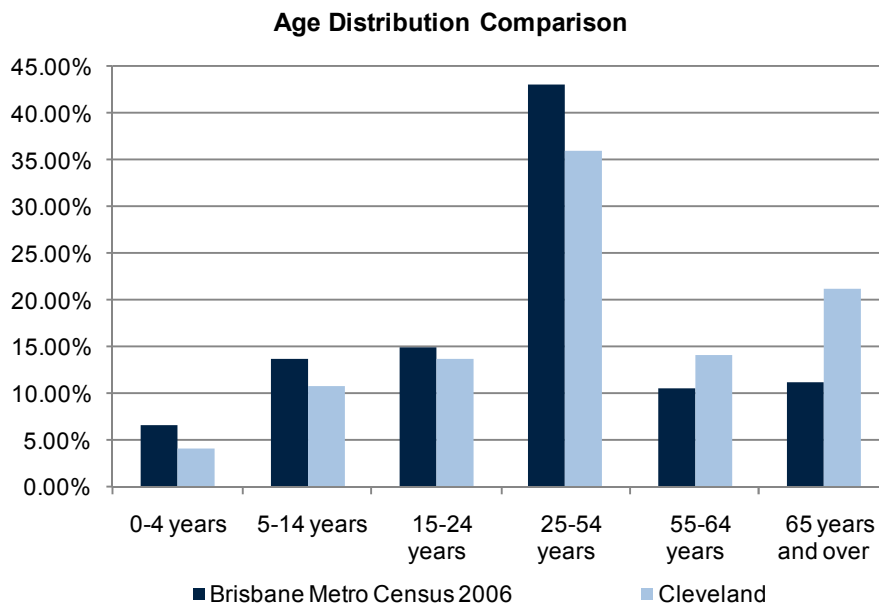
Population

Cleveland has shown a population increase of 6.51% between the 2001 and 2006 Census. In annual terms, Cleveland population has increased at 1.9% per annum since 1996, in line with the Brisbane Metro area which has grown at 1.93% per year.

According to the 2006 Census there were 13,584 people living in the suburb of Cleveland with a median age of 46. The total population and growth figures split between males and females in Cleveland are outlined below:

Cleveland	2001	2006	% Change (2001 - 2006)
Male	6,084	6,448	+5.98%
Female	6,670	7,136	+6.99%
Total	12,754	13,584	+ 6.51%

The chart below highlights the population distribution by age category for both Cleveland and the Brisbane Metro area.

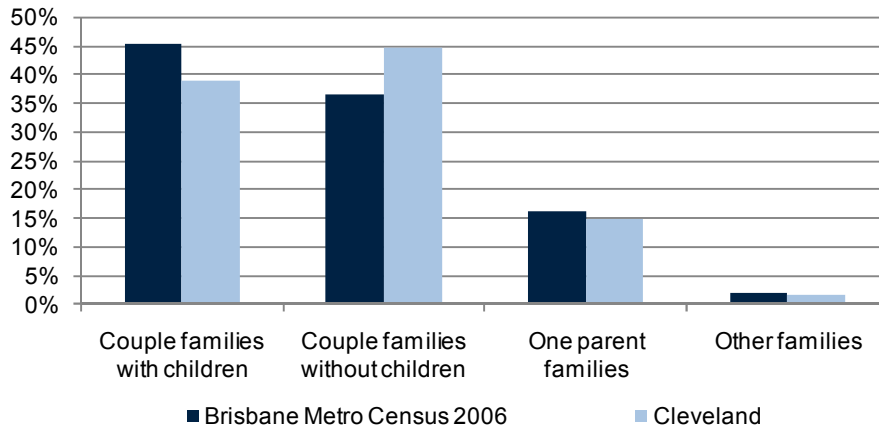


Source: ABS Census, Savills Research

The age structure indicates the area’s residential role and function and how this is likely to change in the future and provides a key insight into the level of demand for services and facilities. The largest age category as at 2006 in Cleveland is the 25-54 years bracket which accounts for 36% of the population. Analysis of the age structure of Cleveland in 2006 compared to the Brisbane Metro shows that there was a smaller proportion of people in the younger age groups but a larger proportion of people in the older age groups (65+ years). The most common age was 53 year olds (233 people total), 48 year olds (232 people total), followed by 50 year olds and 54 year olds equally (224 people in each age group). This was closely followed by 56 year olds and 59 year olds equally (223 people in each age group).

Couple families with children was assessed as being 39%, couple families without children 44.7%, one parent families as 14.7% and other families as 1.7% in Cleveland. The data highlights the area as having a strong presence of retirees. Due to the large amount of over 55 year old persons present in the area we can conclude that the couple families without children are older retired couples.

Family Type Structure Comparison



Source: ABS Census, Savills Research

Population Projections

Historically, based off the Census data Cleveland has shown a population growth of 1.9% per annum over ten year period from 1996 to 2006. The 5 year average growth rate, from 2001 to 2006 was more subdued growing at 1.3% per annum.

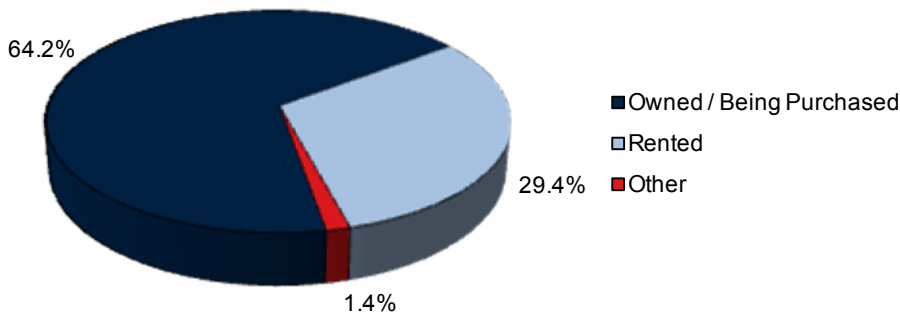
Medium projections released in 2008 by the Office of Economic and Statistical Research, Queensland Treasury indicate that by 2016 the expected population of Redland City Council will grow by 1.8% per annum.

Based off this data we estimate that Cleveland will be in line with the OESR Redland City Council projections with forecast growth in population of 1.8% per annum.

Dwelling Types

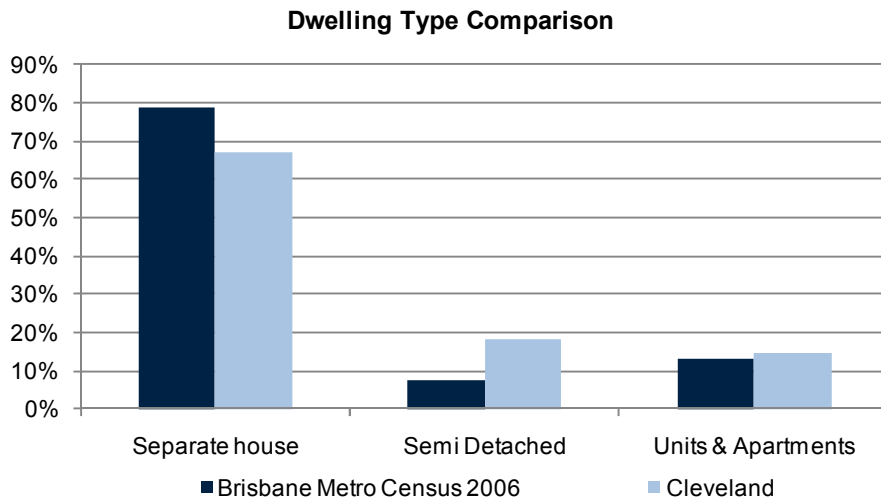
Property ownership (or properties currently being purchased) in Cleveland is marginally higher than that of the Brisbane Metro area. Of Cleveland's dwellings, 29.4% are being rented and 64.2% are owned or being purchased. By comparison of Brisbane Metro's dwellings, 30% are being rented and 63% are owned or being purchased. A high concentration of home owners generally indicates a more settled area (ie. less transitory), with mature families and empty nester household types.

**Dwelling Ownership
Cleveland Census 2006**



Source: Savills Research

Cleveland is similar to Brisbane Metro in that separate houses are the dominant dwelling type within the area representing 67.3% of total dwellings. Of the total residential stock, Cleveland comprises 14.4% of units and apartments and 18.1% semi-detached dwellings. This is demonstrated in the chart below.

