Extraordinary Whangarei District Council Meeting Agenda

Date:	13 July, 2021
Time:	1:00 pm
Location:	Council Chamber Forum North, Rust Avenue Whangarei
Elected Members:	Her Worship the Mayor Sheryl Mai (Chairperson) Cr Gavin Benney Cr Vince Cocurullo Cr Nicholas Connop Cr Ken Couper Cr Tricia Cutforth Cr Shelley Deeming Cr Jayne Golightly Cr Phil Halse Cr Greg Innes Cr Greg Martin Cr Anna Murphy Cr Carol Peters Cr Simon Reid

For any queries regarding this meeting please contact the Whangarei District Council on (09) 430-4200.

Pages

1. Karakia/Prayer

2. Declarations of Interest

3. Apologies

4. Decision Reports

5. Public Excluded Business

6. Closure of Meeting

Recommendations contained in the Council agenda may not be the final decision of Council.

Please refer to Council minutes for final resolution.

4.1 Oruku Landing Conference and Events Centre Project

Meeting:	Extra Ordinary Whangarei District Council
Date of meeting:	13 July 2021
Reporting officer:	Simon Weston (General Manager Infrastructure) Sandra Boardman (General Manager Community) Alan Adcock (General Manager Corporate)

1 Purpose

To provide an update on the Oruku Landing Conference and Events Centre project investigation to enable a decision on whether to move forward or stop the project.

2 Recommendations

That the Whangarei District Council either:

Recommendation A

1. Agrees to progress to the next stage of the project by procuring professional services (including a lead designer) for the project to undertake investigations and design work to move to the preliminary/developed design stage to better understand potential costs.

2. Approves a budget of up to $1 million dollars of unbudgeted operational expenditure in the 2021-2022 financial year to progress the project.

3. Undertakes a Special Consultative Process and/or a Council Long Term Plan 2021-2031 amendment for the project.

4. Notes the potential increase in Whangarei District Council project funding requirement from $23 million to $57.2 million.

5. Notes funding the project would result in a district wide general rates rise of 5.5% (based on current project cost estimates and available funding) or rates rises an average of approximately 22.3% if sourced solely from commercial ratepayers (should they be identified as the major beneficiaries of the project).

6. Confirms the process and timeframes for the Special Consultative Process and/or a Council Long Term Plan 2021-2031 amendment before the end of August 2021.

Or

Recommendation B

That Whangarei District Council

1. Undertakes no further action regarding the Oruku Landing Conference and Events Centre Project.

3 Executive Summary

- Due to the commercial nature of the Crown Infrastructure Partners (CIP) funding agreement, references regarding negotiations and the conditions of the agreement have been excluded from this report.
- The Oruku Landing Conference and Events Centre (CEC) formed part of the 2021- 2031 Long Term Plan (LTP) Consultation Document and was subsequently removed due to the Northland Regional Council (NRC) reducing its contribution from $14 million to $6 million with conditions.
- The project budget currently stands at $89 million based on the original Northland Development Corporations (NDC) estimate with funding provided by CIP ($60 million); NRC ($6 million) and Whangarei District Council (WDC) ($23 million).
- The cost estimate for the project is $123.2 million. The shortfall between budget and cost estimate is $34.2 million. A reduced project scale/scope and value engineering may reduce this gap. Significant further design work will be required to achieve this. The design, scale/scope changes will require stakeholder and Ministerial approval.
- WDC will be responsible for funding any construction cost overruns. In today's construction environment cost overruns are a distinct possibility.
- Legal advice suggests that the changes to the project and its costs will trigger the need for public consultation, under Council's Significance and Engagement Policy.
- Probity advice suggests that Council draft a business case, using the Treasury's Better Business Case methodology, prior to committing further funding to the project.
- Funding the project would result in a district wide general rates rise of at least 5.5%. If the rates funding were targeted towards commercial and/or Central Business District (CBD) commercial (should they be identified as the main beneficiaries of the project) the rates rise for those sectors could be around 22.3% with the highest potential increases of over $5,350 per Separately Used or Inhabited Parts (SUIP).
- Decisions about project funding (for both construction and ongoing operations) have the potential to negatively impact Council current credit rating of AA+ (Stable).

4 Background

The Oruku Landing CEC project has taken a complicated course over a protracted period with the CEC component potentially transferring from a private development to a Council-led project.

Pre 2019

In March 2013 Council agreed to sell 44a – 48 Riverside Drive Lots 1-4 DP 440643 (the now subject site for CEC) to Golden Kiwi Holdings Ltd, or nominee, for the sum of $1.9 million plus GST.

As part of the transaction the following clause was included in the Sale and Purchase Agreement as a non-negotiable condition of sale:

The purchaser covenants that the purchaser enters into this agreement with the intention to develop the property for its Hotel accommodation proposal. In the event that the purchaser nominates another party as transferee, then the purchaser shall promptly prior to settlement obtain the same covenant as to usage from such transferee.

The purchaser was also to agree to construct at its cost:

- The looped walkway along the Hatea River frontage of the properties to an agreed criterion as established by Council. This work is complete.
- The sea wall to an agreed standard of Council subject to the appropriate consents. This work is complete.

- 25 sealed public car parks. This work is complete.

Subsequent to this sale, in 2014-15 a Hotel Feasibility Report was commissioned by WDC and Ngatiwai Trust Board and undertaken by Griffiths and Associates.

The project was to carry out a feasibility study for the development of a hotel of minimum 120 bed spaces and linked conference centre. Land owned by WDC at Dent Street (now referred to as the Almond Court site) was to be included in the sites under investigation and other sites within the CBD were to be considered to establish the best site option for the project.

A review of the accommodation market within Whangarei together with previous consultant's reports on the subject was part of the brief. Once development options were identified an analysis of the site shortlist and an indicative cost for the delivery of the project was also required. All of this information was measured against the ability of the scheme to present a 4 star plus offer.

