

Appendix 4: The feasibility investigations and design delivery can be broken down into the following key stages:

Stage 1	Preliminary design	1. Initiate technical investigations including topographic survey, traffic surveys, breakwater condition surveys, geotechnical bore holes and contamination, wave and hydraulic analysis and coastal ecology survey.
		2. Develop the current overall master plan in more detail including layout of marina, integration with adjacent urban areas, internal planning of new buildings and additions
		3. Prepare "Rough Order of Costs" estimate.
Stage 2	Developed design	1. Further develop the Preliminary Design into a robust Developed Design incorporating the diverse and complex technical aspects of the project.
		2. Prepare Developed Design Cost estimate.
Stage 3	Preparation for Resource Consent	1. Prepare drawings, visualisations and supporting material for application based on Developed Design stage.
		2. Specialist to prepare detailed Assessment of Environmental Effects reports based on the Developed Design to support the Resource Consent application.

The feasibility components below takes the potential project to developed design phase ready for submission of a Resource Consent application i.e. Stage 3. This provides a higher degree of certainty in the design, technical parameters to be worked within and assessment of costs to implement the project.

If the project was to proceed, the following stages would then occur.

Stage 4	Documentation	Documentation prepared for tender and building consent. Final Estimate of Cost prepared based on Schedule of Quantities.
Stage 5	Tender	Management of the procurement process from registration of interest to preparation of tender documentation and evaluation
Stage 6	Construction	On-site construction over several financial years

Feasibility Components to reach Stage 3.

Topographical Survey
Heritage Assessment
Harbour Architectural Design: - <i>Preliminary Design</i> - <i>Developed Design</i> - <i>Resource Consent requirements</i>
Landscape and Urban Design
Quantity Surveyor
On-land structural investigations inc. seismic capacity
Environmental and Water inc storm water and sewer
Coastal Engineering and wave climate survey
Coastal Ecology:
- <i>Contamination history and silt assessment</i>
- <i>Contamination Sampling</i>
- <i>Ecology survey inc divers</i>
Traffic and transportation assessment
Pontoon Design
Marina Design
Geotechnical Investigations and Design:
- <i>Preliminary Geotechnical Appraisal</i>
- <i>Geotechnical Investigations (Physical Testing)</i>
- <i>Geotechnical Assessment</i>
Mechanical and Electrical advice for design
Fire Engineering advice for design
Acoustic Engineering for design

Appendix 5: Preliminary Estimated Construction Costs

Component	Cost - Option 1 (Full Brief)	Cost - Option 2 (Reduced Brief where possible)
Boardwalk - West of Yacht Club building	\$877,000	
Boardwalk - In front of Yacht Club building	\$510,000	
Boardwalk - East of Yacht Club building	\$704,000	
Boardwalk - In front of Sailing Academy building	\$345,670	
Pontoon	\$533,500	\$150,000
Training Boat Berths	\$926,500	\$500,000
Floating pontoons - West	\$524,000	Delete
Floating pontoons - East	\$410,500	Delete
Marina Berths - Sea Wall West	\$1,070,500	Delete
Marina Berths - Sea Wall East	\$883,500	Delete
Storage Sheds	\$16,800	
Wellington Ocean Water Sports Centre	\$420,000	
Rescue Boat Shed	\$715,200	\$200,000
Café	\$78,000	
Harbour Sails Base	\$15,000	
Model Yacht Hire Base	\$15,000	
Main Entry Canopy	\$50,000	
Contractor Margin and Preliminaries	\$836,000	
Contingency	\$1,368,000	
Design and Consenting	\$1,339,000	
Total	\$11,638,170	