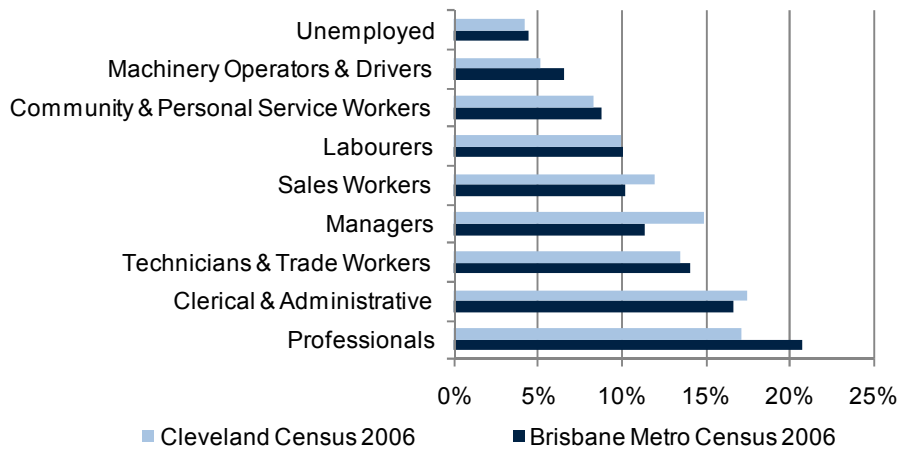


Source: Savills Research

Occupation & Education

The employment status of the population is an important indicator of the socio-economic status of the area. There were 6,572 people (aged 15 years and over) who were usually resident in Cleveland in the labour force. Of these, 59.4% were employed full-time, 30.3% were employed part-time and 4.2% were unemployed. Approximately 69.6% of the Cleveland workforce identified as being employed in a white collar profession during the 2006 Census. This is 2% higher than the Brisbane Metro area, which had 67.6% of its population employed in white collar industries. Cleveland had 28.5% of its workforce identify as being in a blue collar professions, which is 2.2% less than the Brisbane Metro area which possesses a blue collar component of 30.7%. The chart below details the allocation of occupation type across both Cleveland and Brisbane Metro.

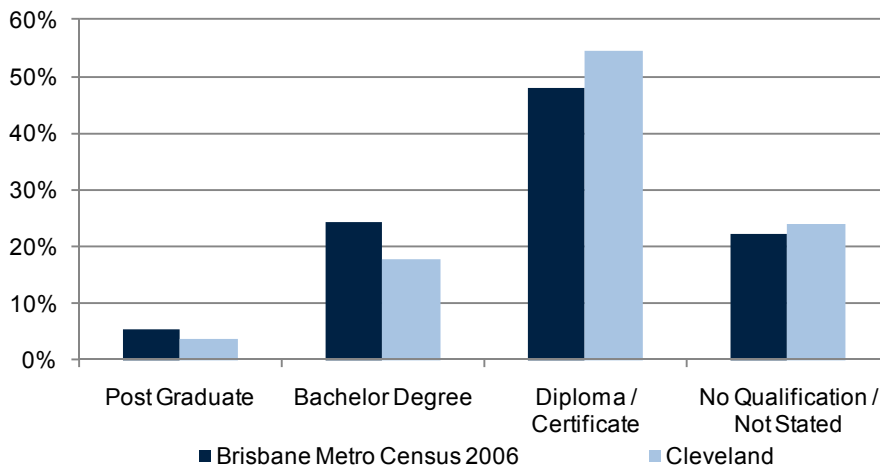
Occupation Type Comparison



Source: Savills Research

Cleveland’s employment classifications are also reflected in the level of non-school education. Approximately 3.6% of Cleveland’s population possess post graduate degrees, 17.9% possess a bachelor’s degree or equivalent, while 54.4% held a diploma or certificate qualifications. Cleveland had a lower proportion of the population with Bachelor Degrees and Post Graduate degrees than the Brisbane Metro area. Details by qualification type are highlighted in the chart below.

Non School Education Levels Comparison



Source: Savills Research

Various additional selected statistics from the Census 2006 on the subject area can be found in the table below.

Selected Statistics	Cleveland	Brisbane Metro
Median Age	46 years	35 years
Median Monthly Housing Loan Repayments	\$1,517	\$1,300
Median Weekly Rent	\$240	\$220
Median Weekly Individual Income	\$473	\$516
Median Weekly Family Income	\$1,251	\$1,262
Median Weekly Household Income	\$1,008	\$1,111
Median Household Size	2.4 persons	2.6 persons

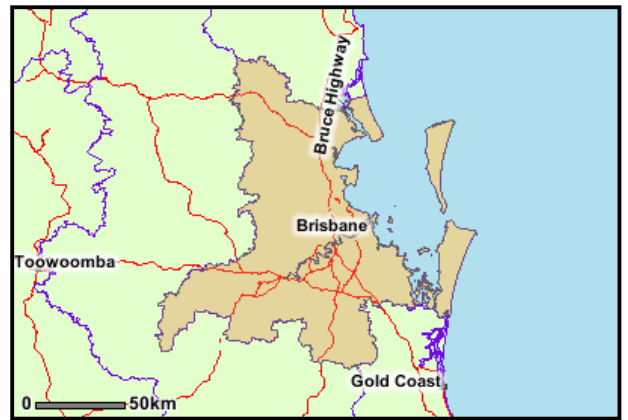
* Cleveland refers to Cleveland (Statistical Local Area) ABS Census 2006

** Brisbane Metro refers to Brisbane Statistical Division as defined in the ABS Census 2006

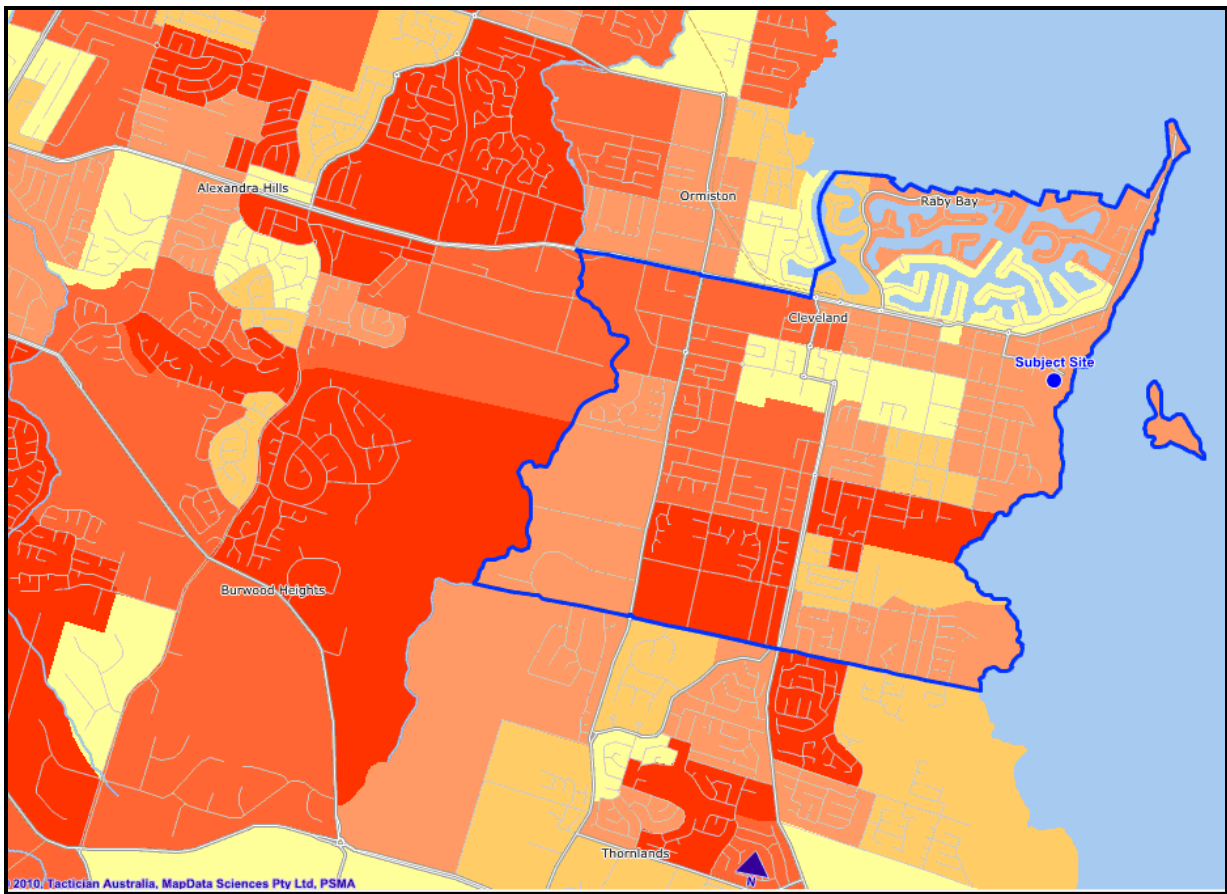
Cleveland (Statistical Local Area)