An integral part of the work involved collating market place data concerning the current Whangarei offer and the key client groups active in the market. This information provided a clear picture of what Whangarei had to offer, what was lacking and what was needed to be put in place to secure private sector funding to deliver the scheme.

On the basis of the analysis carried out on the selected sites it was seen that the provision of a combined hotel of 120 bed units with a conference centre was feasible on at least 2 potential sites.

- Almond Court site alone or possibly combined with Manaia House (corner Rathbone and Dent Street).
- Riverside Drive site (now the subject site for Oruku Landing CEC).

The report writers concluded the Riverside site offered the greatest flexibility and therefore would be more efficient in the design and layout and once out of the ground would be the most cost-effective proposal. The Riverside Drive site had, due to its size and position on the waterfront, significant locational advantages above the other sites. The scale of the site allowed for a very flexible approach to design that would allow a building to take maximum advantage of the waterside frontage.

They also identified added benefit of the site;

- The ability to create waterside apartments for sale which could help with the cash flow of the project as these are being considered for sale under strata title.
- The space requirements of the conference facility could easily be designed into the scheme in a way that takes advantage of the landscaping, waterside and of being linked into the facilities offered by the hotel

In the report it was noted car parking would be essential for a scheme in this location.

2019

In early 2019 NDC presented to Council an update of a project they were developing for a Riverside Hotel and Entertainment Precinct on the subject site. This was being prepared with the view to apply for funding from the Provincial Growth Fund (PGF). The proposal at that time consisted of a combination of;

- Apartments
- 4 star hotel
- 3 star hotel
- Car parking requirements can be achieved onsite and on adjacent sites with 257 basement carparks located onsite
- Anticipated development cost including land, site works, consents, carparks and building $52 million

- Return on Investment Year 5, 4.1% (includes car parking profits under the building).

At that presentation NDC sought;

- Cohesive support from WDC councillors/management/ planning/building & events teams that is solution focused.
- A genuine public private partnership, where WDC have a level of ownership. Covered by a binding Memorandum of Understanding.
- Unity and vocalisation of support.
- Involvement in governance and establishment of a suitable ownership vehicle (Community Trust or Council-controlled Organisation).
- A capital contribution and possibly operational support if required. The capital contribution sought at the time was all or part of the $10 million allocated for a theatre within the then Council LTP.

In March 2019 NDC received $1.3 million from the PGF to undertake a feasibility study. And subsequently updated Council at a workshop the same month where they requested;

- Council confirm their support in principle for the project in writing to the PGF.
- That discussion occurs with WDC, NDC, NRC, Chamber of Commerce and the PGF. As they believed there was a necessity to get "around the table" to discuss the logistics.

NDC were not asking for a decision but were keeping Council updated on what they were trying to achieve. They further suggested there was need for a working group to be established. The PGF needed to see support from Councils for this project if they were to secure the whole $60 million. They stated they were not for looking for a decision but a commitment of support and to get around the table to see how we might make this happen. Those involved could include NDC, Prosper Northland Trust (PNT), NRC, WDC and the Chamber of Commerce. There could be consideration of split investments and management of infrastructure.

On 24 April 2019 WDC resolved to appoint elected members to a joint working group to represent Council's interests. The working group was led by NDC, for the purposes of undertaking the feasibility study. During the feasibility study process NDC updated WDC on progress, however these stopped once the Feasibility Study was complete.

2020

In April 2020 NDC applied to the Shovel-Ready COVID-19 Stimulus Fund.

On 4 August 2020 Council resolved to provide conditional support to the Oruku Landing development. WDC would fund and own the public infrastructure components of the project (approximately $22.85 million). Other parties (CIP, PNT, NRC) would fund the construction of the CEC. PNT would own and run the CEC and WDC would not provide operational funding.

On 9 October 2020 the Infrastructure Reference Group announced that Oruku Landing CEC, a project owned by PNT with a project value of $94 million would receive funding. This funding however was conditional on certain dates being met, NRC providing $14 million funding.

WDC did not have ownership or sufficient certainty about the project to take up the $3 million funding offer, and the associated risk to operational funding was too great, leaving $60 million funding towards the CEC building.

A core issue was that local Government cover any construction cost overruns. NRC refused to agree to this condition and WDC could not agree to underwrite a third party commercial project with no ability to manage the cost. On 17 December 2020 Council rescinded a previous resolution and resolved that, subject to public consultation through the Council LTP

process, Council take over the project; with the CEC being built as a Council asset and operated by a Community Trust.

Through WDC's due diligence investigations into the project it became clear that NDC expected the CEC site to be purchased by WDC, NDC also desire to attach various conditions to the land purchase.

2021

The WDC 2021 – 2031 LTP Consultation Document sought feedback on a proposal that Council fund $23 million (capex and opex), for construction in addition to the $60 million grant from Government. The Document noted that an additional $14 million grant was expected from NRC for the CEC fit-out. WDC was also required to underwrite the construction process and cover any ongoing operating deficits.

The project received support during the LTP consultation with 212 submissions in favour of council doing Oruku Landing, Hihiaua Cultural Centre and an upgrade to Forum North (later in the LTP), Oruku Landing was the second most popular of these facilities (17% in favour 9% against) behind Hihiaua (30% in favour, less than 1% against).

At the 12 May 2021 Council meeting on the 2021 – 2031 LTP Deliberations, Council resolved to proceed with the Oruku Landing CEC subject to:

- A $14 million contribution from NRC (as consulted on) and,
- The outcomes of feasibility and due diligence investigations.

On the 19 May 2021 NRC resolved to approve only $6 million in grant funding for the Oruku Landing CEC Project subject to several conditions. The advice from Thomson Wilson Law was that Council cannot rely on NRC funding for the Oruku Landing CEC Project and the project had to be removed from the WDC LTP.

On 23 June 2021 the Risk and Audit Committee resolved to endorse the risk management analysis of the options presented to Council and seek guidance from the Chair of the Risk and Audit Committee.