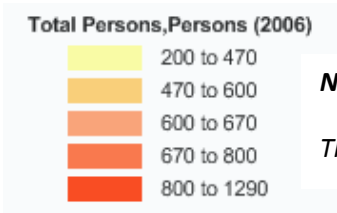
Brisbane Statistical Division



Population Density – Cleveland & surrounds



Source: Tactician

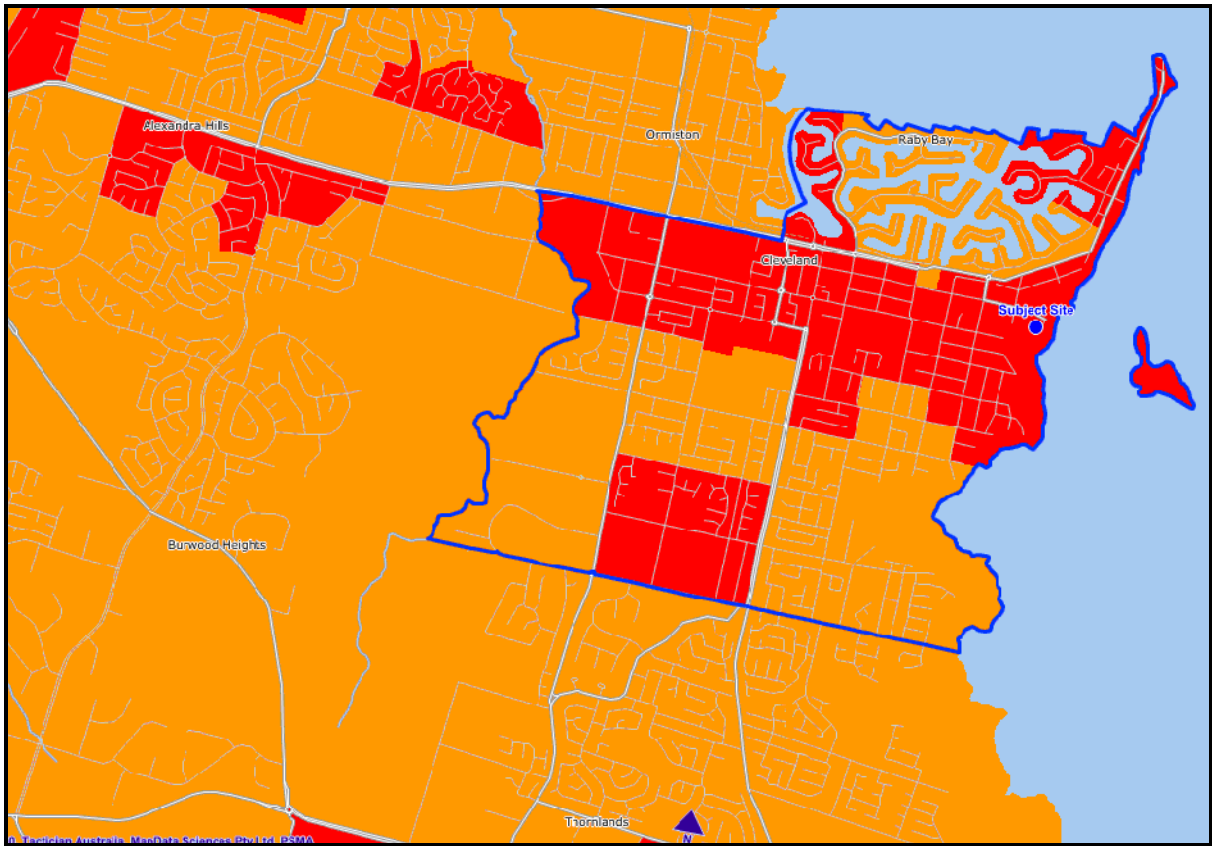


Note: Yellow indicates lower density.

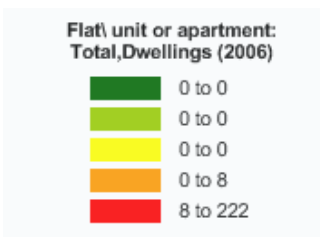
The darker the red the higher the density of total persons.

This chart shows the areas of higher population density within the suburb and surrounding suburbs. The information is extracted from the 2006 Census (Collector Districts) which overlap with natural boundaries such as roads, creeks etc. The result is that precise counts cannot be made and so densities are given as a range of the number of persons in each marked sub-area.

Dwelling Structure – Flat, unit or apartment



Source: Tactician



Note: Red indicates a strong presence of flats, units or apartment type dwellings

This chart shows the areas of higher concentrations of flats, units and apartments within the suburb and surrounding suburbs. The information is extracted from the 2006 Census (Collector Districts) which overlap with natural boundaries such as roads, creeks etc. The result is that precise counts cannot be made and so densities are given as a range of the unit dwellings in each marked sub-area.

8. Residential Units: Take-up Rates

In the Census year 2006, the suburb had a residential population of 13,584 and growing at 1.8%, so approximately 245 new residents were coming to the suburb annually. This would normally generate demand for around 102 additional dwellings (at the Household formation rate of 2.4) if the stock to resident ratio was to remain stable.

However, in that year, there were more than 100 home units alone added to the stock without accounting for new houses and townhouses.

Total dwelling sales amounted to more than 400, indicating a fair amount of “churn” as well as investment from outside of the suburb and this is the key to take-up rates of new units. Cleveland is obviously viewed as an agreeable place to retire. The suburb has good shopping facilities, a lay-back feel, easy access to the islands, remains relatively affordable for “empty-nesters” and retirees and most important, the area has a hospital and reasonable medical facilities.

In this regard, it is expected that investment by “baby-boomers” in apartments in the area will gradually escalate, leading up to their retirement.

To calculate or attempt to calculate that demand for new product from outside of the area, we first need to establish the components of sales.

We know that sales comprise “churn”, demand from organic growth and investment from within and outside the area.

Churn is seen in every suburb and is the result of residents upgrading (or downsizing) and people moving in and out of the suburb. Investigation across a number of suburbs revealed that “churn” is influenced by factors such as whether house prices are moving or stable, what is happening with the general economy and the employment climate. Notwithstanding these points, a churn factor equating to 4% to 5% annually of the dwelling stock in a suburb was seen consistently and accepted as the range in neutral times.

Demand from organic growth is that net increase in the resident population in an area that sits above the movements in and out of the suburb. As noted above, in 2006 that calculated as demand for 102 dwellings (if the status quo was to be achieved).

Investment (within and from outside the suburb) can be calculated deducting the churn factor and organic demand from the overall sales thus:

Total sales for 2006	404
Less "churn"	243 (4%-5% of total dwelling stock in 2006 – say av. 4.5% of 5,395 dwellings)
Less organic demand	<u>102</u> (as calculated above)
Residual	59 (additional sales identified as Investment)

Of course, the overwhelming majority of investment is going to be in home units as local agents confirm that units are seen as the better investment as they are easier to maintain and in the case of older investors, they are often securing an apartment for themselves which they may or may not rent out until they take up residence.

However, it is generally the new product which generates the interest so if there are plenty of new apartments offered for sale, then sales are likely to be a higher volume.

With this in mind, current, current estimated population of Cleveland is 14,500 and the stock of dwellings is around 6,000.

Sales for 8 months are 213 so extrapolating this to 12 months, sales should end up around 320 for the year while churn is down and even calculating at the low end of the range (4%), a churn of 240 appears high as it leaves only 80 to meet organic growth, which would be $14,500 @ 1.8\% = 261$, generating demand for up to 109 dwellings). Clearly, there has been little new development to entice investors and it would seem investment into the area has slowed considerably.

In this scenario, it would be expected that the number of dwellings on the market would have increased and that appears the case with 184 units and townhouses alone for sale.