For the project to proceed at this stage it would need to do so via either the 2022/23 Annual Plan or via an amendment to the WDC 2021 – 2031 LTP. When the exact financial and non-financial details of the project are known, an assessment will be required under WDC's Significance and Engagement Policy to confirm if the project triggers a requirement for public consultation.

5 Discussion

The detail surrounding this project is complex and due to its early concept/ preliminary design, it is difficult to accurately assess all aspects of the project, and the decisions funders may make. Significant further work will be required to provide accurate information. The project is discussed through the following topic areas: -

- 5.1 - Project General Description
- 5.2 - Project Value
- 5.3 - Project Location
- 5.4 - Project Costs
- 5.5 - Project Budget
- 5.6 - Project Consenting
- 5.7 - Project Economics
- 5.8 - Finding Options
- 5.9 - Sale and Purchase Agreement
- 5.10 - Issues Assessment

- 5.11 - Possible Options for Moving Forward
- 5.12 - Alternative Locations

5.1 Project General Description

Council has been aware and provided input into this and predecessor projects for approximately 7 years. During the last 3 years the Oruku Landing Project has morphed from a private development requiring only general support for the project, through to the CEC potentially becoming a council-led project with substantial ratepayer investment.

The proposed CEC Project is at Oruku Landing, 44-48 Riverside Drive, and is part of a wider private development that may include a hotel, apartments and a carparking building. The CEC land purchase is approximately 5840m2 with the following being included as project components:

- CEC including plaza, services and utilities
- Oruku boardwalk and shared path connections
- Ferry terminal
- Connecting bridge
- Intersection (Punga Grove) and services works for Oruku Landing and CEC Project.

The CEC was part of Council's 2021 – 2031 LTP consultation process, however the conditions that had to be met for its inclusion within the final adopted LTP were not met, largely due to the NRC reducing its funding of the project.

Council has undertaken due diligence for the project (the subject of this report), working with NDC and their consultants, CIP and NRC. Council engaged consultants Beca; Insight Economics; McHale Group; and Thomson Wilson Law to assist with the project.

A Council Workshop was held on 10 June 2021 to discuss the project.

Further work has been completed since 10 June. The latest Beca report is attached in attachment 1. There has been insufficient time to undertake a full business case for the project.

5.2 Project Value

It is accepted that the CEC facility, (like many if not all CEC's) will not provide a positive direct commercial return, however, the project may be a catalyst for economic activity in the form of other developments that add to the economic wellbeing of the city and district and may help support other attractions within the district. In addition, the project will provide amenity and recreational value for the district.

The value to the district is discussed within the Insight Economics report in attachment 2.

It will be important to identify which stakeholders within our District will benefit from the project so that the sources of project funding can be allocated appropriately.

5.3 Project Location

The project is located at Oruku Landing, 44-48 Riverside Drive, on the north side of the Hatea River. The current proposal by NDC is that the CEC will be co-located with a Hotel and apartments and a multi-level car park (yet to be confirmed). Without those components the CEC is viewed as being somewhat isolated.

To try and improve connectivity with the CBD and Town Basin, and resolve parking and accommodation constraints of the site, it is proposed to build a footbridge to connect the Oruku Landing site to the CBD side of the Hatea River. The costs for the footbridge are a

rough estimate only as no investigation, design or consenting work has been done on this piece of infrastructure. NDC and WDC consider the footbridge link to be a key component of the Oruku Landing Project.

5.4 Project Cost

Beca were asked to provide a cost estimate for the Oruku Landing CEC project and associated works. A total of three documents were produced between May 2021 and July 2021 providing cost estimate updates as information was examined and initial engineering assumptions tested.

The estimate is largely based on information provided by NDC to Council. The cost estimate is 'Turnkey' to eliminate additional budgets required to take the structure and associated works from construction completion through to being operational. Table 1 shows the cost estimate comparisons between two project cost estimates (Original NDC and Beca). The Beca estimate is based on collaborative reconciliation between NDC and Beca. The Beca report identifies the areas where there are still differences between the two estimates. It should be noted that significant further design work will be required to provide a more accurate cost estimate. The cost estimate is presently based on preliminary design/concept information. Further information is available in the Beca report (attachment 1).

The Oruku Landing CEC project scope and design is yet to be fully developed, and cost estimates are based on concept designs and early schematics, and therefore have industry accepted contingencies comparable with projects of this nature and complexity. Beca also identified the potential for cost savings and value engineering that could be undertaken as a separate exercise.

Table 1: Cost Estimates Comparison

Item No.	Description	2019 NDC Concept Cost Estimate ($Million)	2021 Beca Reconciliation Cost Estimate ($Million)
1	CEC, Plaza, Services, Utilities, Landscaping, Geo	$72.035 (including land)	$80.000
2	Oruku Boardwalk	$8.290	$4.600
3	Ferry Terminal	$3.370	$2.600
4	Bridge (PC Sum) Only	$10.000	$20.000 (See note 1)
5a	LTP Projects – WW Upgrade, Punga Grove Ave Intersection, Hatea Loop Paths	$1.190	$2.500
5b	Seawall Allowance/ground improvement to CEC only	(included in 5a)	$3.500
	Sub-Total	**$94.885**	**$113.200**
6	Land Purchase (WDC Estimated Cost, yet to be agreed through a valuation process)	Likely to be between $5m and $10m (Included in item 1)	Likely to be between $5m and $10m. $10m included in Figs.
	Total Cost for project including land	**$94.885**	**$123.200**

Note 1: This is the concept cost estimate for the bridge in the location proposed by NDC, opposite Oruku Landing and not at the narrowest point in the Hatea River. Logistically it may be difficult to operate the bridge further upstream. Based on current bridge operations

its likely that it will have approximately lifts/openings of 2,600 per year, with an operational cost of approximately $150,000.

We understand the NDC estimate has increased to approximately $108 million with the CEC component being $76.5 million (excluding land) compared to Beca's $80 million (excluding land).

The revised Beca concept cost estimate for the total CEC project is $123.2 million including the land cost (based on $10 million) and the footbridge in the location proposed by NDC. NDC consider the footbridge to be a key component of the Oruku Landing project and a requirement for the hotel and CEC.