In more normal circumstances, with a confident public, good economic outlook, plentiful finance and a good supply of new unit product, we would expect sales to emulate the 2009 figures of 453 sales, providing for a churn of 240 to 300 sales (all types of dwellings), leaving 153 to 213 sales less organic demand of 109 sales (Also all types of dwellings -calculated as $14,500 \times 1.8\% = 261$ divided by HF rate of 2.4). **This leaves an investment quota between 44 and 104 and mainly attributable to apartments.**

Considering that the last decade has seen an average 860 new units enter the market and be absorbed (less those currently on the market), it is considered reasonable to accept that new apartments in the area **could attract up to 100 sales annually**. This figure is likely to increase significantly as greater numbers of "baby-boomers" contemplate retirement.

9. Supply

The potential supply of new apartments in Cleveland is calculated as follows:

Development applications already lodged, approved and deferred could yield around 150 new units per annum between 2011 and 2013. From 2014, there is the potential for a large number of units to be constructed but the time frame is unclear. Best estimate is that there are 1,500 units that could be developed over a three to five year period from 2014, a figure which includes a large site in Bloomfield Road, the 2 hectare CSIRO site in Middle Street and the 877 potential units of sites "A" to "H" at Toondah Harbour.

10. Retail - Commercial

Cleveland is well served with a sub-regional shopping centre, Stockland Cleveland, which has a Coles and a Woolworths for a total of 7,567 square metres of supermarket together with 8,092 square metres over 62 specialty outlets which include banks, post office, medicare along with a good tenant mix and 357 square metres of restaurants. The centre is integrated well with the rest of the business centre and spans both sides of Middle Street.

Toondah Harbour is approximately 1.4 kilometres from the main business centre of Cleveland and is only serviced by a periodic bus service. It is considered too far to walk and tote purchases back.

Considering the potential for considerable growth in the number of residents in this area and the likelihood of a high percentage of older residents, convenience retail in the Toondah precinct will be an excellent draw for persons considering this location. Being also the ferry embarking point to Stradbroke Island, convenience retail would be well patronised.

There is potential for up to 3,000 residents to be within a 300 metre radius of Toondah Harbour, enough to support selected convenience retail, restaurant and coffee shop(s).

Without detailed investigation, the mix and size of the area dedicated to retail is difficult to assess but it will be nowhere near the 15,288 square metres potentially allocated to retail, offices and restaurants on the sites plan.

It is considered that commercial office space would be difficult to lease in the waterfront location as it would be regarded as too disconnected from the main business centre.

11. Summary

The location is considered superior to all other residential development sites of any significance in Cleveland. There are waterfront parks in proximity, spectacular views of the bay and islands and a point of interest with the ferries and activity surrounding them.

The sites allow for staging which is believed to be an important strategy to ensure the overall success. Staging will also ensure that interest is maintained for the duration of the project, however, one of the strengths of the overall project is that with multiple sites in a unique location, a precinct can be created to enhance the offering with convenience retail, themed restaurants, leisurely paced coffee shops/bars and yet have a variety of price points in accommodation to achieve the widest appeal.

Residential

As calculated in the chapter “Residential Units: Take up rates”, the current sales activity is depressed and not a good indication of the rate of take up which can be expected as the market goes forward. For that reason the 2006 sales figures have been used, at a time when new units were entering the market, to determine what was the real absorption rate of new home units in the Cleveland market.

The findings suggest that, on top of the normal sales churn of existing units, we would expect around **100 new units would be taken up annually** in the area so this would be shared between the new developments in the area and very dependent upon pricing as we see the “baby-boomers” being the likely purchasers in the main. They will want to avoid finance. More likely they will seek to release some capital from previous accommodation.

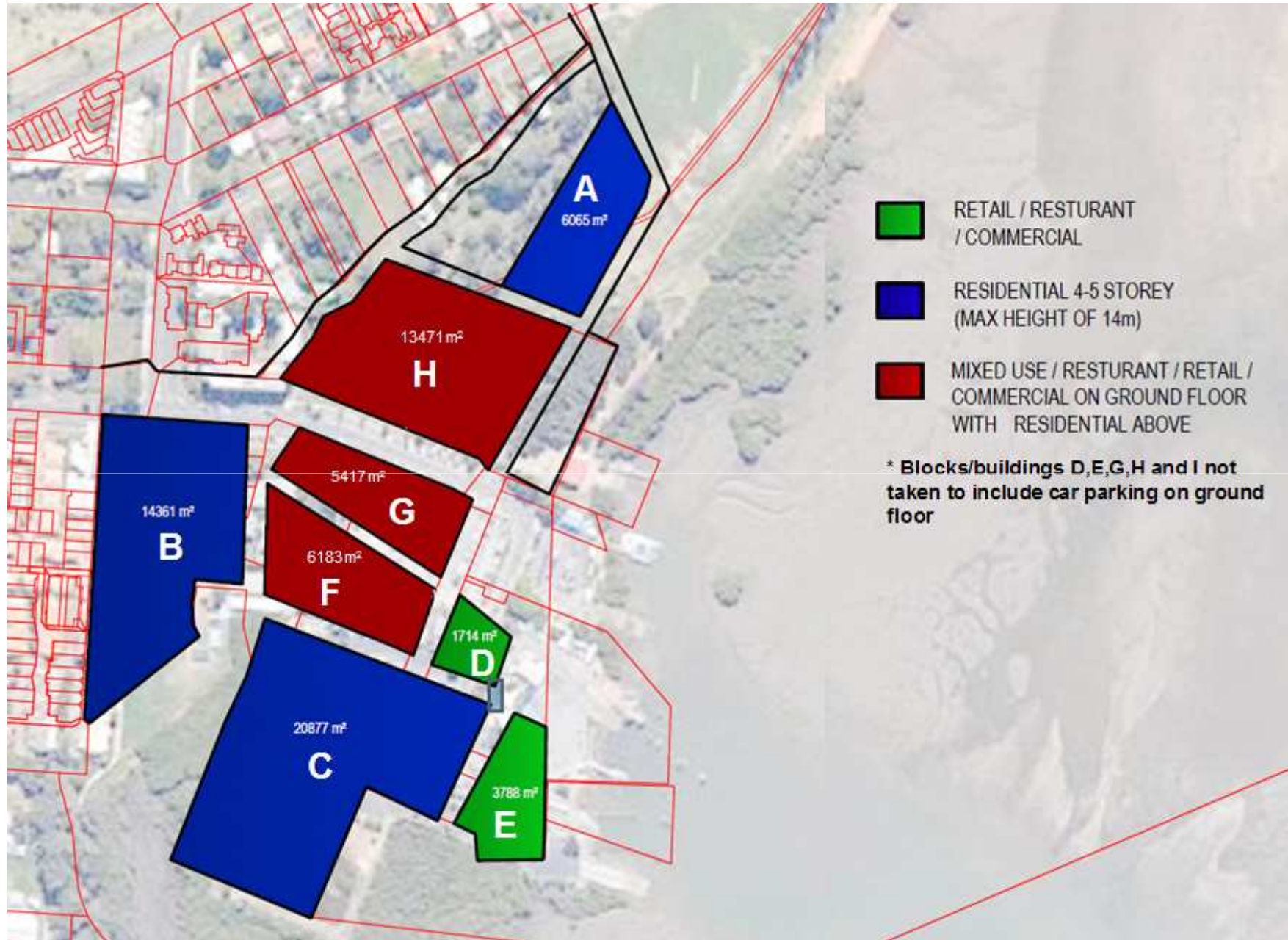
Nevertheless, the predicted take up of new units is likely to increase progressively to 2016 as the cycle of retiring “baby-boomers” peaks, doubling the demand for new units in the area. The attractions of the Toondah Harbour site are likely to ensure any residential development on this site will enjoy the major share of this demand.

Retail – Commercial

The potential number of residents in the immediate area will not support the possible scale of retail and commercial space.

Retail will be a necessary catalyst in attracting residents to the proposed Toondah Harbour development, however, it will be difficult to establish a viable business until all the potential residents move in. Even at this point, it is difficult to see any more than 500 square metres of retail required initially.

Ultimately, a gym, a hotel, general medical practice as well as a convenience store, restaurant and coffee shops could possibly be supported by residents and a high ferry trade. This would still be considerably less than 2,000 square metres



Appendix 2 - Units for Sale - Cleveland

	Locality	Listed Price	Days Listed	Type	Br	Cars
1/26-34 Weippin St	CLEVELAND		1 Day		0	0
8/23 NORTH STREET	CLEVELAND	\$449,000	4 Days	Unit	3	
24/218 QUEEN STREET	CLEVELAND	\$360,000	4 Days	Unit	3	
5/171 MIDDLE STREET	CLEVELAND	\$379,000	4 Days	Unit	2	
2/192 Shore Street North	CLEVELAND	Auction	7 Days	RESI	3	2
43/150 Middle Street	Cleveland	\$695,000	7 Days	Unit	3	0
43/136 PRINCESS STREET	CLEVELAND	Offers Over \$288,000	7 Days	Unit	3	1
150 Middle Street 'water's Edge Apartme	Cleveland	FROM \$399,000 TO \$695,000	7 Days	Unit	3	0
218 BLOOMFIELD ST	CLEVELAND	\$1,149,000	7 Days	House	0	0
59/6 Harbour View Crt	Cleveland	\$1,200,000	7 Days	Unit	0	0
43/150 Middle Street	CLEVELAND	\$695,000	11 Days	RESI	3	2
2/171-173 MIDDLE ST	CLEVELAND	\$379,000	13 Days	Unit	2	1
9/26 NEL STREET	CLEVELAND	\$295,000	17 Days	Unit	2	
2/192 SHORE STREET	CLEVELAND	Auction	18 Days	Unit	3	1
	CLEVELAND	\$700,000	19 Days	Unit	2	1
Cnr Middle and Passage Sts	CLEVELAND	\$535,000	19 Days	Unit	2	0
9/26 nel Street	CLEVELAND	\$295,000	19 Days	Unit	2	0
5/162 RUSSELL STREET	CLEVELAND	\$289,000	19 Days	Unit	2	1
	CLEVELAND	Submit All Offers \$800,000	20 Days	Unit	2	1
39/20 MASTHEAD DRIVE	CLEVELAND	Price Upon Application	20 Days	Unit	3	2
5/162-164 RUSSELL STREET	CLEVELAND	\$289,000	20 Days	Unit	2	1
43/29 ISLAND STREET	CLEVELAND	\$349,000	22 Days	Unit	2	1
30/135 Shore Street West	Cleveland	\$3,850,000	23 Days	Unit	5	0
19/135 Shore St W	Cleveland	\$800,000	24 Days	Unit	2	1
30/135 Shore Street West	CLEVELAND	\$3,850,000	26 Days	RESI	5	5
2/192 SHORE STREET NORTH	CLEVELAND	Auction	26 Days	Unit	3	2
6/31-33 PASSAGE STREET	CLEVELAND	\$449,000	27 Days	Unit	3	1
16/58 ISLAND STREET	CLEVELAND	\$369,000	28 Days	RESI	3	1
1/31-33 PASSAGE STREET	CLEVELAND	\$479,000	28 Days	House	3	1
1/162 RUSSELL STREET	CLEVELAND	\$279,000	28 Days	Unit	2	1
1/162-164 RUSSELL STREET	CLEVELAND	\$279,000	29 Days	Unit	2	1
16/6 HARBOUR VIEW CRT	CLEVELAND	Starting	33 Days	Unit	3	2
22/32 MIDDLE STREET	CLEVELAND	\$650,000	34 Days	Unit	2	2
32/212-222 QUEEN STREET	CLEVELAND	For Sale \$329,000.00	40 Days	Unit	2	1
13/19 ISLAND ST	CLEVELAND	For Sale \$350,000.00	40 Days	Unit	2	1
13/223-227 MIDDLE STREET	CLEVELAND	For Sale \$309,000.00	40 Days	Unit	2	1
4/ 115 SHORE STREET NORTH	CLEVELAND	For Sale \$729,000.00	40 Days	Unit	3	1
61/29 ISLAND STREET	CLEVELAND	For Sale \$349,000.00	40 Days	Unit	2	1
5/31-33 PASSAGE STREET	CLEVELAND	For Sale \$429,000.00	40 Days	Unit	3	1
3/23 HOMER ST	CLEVELAND	\$515,000	40 Days	Unit	3	2
2/23 HOMER ST	CLEVELAND	\$490,000	40 Days	Unit	3	1
1/23 HOMER ST	CLEVELAND	\$499,000	40 Days	Unit	3	2
4/23 HOMER ST	CLEVELAND	\$525,000	40 Days	Unit	3	2
23 HOMER ST	CLEVELAND	\$525,000	43 Days	Unit	3	2
	CLEVELAND	Offers over \$849,000	46 Days	House	4	2
4/24-26 Passage Street	Cleveland	\$435,000	46 Days	Unit	3	0
51/2 QUEEN STREET	CLEVELAND	Offers Over \$415,000	47 Days	Unit	2	1
4/ 115 SHORE STREET NORTH	CLEVELAND	For Sale \$729,000.00	47 Days	Unit	3	1
4/24-26 Passage Street	CLEVELAND	\$435,000	48 Days	RESI	3	1
7-13 Shore Street East	Cleveland	\$420,000-\$480,000	51 Days	Unit	2	1
7 - 13 SHORE STREET	CLEVELAND	\$420,000	55 Days	Unit	2	1
CLEVELAND	CLEVELAND	\$452,000	56 Days	Unit	2	1
7-13 SHORE STREET EAST	CLEVELAND	\$420,000 - \$480,000	56 Days	Unit	2	1
8/23 North Street	Cleveland	Submit all Offers	56 Days	Unit	3	1
8/23 North Street	Cleveland	\$449,000	57 Days	Unit	3	1
33/212-222 QUEEN STREET	CLEVELAND	\$339,000	57 Days	Unit	3	1
24/212-222 QUEEN STREET	CLEVELAND	Submit all Offers	57 Days	Unit	3	1

	Locality	Listed Price	Days Listed	Type	Br	Cars
47/2-12 QUEEN STREET	CLEVELAND	Offers Over \$400 000	59 Days	Unit	3	2
16/11-15 WHARF STREET	CLEVELAND	\$299,000	63 Days	RESI	2	2
?/46 The Anchorag Masthead Dr	Cleveland	Price Upon Application	65 Days	Unit	4	2
CLEVELAND	CLEVELAND	\$375,000	68 Days	Unit	2	1
29/11-15 WHARF STREET	CLEVELAND	Private Treaty	68 Days	Unit	2	1
46/20 MASTHEAD DRIVE	CLEVELAND	Price Upon Application	69 Days	Unit	4	2
4 A Fitzroy	Cleveland	SELLING FAST !!!!!!!	73 Days	Unit	3	3
Cnr Middle And Passage Sts	Cleveland	From \$535,000-\$2,900,000	73 Days	Unit	2	1
?/4a Fitzroy St	Cleveland	SELLING FAST !!!!!!!	76 Days	Unit	3	3
?/139 Middle St	Cleveland	P.O.A.	76 Days	Unit	3	1
4 A FITZROY	CLEVELAND	SELLING FAST !!!!!!!	77 Days	Unit	3	3
12/12 ESPERANCE COURT	CLEVELAND		78 Days	Unit	3	1
Level 3/141 Shore St West	Cleveland	Price Upon Application	78 Days	Unit	1	1
1/141 Shore Street West	Cleveland	Price Upon Application	78 Days	Unit	2	2
Unit,38/150 Middle Street ('waters Edge'	Cleveland	Auction	78 Days	Unit	3	0
Unit,18/150 Middle Street ('waters Edge'	Cleveland	Auction	78 Days	Unit	3	0
Level 6/7 Shore St	Cleveland	Priced from \$1,300,000.00	78 Days	Unit	3	2
Unit,8/150 Middle Street ('waters Edge')	Cleveland	FROM \$429,000	78 Days	Unit	2	0
Unit 6 141 Shore Street West	Cleveland	Offers over \$670,000	78 Days	Unit	2	2
4 Fitzroy On The Bay	Cleveland	Price On App.	78 Days	Unit	3	2
4 Fitzroy On The Bay	Cleveland	Price On App.	78 Days	Unit	3	2
4 Fitzroy On The Bay	Cleveland	Price On App.	78 Days	Unit	3	2
4 Fitzroy On The Bay	Cleveland	Price On App.	78 Days	Unit	3	2
25/135 Shore St North	Cleveland	\$1,500,000	78 Days	Unit	3	2
26/135 Shore Street North	Cleveland	\$1,490,000	78 Days	Unit	3	2
23/135 Shore Street North	Cleveland	\$845,000	78 Days	Unit	2	2
Unit,29/150 Middle Street ('waters Edge'	Cleveland	\$725,000	78 Days	Unit	3	0
Unit,28/150 Middle Street ('waters Edge'	Cleveland	\$695,000	78 Days	Unit	3	0
Unit,18/150 Middle Street (waters Edge)	Cleveland	\$595,000	78 Days	Unit	3	0
50/20 MASTHEAD DRIVE	CLEVELAND	\$585,000	78 Days	Unit	2	0
Unit,33/150 Middle Street ('waters Edge'	Cleveland	\$495,000	78 Days	Unit	3	0
Unit,30/150 Middle Street ('waters Edge'	Cleveland	\$495,000	78 Days	Unit	2	0
1/53 Shore Street East Street	Cleveland	\$399,000 ono	78 Days	Unit	3	1
20/102 WYNYARD STREET	CLEVELAND	\$379,000	78 Days	Unit	2	1
56/29 ISLAND STREET	CLEVELAND	\$375,000	78 Days	Unit	2	1
6/52 ISLAND ST	CLEVELAND	\$299,000	78 Days	Unit	2	1
8/23 North Street	Cleveland	Submit all Offers	78 Days	Unit	3	1
8/23 North Street	Cleveland	Submit all Offers	78 Days	Unit	3	1
Unit 6 141 Shore Street West	Cleveland	Offers over \$670,000	78 Days	House	2	2
12/76 ISLAND STREET	CLEVELAND	AUCTION	78 Days	Unit	3	0
46/13-14 ESPERANCE COURT	CLEVELAND	Auction	78 Days	House	3	0
19/192-202 LONG STREET	CLEVELAND	Private Treaty	79 Days	Unit	3	2
Cnr Middle and Passage Sts	CLEVELAND	From \$535,000-\$2,900,000	82 Days	Unit	2	1
?/Fitzroy St	Cleveland	From \$365,000 - \$1,750,000	82 Days	Unit	3	2
4 FITZROY	CLEVELAND	\$365,000	82 Days	Unit	3	2
CLEVELAND	CLEVELAND	\$1,160,000	83 Days	Other	3	3
10/13 Esperance Crt,	CLEVELAND	WITH PONTOON!!!!!!	83 Days	Unit	3	1
45-47 LONGLAND ST	CLEVELAND	\$449,000	88 Days	Unit	3	1
6/26-34 WEIPPIN ST	CLEVELAND	\$675,000	90 Days	Other	0	0
8 CHANNEL STREET	CLEVELAND	Under Offer	91 Days	Unit	2	1
8/23 North St	Cleveland	Submit all Offers	93 Days	Unit	3	1
CLEVELAND	CLEVELAND	Offers Over \$300,000	95 Days	Unit	3	1
CLEVELAND	CLEVELAND	\$1,025,000	96 Days	Other	0	0
4/221 Shore St W	Cleveland	\$465,000	98 Days	Unit	3	1
24/120 BLOOMFIELD STREET	CLEVELAND	\$225,000 Incl GST	106 Days	Commerci	0	0
1 Northerley Apts	Cleveland	Price From \$535,000	110 Days	Unit	3	2
1 Eco On Taylor	Cleveland	From \$309,000	110 Days	Unit	2	1
CLEVELAND	CLEVELAND	Price From \$535,000	111 Days	Unit	3	2