5.5 Project Budget

The current status of the project budget is shown within Table 2. This will drive the scale and scope of work for the project.

Table 2: Current Project Funding and Project Budget

Funding Source	Budget Total
CIP Funding (subject to confirmation)	$60,000,000
WDC Funding (Not within Councils LTP but discussed within the LTP Consultation Document)	$23,000,000 (Note 1)
WDC Provisional Additional Funding (Subject to WDC Approval)	To be advised – Subject to Council Decision
NRC Funding	$6,000,000 (Note 2)
Total	**$89,000,000**

Notes:

1. Anticipated WDC funding, this funding is not within Council's 2021-2031 LTP. Any cost overruns would also need to be funded by WDC.
2. As at 7 July 2021 the NRC funding for fit-out in 2023/24 has had the condition regarding the commencement of the hotel removed.

The estimated total cost for the project (excluding internal Council costs but including funding for external project management and other professional services), including land, is $123.2 million, whilst the available funding for the project is $89 million. This provides a gap between estimated cost and funding of $34.2 million. Council is already contributing $23 million to the project; therefore, the total estimated Council contribution, based on information at this time is up to $57.2 million plus any subsequent cost escalations.

One option to get the WDC contribution to a manageable level is to reduce the scope of the project. At this stage the removal of the ferry and terminal ($2.6 million) would seem reasonable and likely to be supported by all the funders, however, further reduction in scope such as removing the bridge is not advisable, due to parking and connectivity issues between the site and the rest of Whangarei CBD.

5.6 Project Consenting

NDC have submitted a consent application through the Governments Fast Track Consent Process. The consent covers both public and private development. The key risks associated with this are the potential for many conditions to be attached to the consent resulting in increased cost for the CEC development, and potential complications if the CEC is constructed and stands alone. Additional consents may be required to address activities for the project, but which have not been included in the current Fast Track

application. E.g. if WDC needs to change the design or scope to meet budget. The footbridge is not currently within the Fast Track consent application.

5.7 Project Economics

The Insight Economic Report (attachment 2) confirms the accuracy of previous modelling by Horwath and Deloitte. The report also modelled the impact of COVID-19 on the conference and events centres financial viability noting that this resulted in only minor changes to projected revenue and profit/loss.

The major concern highlighted by the authors is the negative 16.8% Internal Rate of Return. The Consultation Document assumed that the Trust operating the CEC would not require a grant from Council to cover operating losses. However, it was agreed that Council would fund depreciation, long term maintenance, insurance and rates, as well as interest on the debt. The following Table 3 compares the LTP opex assumptions and the impact of the NRC decision and the Beca cost estimate:

Table 3 Operational Costs

Opex Item	LTP Consultation Document based on $90 million project	Revised figures based on $113.2 million project excluding land (Beca estimate) and no NRC funding	Comments
Depreciation	$2,413,811	$3,045,080	On $113.2 million asset (excludes land value)
Interest	$749,084	$2,133,560	Borrowing $57.2 million
Maintenance	$50,000	$63,076	Assumption
Insurance	$138,188	$174,327	Pro-rata
Rates paid	$20,277	$20,277	Assumption
Total	**$3,371,360**	**$5,436,320**	**Impact on rates from year 3 would need to be assessed.**

The operating surplus is estimated as $650,000 in year 3 rising to $747,000 at year 10. Taking the mid-point of this range the net annual opex impact to WDC used for modelling the potential funding options is $4,736,320.

Note: further written feedback was sent by NDC (attachment 3) however it does not alter staff's comments above.

5.8 Funding options

The 2021-31 LTP was adopted without any allowance for the inclusion of the Oruku Landing CEC project. It is assumed that Council's estimated $57.2 million capital contribution to the project would be funded through additional debt.

It is also assumed that User Charges will be levied for the day to day operations of the CEC, and contribute directly to the Operating Surplus shown above.

Any ratepayer funding for Operating Expenses (assumed to be $4.7 million as shown above) must be considered to be additional to what is already included in the LTP, noting that Council could choose to reduce funding for other initiatives to offset this (with potential impacts to levels of service in those areas).

It is important to note that while the CEC was included in the draft LTP and funded within the (then) proposed 6.5% General Rates increase, this was for a smaller project with lower funding impacts. Several other changes (e.g. Waka Kotahi subsidy reductions) saw the funding 'released' by the omission of the CEC committed to other activities. Also, simply funding the CEC by reducing Council's forecast operating surpluses would see debt increase each year, resulting in increased interest costs. Additional ongoing operating funding is therefore necessary if Council wishes to proceed with the project unless funding is reduced in other areas.

Consideration should also be given to the potential negative impact on Council's credit rating from S&P Global, which is currently AA+ with a Stable Outlook. The increased debt of $57.2 million to fund construction will place downward pressure on this rating, and unless the net operating costs are fully funded (rather than absorbed in current forecast surpluses) forecast debt levels would rise every year, placing further downwards pressure on our credit rating. If that results in a credit rating downgrade, that has the potential to increase interest margins on Council's total debt.

Any funding options should be consistent with Council's recently adopted Revenue and Financing Policy, which sets out the basis for funding all activities. Excerpts from the policy that cover relevant funding sources include:

Funding Sources for Operating Expenses. *Operating expenses are for the day-to-day spending by Council delivering ongoing services and for the maintenance of Council's assets. This includes contributions to the wear and tear on assets used (depreciation), interest charged on borrowing for capital projects and corporate overheads.*

Council must consider the funding for each activity in a way that relates exclusively to that activity. Some activities may be best funded using user charges, others with targeted rates and others from general rates. Distinct funding enables ratepayers or payers of user charges to assess more readily whether the cost of the service provided to them either directly or indirectly represents good value. They can also more easily determine how much money is being raised for the service and spent on the service, which promotes transparency and accountability.