	Locality	Listed Price	Days Listed	Type	Br	Cars
CLEVELAND	CLEVELAND	From \$309,000	111 Days	Unit	2	1
?/20 Taylor Cr	Cleveland	Price Upon Application	111 Days	Unit	2	1
148 SMITH	CLEVELAND		111 Days	Unit	1	
11 GRANT STREET	CLEVELAND		111 Days	Unit	1	
20 TAYLOR CRESCENT	CLEVELAND	Price Upon Application	112 Days	Unit	2	1
136-150 SMITH STREET	CLEVELAND	\$450,000	115 Days	Unit	3	1
74/29 ISLAND STREET	CLEVELAND	\$349,000	117 Days	Unit	2	1
	CLEVELAND	\$1,390,000	127 Days	Unit	4	3
Level 6/7 Shore Street	CLEVELAND	priced from \$1,300,000.00	130 Days	Unit	3	2
25/135 Shore St North	CLEVELAND	\$1,500,000	130 Days	Unit	3	2
12 MASTHEAD DRIVE	CLEVELAND	\$319,000	138 Days	House	2	2
?/211 Middle St	Cleveland	Price by Enquiry	150 Days	Unit	3	
20/135 Shore St W	Cleveland	\$1,700,000	154 Days	Unit	3	2
25/135 Shore St W	Cleveland	\$1,500,000	154 Days	Unit	3	2
?/7 Shore St W	Cleveland	Priced from \$1,300,000.00	154 Days	Unit	3	2
19/135 Shore St W	Cleveland	\$945,000	154 Days	Unit	2	1
23/135 Shore St W	Cleveland	\$845,000	154 Days	Unit	2	2
24/135 Shore St W	Cleveland	\$845,000	154 Days	Unit	2	2
?/54-1 Esperance Ct	Cleveland	\$595,000	154 Days	Unit	3	1
?/141 Shore St W	Cleveland	Price Upon Application	154 Days	Unit	1	1
1/141 Shore St W	Cleveland	Price Upon Application	154 Days	Unit	2	2
2/141 Shore St W	Cleveland	By Negotiation	154 Days	Unit	3	2
20/135 SHORE STREET NORTH	CLEVELAND	\$1,700,000	158 Days	Unit	3	0
LEVEL 6/7 SHORE ST	CLEVELAND	Priced from \$1,300,000.00	158 Days	Unit	3	2
25/135 SHORE ST NORTH	CLEVELAND	\$1,500,000	158 Days	Unit	3	2
24/135 SHORE STREET NORTH	CLEVELAND	\$845,000	158 Days	Unit	2	2
23/135 SHORE STREET NORTH	CLEVELAND	\$845,000	158 Days	Unit	2	2
1/141 SHORE STREET WEST	CLEVELAND	Price Upon Application	158 Days	Unit	2	2
18/212-222 QUEEN STREET	CLEVELAND	\$350,000	158 Days	Unit	3	1
LEVEL 3/141 SHORE ST WEST	CLEVELAND	Price Upon Application	158 Days	Unit	1	1
?/211 Middle & Passage	Cleveland	from \$535,000	166 Days	Unit	3	2
3/96 WYNARD STREET	CLEVELAND	\$329,000	171 Days	Unit	2	1
CLEVELAND	CLEVELAND	from \$535,000	172 Days	Unit	3	2
CLEVELAND	CLEVELAND	Offers over \$329,000	174 Days	Unit	2	1
?/Cnr Middle & Passage Sts	Cleveland	From \$535,000 - \$2,900,000	193 Days	Unit	2	1
CNR MIDDLE AND PASSAGE STS	CLEVELAND	From \$535,000 - \$2,900,000	194 Days	Unit	2	1
5/141 Shore St W	Cleveland	URGENT SALE	200 Days	Unit	2	1
1/141 Shore Street West	CLEVELAND	For Sale	201 Days	Townhouse	2	2
5/141 Shore Street West	CLEVELAND	URGENT SALE	201 Days	Unit	2	1
16/6 HARBOURVIEW COURT	CLEVELAND	Private Treaty	202 Days	Unit	3	2
6/165-175 BLOOMFIELD STREET	CLEVELAND		207 Days	Other	0	0
11/13 ESPERANCE CT	RABY BAY	For Sale	210 Days	Unit	3	
?/4 Fitzroy On The Bay	Cleveland	Private Treaty	211 Days	Unit	3	2
?/4 Fitzroy On The Bay	Cleveland	Private Treaty	211 Days	Unit	3	2
?/4 Fitzroy On The Bay	Cleveland	Private Treaty	211 Days	Unit	3	2
?/4 Fitzroy St	Cleveland	Private Treaty	211 Days	Unit	3	2
6/141 Shore St W	Cleveland	Offers over \$670,000	217 Days	Unit	2	2
CLEVELAND	CLEVELAND	Serious Offers over \$290,000	217 Days	Unit	3	1
Unit 6 141 Shore Street West	CLEVELAND	Offers over \$670,000	218 Days	RESI	2	2
26/135 Shore Street North	CLEVELAND	\$1,490,000	247 Days	Unit	3	2
UNIT 2 ESPERANCE COURT	RABY BAY QYS CLE	For Sale	277 Days	Unit	2	
19/135 SHORE ST	CLEVELAND	\$945,000	278 Days	Unit	2	
1/54 - 1 ESPERANCE CT	RABY BAY	\$595,000	278 Days	Unit	3	1
6/7 SHORE ST	CLEVELAND	For Sale	278 Days	Unit	3	2
28/20 MASTHEAD DRIVE	CLEVELAND	\$600,000 - 650,000	295 Days	House	2	2
?/203 Shore St W	Cleveland	\$480,000	321 Days	Unit		
203 SHORE ST	CLEVELAND	\$482,000*	321 Days	Unit	0	
28/120 BLOOMFIELD STREET	CLEVELAND	\$425,000 Incl GST	326 Days	Commercial	0	0