General rates *are used to fund those services where there is a benefit to the whole community (public benefit) or where there is no practical method for charging individual users.*

Targeted rates *are used where an activity benefits an easily identifiable group of ratepayers and where it is appropriate that only this group be targeted to pay for some or all of a particular service*

A range of different options for ratepayer funding are presented for consideration by Council. Each makes different assumptions about who the beneficiaries of this project are. For example:

- If there is a general public good for the entire district, every ratepayer should contribute
- If the Commercial sector benefits more, they should pay a larger share
- If a smaller part of the Commercial sector (say CBD businesses) benefits the most, they should pay the largest share
- Within each of these options, should each ratepayer group contribute a similar amount (say via a Targeted rate), or should the contribution be on a variable basis (say via a Land or Capital Value based General Rate)?

This agenda item does not draw any conclusions about these issues but uses them as a framework to present potential funding options as shown in the table below. They are:

- General Rates - using current sector splits

- General Rates - all via Commercial sector with new sector splits
- Targeted Rate - Spread equally across all ratepayers
- Targeted Rate - 50% Rural & Residential, 25% CBD Commercial, 25% Other Commercial
- Targeted Rate - 100% Commercial
- Targeted Rate - 50% CBD Commercial, 50% Other Commercial

GENERAL RATE OPTIONS	RES	RURAL	COMM	COMM ex CBD	CBD	TOTAL
100% General Rates using current sector splits						
Current splits maintained	66.44%	8.93%	24.63%			
General Rates Revenue	3,146,811	422,953	1,166,556			4,736,320
Increase per Ratepayer	5.5%	5.5%	5.5%			
100% General Rates, but all to Commercial						
General Rates Revenue			4,736,320			4,736,320
Increase per Commercial Ratepayer			22.3%			
New Sector Splits	63.0%	8.5%	28.6%			
TARGETED RATE OPTIONS SUIPs	**39,863**	**2,131**	**2,738**	**2,296**	**442**	**44,732**
Targeted Rate - Equal amount per SUIP						
Target rate per SUIP	105.88	105.88	105.88	*105.88*	*105.88*	
Revenue received	4,220,780	225,635	289,905	*243,105*	*46,800*	4,736,320
% of revenue by sector	89%	5%	6%	*5%*	*1%*	
				(Further breakdown of Commercial)		
50% Res & Rural, 25% CBD, 25% Comm Other						
Target rate per SUIP	56.39	56.39		515.71	2,678.91	
Revenue received	2,247,987	120,173		1,184,080	1,184,080	4,736,320
% of revenue by sector	47%	3%		25%	25%	
100% Commercial Targeted Rate						
Target rate per SUIP			1,729.85	*1,730*	*1,730*	
Revenue received			4,736,320	*3,971,728*	*764,592*	4,736,320
% of revenue by sector			100%	*84%*	*16%*	
				(Further breakdown of Commercial)		
50% CBD, 50% Commercial Other						
Target rate per SUIP				1,031.43	5,357.83	
Revenue received				2,368,160	2,368,160	4,736,320
% of revenue by sector				50%	50%	

Note: Targeted rates could be set on a per SUIP basis as shown here, or per Rating Unit

While each option allocates the funding burden differently across the ratepayer base, they all show that they can provide the required funding for the project's ongoing costs as currently envisaged.

The options shown range from a 5.5% increase in general rates for all ratepayers, through to much larger increases if the Commercial sector (or a part of it) bears a greater cost. For example, if all the costs are borne by the Commercial sector through General Rates, it would see an increase of 22.3%. The highest increases would result from a Commercial Targeted Rate weighted towards CBD properties, at over $5,300 per SUIP.

If it is decided to consult with the community as to whether to proceed with the project, it is recommended that direct feedback on some or all of these funding options is sought, supported by commentary about the benefits each sector would receive from the project.

Each option allocates the funding burden differently across the ratepayer base, with the common feature being that they provide the funding uplift required to meet the project's ongoing operating costs.

5.9 Sale and Purchase Agreement

Reasonable progress has been made with NDC over the sale and purchase agreement. Council and NDC are at the point of instructing the Valuers to undertake a valuation of the property. Indications are that the expected purchase prices is between $5 million and $10 million. The terms of a draft Sale and Purchase agreement proposed by NDC is shown in attachment 4.

5.10 Issues Assessment

The project is currently in the early stages of development. The project needs a business case and time to 'close-out' risk related items. An evaluation of the issues is detailed within Table 5 using evaluation categories and criteria detailed within Table 4.

Table 4 Evaluation Categories and Criteria

Score	General Description
F	Failed – the characteristics are such that it would be unrealistic to accept these issues
1	Lowest ranking – there are significant constraints
2	Medium Ranking – there are some constraints
3	Highest Ranking – there are minimum or no constraints

Table 5 Assessment

Category	Evaluation Elements	Score	Total Score	Comments/Observations
Operational Suitability	• General Location Located on the south side of Parihaka, adjacent to Hatea River. Limited local parking and limited linkage to CBD. Footbridge goes some way to improving these linkages.	1	1.4	The location for the CEC is constrained and most of the benefit is dependent on a hotel and apartments being constructed adjacent to the facility. This will present further constraints regarding external areas for expo users, reducing the overall effectiveness of the facility.
	• Car Parking availability The development does not have a parking facility to meet its demand. When the site is developed with a hotel, private investment may include the provision of parking in the future, but unlikely within the next few years.	1		
	• Outside CEC Space	1		