	Locality	Listed Price	Days Listed	Type	Br	Cars
Level 3/141 SHORE ST West	CLEVELAND	price upon application	383 Days	Unit	1	1
Level 3/141 SHORE ST West	CLEVELAND	price upon application	383 Days	Other	1	1
CLEVELAND	CLEVELAND	From \$750,000	405 Days	Unit	2	2
135 SHORE STREET N	CLEVELAND	Offers over \$599,000	496 Days	Unit	3	2
22/12 ESPERANCE COURT	CLEVELAND	\$975,000	518 Days	Other	3	2
56/13 Esperance Court Cleveland	CLEVELAND	offers over...\$590,000	553 Days	Unit	3	1
18/32 MIDDLE STREET	CLEVELAND	\$399,000	557 Days	Unit	1	1
21/32 MIDDLE STREET	CLEVELAND	Auction	568 Days	Other	2	1
SHORE ST	CLEVELAND	Exclusive	916 Days	Unit	2	1
24/135 Shore Street North	CLEVELAND	\$845,000	923 Days	Unit	2	2

Appendix 3

Buyers look to unit market for variety

Friday, 10 September 2010

The variety of units and townhouses now available to Queensland property buyers has helped this segment of the market record solid price growth in many areas over the June quarter.

And according to the Real Estate Institute of Queensland (REIQ), sales of units and townhouses also held steady over the quarter, especially in the Greater Brisbane region.

"About 25 per cent of all sales for Queensland residential property are now units and townhouses and this number is just going to continue to grow as more and more people factor lifestyle, location and affordability into their buying decisions," REIQ managing director Dan Molloy said.

"The type of developments now available also caters to many different types of buyers. Across the state, units and townhouses continue to provide more affordable options for first home buyers and investors, while prestige buyers are increasingly spending upwards of \$1 million to snare a unit with unparalleled water or city views."

The development of high-end unit and townhouse complexes in regional areas is also helping to reshape the traditional landscape of these towns.

"Where units and townhouses used to be a relative scarcity in some of our rural and regional centres, this is starting to change as our population grows and demand for property increases," Mr Molloy said.

"Mining is also having an impact on demand and on the types of developments being constructed, so we are seeing an increase in prestige units in Central Queensland, especially Gladstone, Mackay and Rockhampton."

Brisbane

The highest numbers of preliminary unit and townhouse sales over the June quarter were located in Brisbane City, New Farm, Coorparoo, Nundah and Moorooka. The trend to high-end units was evident in Brisbane City with nine preliminary sales of more than \$1 million occurring over the quarter.

Greater Brisbane

The highest numbers of preliminary sales over the quarter were in Redbank Plains in Ipswich, Eagleby in Logan, Redcliffe in Moreton Bay and Cleveland in Redland. While Cleveland has had strong sales of waterfront stock over the past 12 months, it was the established older unit market that was more popular during the June quarter.

Gold Coast

The highest numbers of preliminary sales recorded were in the traditionally strong Surfers Paradise, followed by Southport, Labrador and Hope Island. Surfers Paradise recorded six preliminary sales for more than \$1 million over the quarter, while buyers snapped up units priced between \$350,000 and \$500,000 on Hope Island.

Sunshine Coast

The most popular suburbs over the quarter on the Sunshine Coast were Maroochydore, Mooloolaba, Buderim and Noosa Heads. There were a number of \$1 million plus sales over the quarter, including \$2.4 million for a penthouse in Maroochydore, and two sales of \$2.95 million and \$3.65 million in Noosa Heads.

Regional Queensland

The Gladstone, Mackay and Cairns local government areas all recorded median price gains due to the large number of sales of new stock with water views over the quarter.

Agnes Waters continued to record steady sales of units in a development in Beaches Village Circuit, while sales above \$600,000 were occurring in a new high-end development with views over Pioneer River in Mackay.

The suburbs of Cairns City and Cairns North were the most popular for unit sales in the Cairns region. Cairns North recorded a shift in the proportion of sales at the lower end of the market, with more sales occurring priced between \$250,000 and \$350,000.

PROJECTS SUMMARY REPORT

Project ID	Project Title	Council	Suburb	State	Estimated Value	Planning Stage	Update Date
772193	SHORE STREET EAST UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$1,000,000	Building Application	29/09/2010
1215457	QUEEN STREET MIXED USE DEVELOPMENT	REDLAND SHIRE	CLEVELAND	QLD	\$22,000,000	Development Application	23/09/2010
939950	PASSAGE STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$4,000,000	Development Approval	22/09/2010
774280	WATERMARK APARTMENTS	REDLAND SHIRE	CLEVELAND	QLD	\$18,000,000	No Tender Accepted Tenders To Be Recalled	22/09/2010
4198302	FOREST PLACE RETIREMENT VILLAGE - CLEVELAND STAGE 4	REDLAND SHIRE	CLEVELAND	QLD	\$5,000,000	Development Approval	17/09/2010
611508	FOREST PLACE RETIREMENT VILLAGE - CLEVELAND STAGE 5	REDLAND SHIRE	CLEVELAND	QLD	\$8,000,000	Development Approval	17/09/2010
1184718	TAYLOR CRESCENT UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$9,800,000	Development Application	7/09/2010
1123049	LONGLAND STREET TOWNHOUSES	REDLAND SHIRE	CLEVELAND	QLD	\$1,400,000	Development Approval	19/08/2010
1124852	WHARF STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$5,900,000	Development Approval	18/08/2010
761650	BAYSIDE BUSINESS PARK REMAINING STAGES	REDLAND SHIRE	CLEVELAND	QLD	\$60,000,000	Development Approval	10/08/2010
931708	NORTH STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$9,500,000	Development Approval	5/08/2010
1122295	OSTEND COURT DUPLEXES	REDLAND SHIRE	CLEVELAND	QLD	\$1,300,000	Building Application	8/07/2010
1131684	MIDDLE STREET TOWNHOUSES	REDLAND SHIRE	CLEVELAND	QLD	\$1,200,000	Construction	7/07/2010
931838	MIDDLE STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$15,000,000	Building Approval	6/07/2010
1284849	CLEVELAND SEWERAGE PUMPING STATION 6	REDLAND SHIRE	CLEVELAND	QLD	\$500,000	Contract Let	31/05/2010
1307307	REDLAND SOCIAL HOUSING UNITS NBESP PROJECT	REDLAND SHIRE	CLEVELAND	QLD	\$1,929,000	Contract Let	28/05/2010
4179044	SHORE STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$10,000,000	Contract Let	10/05/2010
832958	SHORE STREET EAST UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$1,500,000	Development Approval	14/04/2010
1303304	MICHELLE COURT TOWNHOUSES	REDLAND SHIRE	CLEVELAND	QLD	\$2,000,000	Development Application	24/03/2010
932200	NORTH STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$3,100,000	Building Application	15/03/2010

PROJECTS SUMMARY REPORT

Project ID	Project Title	Council	Suburb	State	Estimated Value	Planning Stage	Update Date
942444	REDLAND SHIRE COUNCIL RENEWABLE & LOW CARBON ENERGY OPTIONS	REDLAND SHIRE	CLEVELAND	QLD	\$5,000,000	No Tender Accepted Tenders To Be Recalled	18/02/2010
1244888	WYNYARD STREET MIXED USE DEVELOPMENT	REDLAND SHIRE	CLEVELAND	QLD	\$3,000,000	Development Application	9/11/2009
1227422	RUSSELL STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$1,100,000	Development Application	2/10/2009
4174154	MASTHEAD DRIVE UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$10,000,000	Development Approval	13/07/2009
4195858	QUEEN STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$6,500,000	Development Approval	9/07/2009
803861	SHORE STREET EAST UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$7,500,000	Development Application	9/07/2009
1030889	BLOOMFIELD STREET SHOPS & OFFICES	REDLAND SHIRE	CLEVELAND	QLD	\$2,500,000	Development Application	27/05/2009
939929	HOMER STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$800,000	Building Application	23/04/2009
1093521	RELDAND HOSPITAL EMERGENCY DEPARTMENT IMPROVEMENTS	REDLAND SHIRE	CLEVELAND	QLD	\$7,000,000	Early Planning	3/04/2009
1122178	ENTERPRISE STREET INDUSTRIAL BUILDING	REDLAND SHIRE	CLEVELAND	QLD	\$600,000	Construction	1/04/2009
606143	OCEAN VIEW PARKLANDS MIXED DEVELOPMENT	REDLAND SHIRE	CLEVELAND	QLD	\$135,000,000	Development Application	25/03/2009
4180339	WATERLOO STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$8,500,000	Development Approval	10/02/2009
917900	BAYSIDE BUSINESS PARK MEDICAL RESEARCH BUILDINGS STAGE 1	REDLAND SHIRE	CLEVELAND	QLD	\$8,000,000	Construction	3/12/2008
4178396	ISLAND STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$7,000,000	Development Approval	2/12/2008
1059317	ISLAND STREET UNITS DOUBLE ENTRY REFER PROJECT ID 20179	REDLAND SHIRE	CLEVELAND	QLD	\$2,400,000	Development Approval	2/12/2008
4188979	SAN TROPEZ MIXED DEVELOPMENT	REDLAND SHIRE	CLEVELAND	QLD	\$5,000,000	Development Approval	27/11/2008
935976	WEINAM CREEK MARINA AMENITIES BUILDING & TICKET OFFICE	REDLAND SHIRE	CLEVELAND	QLD	\$250,000	Completed	21/11/2008
4196164	LONGLAND STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$800,000	Site Preparation in Progress	5/11/2008