Category	Evaluation Elements	Score	Total Score	Comments/Observations
	The CEC has limited outside space for external events/expo use. Limited set-up areas for CEC.			Discussions with the Christchurch CEC operators confirms the value of having a large campus for the facility, providing outside areas for expos and events. The proposed location is significantly constrained in this respect.
	• Flexibility Its internal space will be designed to be flexible and adaptable for most uses. However, limited outside area will restrict some uses.	2		
	• Utilisation The hotel will have 50% utilisation of the facility, the rest likely to be by the community.	2		
Planning Issues and Requirements	• Consenting Timeframe The subdivision consent has been approved. The consent for Oruku Landing and CEC is yet to be accepted into the Fast Track process. If the Oruku Landing and CEC be accepted in the Fast Track process, there will be less opportunity for opposition.	2	1.7	If the Oruku Landing fast track consent application is not approved, it will increase the risk of not meeting the CIP deadline.
	• Risks of needing additional consents Complexity may ensue due to the CEC being developed separately to the hotel and apartments. The footbridge is not included in the consent application. It is likely that amended or additional consents will be required.	1		The project needs to be developed during the consenting period and it is likely that changes to the consent may be required during this process, and after its been obtained.
	• Consent conditions Unknown, may be challenging for construction and ongoing monitoring.	1		
Engineering	• Geotechnical The site has several geotechnical challenges that will require piling level changes and wider infrastructure.	2	1.7	Engineering issues can be readily resolved.
	• Services Infrastructure is required for the hotel, apartments and the CEC. Council is installing these elements.	2		The bridge and its operation has not been developed and is a significant risk in terms of consenting, operations, and construction costs. The bridge needs to be attractive and have high amenity value.
	• Bridge Strongly supported to provide improved linkage to CBD and parking. However, no work has been done on the bridge, theory only.	1		
Accessibility	City Location	1	1.7	The facility could be located in a more suitable location,
	Entrance to site	2		

Category	Evaluation Elements	Score	Total Score	Comments/Observations
	Multi modal linkage	2		but may not then attract a hotel development on the Oruku Landing site.
Financial	• Council Capital investment Council conditionally agreed to $23 million investment. The current project estimated cost is $123.2 million. Shortfall is $34.2 million. Further, Council is underwriting the project Total Outturn cost.	1	1.7	These issues cannot be resolved with the current level of design. The ongoing operational cost is also reasonably significant and will have a negative impact on rates.
	• Price Risk Currently construction is challenging with shortage of resources and likely high escalation costs. This can be managed in some respects by appropriate contract terms.	2		
	• Operational Costs Operating cost $5.3 million funded by targeted rates (district wide and CBD targeted). Has significant impact on rates.	2		
Economic Benefits	**Potential for:-**			The project will provide short term construction activity but may attract wider construction activity and ongoing employment. A potential negative may be the impact on other similar facilities for a period of time.
	Provision of a new hotel	2	2.2	
	Additional spend within the district	2		
	Catalyst for wider development	2		
	Impact on other local CEC	2		
	Construction activity benefits	3		
Social and Cultural	• Social improvements There are social benefits from the development through economic activity associated with CEC construction; catalyst project for a hotel; jobs and ongoing operations including training.	3	3	The project is likely to provide significantly positive social and cultural outcomes, providing opportunity for jobs and training as well as events for the district. Viewed as a catalyst project, the benefits may be wider than from the project itself.
	• Cultural improvements Designed in accordance with cultural requirements. Can provide for ongoing cultural requirements.	3		
Total	**Total average score**	**1.8 average**		

Table 5 provides a high-level assessment to signal if there are significant constraints or otherwise indicating the risk and complexity for those elements of the project. The assessment is subjective and during this early stage of project development these elements can change quickly. Overall, the project has a score of 1.8 indicating that in totality the project sits between having significant constraints and some constraints.

5.11 Possible Options for Moving Forward

Council is at the stage where project decisions are needed before further work can be undertaken.

Table 6: Possible Options for Moving Forward

Option Number	Description	Next Step (This will involve formal council resolution)	Advice based on work to date
1	Continue to develop the project, at the Oruku Landing site with similar scale/scope as current. Current project Cost Estimate $123.2 million. Budget $89 million. Shortfall $34.2 million.	Council commits $1 million funding to further the project investigation and design. This will require the engagement of specialists and the lead project designer. Undertake value Engineering and some form of ECI to attempt to reduce costs. Note: Council has been informed that CIP will provide a grant of up to $1m on a 50/50 cost sharing basis to progress to the next stage of the project. Therefore, in total Council will have up to $2 million to move to the next stage of the project. Undertake LTP Amendment.	Council need to be comfortable with funding $57.2 million. Value engineering may reduce this cost. This will require an amendment to Councils LTP and a special consultative process.
2a	Proceed no further with the Oruku Landing CEC project.	Inform all stakeholders of the decision.	No further work on the project.
2b	If Option 2a above is chosen, Council may request that CIP redirects the funding to another site within Whangarei to construct a similar CEC at a less overall cost.	Negotiate with CIP, NRC and NDC. Initial work suggests that the Forum North site may reduce the cost of the project by $30 million.	Requires significant engagement with stakeholders. May see the loss of CIP funding.

5.12 Alternative Locations

For comparative purposes given the overall cost associated with developing the CEC at the Oruku Landing site, two locations were given high level consideration – John/James Street Precinct and Forum North.

The high-level assessment is shown within attachment 5. Without going into detail, the Forum North site scores relatively well compared to the Oruku Landing site, with the main issue being the tight program to meet the deadlines for CIP. However, it is notable that the Forum North location is expected to have a lower cost for development, in the order of $25 to $30 million less than the Oruku location.

In addition, the additional site area provides added flexibility for events that require external areas for expo type arrangements.

6 Conclusion

Table 7: Summary of Project Status

Item	Project Current Status	***Possibilities not closed out***
Subdivision Consent	Granted	*Titles not yet issued*
Consent for Oruku Landing and Conference Centre	Waiting for acceptance by the Minister. This is currently on hold until Council decides on supporting the project	*May not get accepted. Consent conditions may be difficult.* *May require further consents.*
Project Budget	$89 million	*CIP need to approve changes to scale and scope.*
Project Cost Estimate	$123.2 million	*Concept stage of development*.
Project estimated Shortfall	$34.2 million	
Land Purchase	In progress	*Negotiations progressing.*
LGA requirements	Will require an LTP amendment	*There is risk that this proposal may not be supported by the community or that Council is unable to complete the process by the CIP deadline in September 2021.*

The project needs a business case and time to resolve or reduce high risk items, in particular the time constraints attached to their $60 million funding, the usual approach for this project cannot be undertaken.