PROJECTS SUMMARY REPORT

Project ID	Project Title	Council	Suburb	State	Estimated Value	Planning Stage	Update Date
922797	HOMER STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$650,000	Construction	20/10/2008
932205	RUSSELL STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$860,000	Development Application	24/09/2008
1005810	EAST COBURG STREET DUPLEX	REDLAND SHIRE	CLEVELAND	QLD	\$441,000	Contract Let	5/09/2008
805688	CHANNEL STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$620,000	Contract Let	28/08/2008
816645	ISLAND STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$2,500,000	Contract Let	20/05/2008
930571	RUSSELL STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$800,000	Contract Let	7/05/2008
803864	FITZROY STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$4,500,000	Construction	10/04/2008
826177	ISLAND STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$700,000	Construction	10/04/2008
803887	TAYLOR CRESCENT UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$4,000,000	Development Approval	10/04/2008
939235	RUSSELL STREET SHOWROOMS & RETAIL WAREHOUSE	REDLAND SHIRE	CLEVELAND	QLD	\$1,200,000	Development Approval	11/03/2008
930869	QUEEN STREET DUPLEXES	REDLAND SHIRE	CLEVELAND	QLD	\$800,000	Development Approval	3/03/2008
740714	PASSAGE STREET UNITS	REDLAND SHIRE	CLEVELAND	QLD	\$2,400,000	Development Application	13/02/2008



Appendix 5
Assessment of Development Yield

1 Planning Scheme Requirements with the Marine Activity Zone (MA1 – Toondah Harbour Cleveland Sub Zone)

1.1 Building Heights

No greater than –

- (a) 11 metres in the Toondah Harbour subzone;
- (b) 14 metres in the Toondah Harbour subzone when involving mixed use development; and
- (c) 8.5 metres if the any part of the proposed development shares a boundary with a sensitive receiving environment.

1.2 Site Coverage

- ▶ The maximum building profile is to have a site coverage of no greater than 50% within the Toondah Harbour subzone;
- ▶ Total development area including parking and any outdoor works is to have a site coverage of no greater than 80% in the Toondah Harbour subzone; and
- ▶ Planted landscape areas must cover a minimum of 20% of the site area.

2 Explanation of Yield Calculations

The calculations are based on an interpretation of how the previous master plans may be implemented. For example the previous master plan shows areas for development, and not specific land uses (e.g. residential, retail). The previous plans also omit any details on parking.

2.1 Land Uses

Building off the basic structure established in the previous master plan, the majority of the land precinct has been dedicated to multi-storey residential uses. Adjacent to the foreshore, provision has been made for two areas of mixed-use development. Desired uses in these areas are restaurants/retail and commercial: their basic function is to draw activity towards the water and potential marina development.

To support further activity along the main access road and 'high street,' mixed-use development is desired on the ground floors of blocks G,H and I.

2.2 Building Structure and Parking

All yield calculations made in relation to parking have been made with reference to the above land use breakdown and in accordance with the Redland City Council Planning Scheme. The parking rates relevant to this master plan are shown in Table 1.

Table 1 Planning Scheme Parking Requirements

Type of Use	Required Parking Rate
Apartment Building	1 parking space per unit and one additional visitor parking place for every 4 units (Note that the additional visitor parking requirements were factored into the calculations by increasing the standard area of 30m ² to 37.5m ²)
Mixed Use Commercial	5 parking spaces per 100m ² of leasable area

The form of parking and the structure of the planned buildings varies from block to block. Table 2 provides details of all assumptions made for the final yield calculations.

Table 2 Assumptions Made for Yield Calculations

Subject	Assumptions Made
Blocks A, B and C	<ul style="list-style-type: none">- These blocks are all to be multi-storey residential buildings- Required parking spaces are to be accommodated within the ground floor- The number of parking spaces determines the maximum number of units in above storeys as the planning scheme requires every unit to have at least one space
Block D and E	<ul style="list-style-type: none">- These blocks are to be single storey- While underground parking may be an option it is assumed that this would be highly expensive

Subject	Assumptions Made
	<ul style="list-style-type: none"> - The required parking for these buildings will be supplied in a separate area or structure within the Toondah Harbour precinct
G, H and I	<ul style="list-style-type: none"> - These blocks are to all to be multi-storey - Mixed-use commercial/ retail uses are to take up the ground floor - As mixed uses take up the 1st floor parking for these building must be accommodated in another area or structure
Floor heights	The number of storeys for each block has been calculated through determining how many times a floor (being 3.7m high) can fit into the maximum building height under the Redlands Planning Scheme
Units	Taken to be 90m ²
Parking Spaces	30m ² is comprised of the parking space and required manoeuvring room

Table 3 Toondah Harbour Land Development Yield

Full Residential Buildings (Car parking on 1st Floor)										
Building	Detail	Site Area (m ²)	Floor Plate or Site Coverage * Max 50% (m ²)	Total Building Height (Storey)	Total Building Height - Ground Floor Parking	Total GFA (m ²)	Total GFA minus Ground Floor	Plot Ratio Total GFA / Site Area	Number Possible Car parks on Ground Floor 37.5m ² (refer above for area explanation)	Units 90m ²
A	Residential	6,065	3032.5	3	2	9,097.50	6,065	1.5	80.87	67
B	Residential	14,361	7,180.50	3	2	21,541.50	14,361	1.5	191.48	160
C	Residential	20,877	10,438.50	3	2	31,315.50	20,877	1.5	278.36	232
Full Mixed Use Buildings (No Internal Car parking)										
Building	Type	Site Area (m ²)	Floor Plate or Site Coverage * Max 50% (m ²)	Total Building Height (Storey)	Total GFA (m ²)	Plot Ratio (Total GFA / Site Area)	Total Parking Required (In separate area or structure)	Total Parking Area Required 30m ² (In separate area or structure)		
D	Retail/ restaurant/ Commercial	1,714	857	1	857	0.5	9	270		
E	Retail/ restaurant/ Commercial	3,788	1,894	1	1,894	0.5	19	570		

Mixed Use Residential and Retail Buildings (Car parking located separately as ground floor is retail)

Building	Type		Site Area (m ²)	Floor Plate or Site Coverage * Max 50% (m ²) (1st Floor in these buildings is retail)	Total Building Height (Storey)	Total GFA (m ²)	Plot Ratio Total GFA / Site Area	Total Parking Required (In separate area or structure)	Total Parking Area Required - 30m ² & In separate area or structure - 30m ² for residential	Units 90m ²
F	Mixed	Residential	6,183	3,092	4	9,275	1.50	129	3,864	103
		Mixed Commercial				3,091.5	0.50	155	4,637	NA
G	Mixed	Residential	5,417	2,709	4	8,126	1.50	113	3,386	90
		Mixed Commercial				2,709	0.50	135	4,063	NA
H	Mixed	Residential	13,471	6,736	4	20,207	1.50	281	8,419	225
		Mixed Commercial				6,736	0.50	337	10,103	NA

Table 4 Yield Summaries

Total Units	Total Car Parks	Total Gross Floor Area (GFA)			Total Site Area		
		Residential	Mixed Use Restaurants/ Retail	Mixed Commercial	Residential	Mixed Use Restaurants/ Retail	Mixed Commercial
877	1,728	90,287m ²	2,571m ²	12,536m	41,303m ²	5,502m ²	25,072



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