The capital cost and operational costs need to be considered in detail and are a significant commitment for Council.

Council has two likely options from here: -

1. Proceed with the project at pace, commit to funding the next stage up to $1 million, and begin procuring services, in the knowledge Council will need to fund up to $57 million. This option will require Council to undertake an amendment to its LTP and undertake a Special Consultative Process. Timeframes for this are challenging. (Note: Council has been informed that CIP will provide a grant of up to $1m on a 50/50 cost sharing basis to progress to the next stage of the project. Therefore, in total Council will have up to $2 million to move to the next stage of the project).

2. Decline the CEC project and inform the stakeholders. If Council undertakes this option, it may wish to review the option of developing a CEC at Forum North. If Council undertakes this option, it runs the risk of losing $60 million CIP funding. If this option is chosen and the Forum North site is supported, Council will still be required to make an amendment to its LTP and undertake the Special Consultative Process.

7 List of Acronyms

- CEC - Conference and Events Centre
- LTP - Long Term Plan
- NRC - Northland Regional Council
- NDC - Northland Development Corporation
- CIP - Crown Infrastructure Partners
- WDC - Whangarei District Council

- CBD – Central Business District
- SUIP - Separately Used or Inhabited Parts
- PGF - Provincial Growth Fund
- PNT - Prosper Northland Trust
- RLB – Rider Levett Bucknall

8 Significance and engagement

The decisions or matters of this Agenda may trigger the significance criteria outlined in Council's Significance and Engagement Policy and may require council to undertake a Special Consultative Process and an amendment to Councils 2021-2031 Long Term Plan. If this is the case the council and the public will be informed by a follow-up agenda providing the process and the timeframes for such a process.

The public will be informed via Agenda publication on the website, Council News, Facebook or any other channel you currently use to inform customers.

9 Attachments

1. Beca Report Oruku Landing Conference and Events Centre Project Risk Review (page 19)
2. Insight Economics Report (page 137)
3. Further feedback from Northland Development Corporation (page 153)
4. Draft Sale and Purchase Agreement with Northland Development Corporation (redacted) (page 157)
5. Conference and Events Centre Alternative Site Assessment (page 169)

Brief Report – Oruku Landing CEC Project Risk Review

Multi-discipline review of Concept Design and Supporting Material.

Prepared for Whangarei District Council
Prepared by Beca Limited

5 July 2021

Creative people together transforming our world

Revision History

Revision Nº	Prepared By	Description	Date
0	Danielle Lind-Corkill	Draft for review	6 May 2021
1	Danielle Lind-Corkill	Final Report – updated estimate	8 June 2021
2	Danielle Lind-Corkill	Final Report – reconciled estimate	2 July 2021
3	Danielle Lind-Corkill	Final Report – minor editions	5 July 2021
4	Danielle Lind-Corkill	Final Report – amended land cost	5 July 2021

Document Acceptance

Action	Name	Signed	Date
Prepared by	Danielle Lind-Corkill		5 July 2021
Reviewed by	Glenn Forber		5 July 2021
Approved by	Blair Masefield		5 July 2021
on behalf of	Beca Limited		

Contents

Appendices

Executive Summary

Whangarei District Council (Council) are interested in improving understanding of risks associated with the proposed Conference and Events Centre (CEC) Project at Oruku Landing, 44-48 Riverside Drive, Whangarei. There are a number of ways to develop and deliver the CEC project; this document is intended to inform Council decision-makers about potential risks, as well as gaps and opportunities based on review of the concept design project documents produced and lodged in April 2021 for consent through the Environmental Protection Agency (EPA).

This report is an update following reconciliation of the capital estimate assumptions with NDC. There have also been minor updates to the programme and risks as a result of the estimate reconciliation, as well as updates for time since the last report revision (8 June 2021).

1.1 Introduction

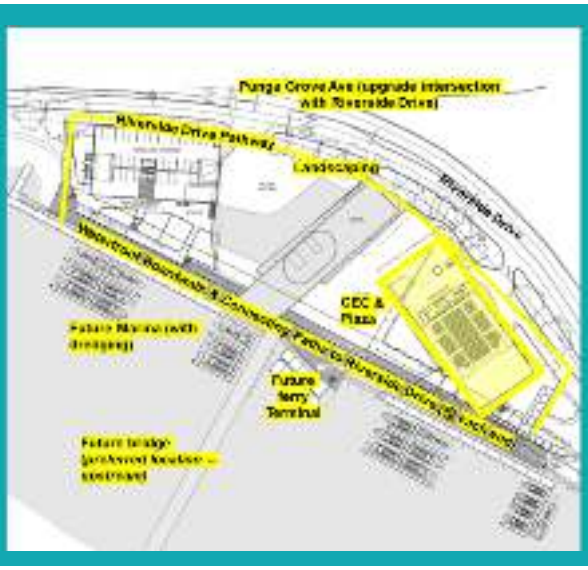
Scope

Whangarei District Council (WDC) has commissioned Beca to carry out a risk review of the documentation relating to the Conference and Events Centre (CEC) component of the Oruku Landing Development.

This documentation has been prepared by Northern Development Corporation (NDC) and their consultants. A list of the documents reviewed is included in the Appendices.

The review process included a number of workshops with WDC representatives to report on progress and discuss the appropriate way to deal with gaps and risks around the areas of Council responsibility in the proposed Oruku development, as highlighted below:

- **Conference & Event Centre building and all fit out costs (i.e. furnishings & equipment)**
- **Oruku plaza, landscaping, pathways, and waterfront boardwalks**
- **Adjacent services e.g. communications, electricity, gas, and three waters**
- **Supporting infrastructure & ground conditions e.g. traffic access, geotech**
- **Connecting Infrastructure including future developments e.g. existing seawall, electrical ferry terminal, bascule bridge, marina expansion impacts.**



Approach

The required outcomes of the Beca review are:

- A parallel estimate to check the overall cost of the development including associated enabling works
- A risk review of nine areas related to the development
- Reconciliation of the capital estimate differences with NDC's estimator, RLB.

The estimate scope was taken from the documentation reviewed for the CEC project, with clarifications of precedence sought from Council where discrepancies were noted *e.g. Architectural drawings take*

precedence over Structural drawings. The estimate was then built up from a combination of factored norms, unit rates over known areas or volumes, together with engineering input sought to bridge any design data gaps. A verification review was carried out by senior cost estimators and project managers familiar with Event and Conference Centre builds.

On the 4th of June 2021, Beca was provided with the "Oruku Landing – Draft Project Cost Review 20210521" authored by NDC. This report concludes discussions of the points raised and an updated cost summary reflects the completed estimate reconciliation (Appendix 1 of this updated Final Report).

The risk review of the lodged and supporting concept project documentation was completed by an experienced multi-discipline team (over five weeks) with subsequent review cycles following feedback. The initial Draft Report has been circulated to WDC, NRC, CIP and NDC. The project risks have been categorised (as noted below) with the flag symbols being used throughout this document to highlight importance. Note a detailed risk register has not been compiled at this stage. The nine review areas were:

1. Cost risks and scope uncertainties, expected at this early stage of project, with updates from the reconciliation review which is still in progress.
2. Consenting risks – concept documentation has been lodged under the fast-track consenting process (as of mid April)
3. Building and structural design
4. Supporting infrastructure e.g. civil, services and LTP projects (Long term plan 2021-31)
5. Marine and connecting infrastructure (to the river and the city centre)
6. Geotechnical data
7. Programme
8. Project risks
9. Project delivery models – possible models for Council

The key findings from each review area are set out below under their respective headings with the categorisation of each identified risk using:


U/ Urgent – potential show stopper for project. Decision / action required immediately.


H/High - very important for project (must have). Action to address or provide direction before starting next project stage.


M/Medium - important for the project (must have). Action in the next project stage(s) and should be addressed as part of good project practices.


L/Low - somewhat important (nice to have). Note for future stages if budget, schedule etc allows.

The full risk reviews from each of the nine areas can be found in the attached individual review documents (see corresponding Appendices for each area) including lists of the reviewed documentation.

1.2 Cost Estimate Risks

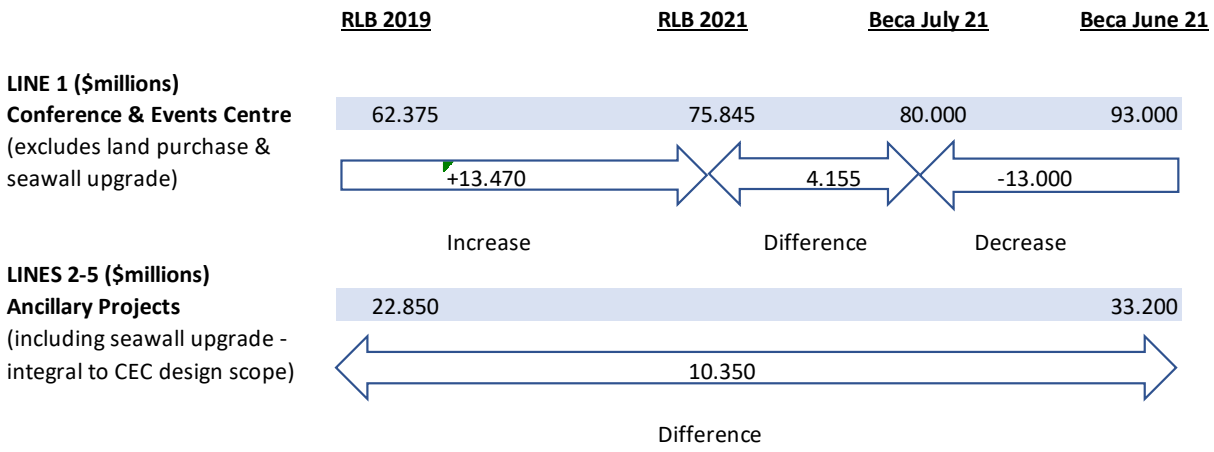
Council have indicated concern if the current budget of $94.885milion NZD increases significantly in the next project stage. This figure includes electric ferry terminal, bridge, and LTP projects e.g. intersection, wastewater upgrade, seawall, boardwalk and paths. The updated parallel cost estimate completed included a high level qualitative risk analysis to confirm the areas of highest cost risk, see in Table 1 below.

Table 1: Comparison Estimates – updated RLB & Parallel

#	Description	RLB Est. $**	Parallel Est. $	Maturity (%)
1	Conference & Events Centre, CEC (with plaza , services/utilities, landscaping & geotech)	75,845,000**	80,000,000	Class 3-4 (+25%/-20%)
	Seawall Allowance / ground improvements to CEC site only	(included in 2)	3,500,000	Class 5+ (+50%/-50%)
2	Oruku Boardwalk	8,290,000	4,600,000	Class 3-4 (+25%/-20%)
3	Ferry Terminal (pontoon design assumed)	3,370,000	2,600,000	Class 5 (+40%/-20%)
4	Connecting Bridge –see separate section below.	10,000,000	20,000,000	Class 5+ (+50%/-50%)
5	LTP Projects: Wastewater Upgrade, Punga Grove Ave Intersection, Pathways	1,190,000	2,500,000	Class 5+ (+50%/-50%)
	TOTAL ($ NZ)	**$98,695,000**	**$113,200,000**	
	Land Purchase (additional)	**$10,000,000**	**$10,000,000**	

** Whilst we have not seen the final position of the RLB estimate for the Conference & Events Centre, the WIP (work in progress) used as the basis for reconciliation suggests that the estimate for this portion of work increased and the Beca estimate reduced – see Figure 1.

Figure 1: CEC and Ancillary Project Reconciliation Estimate Changes



The main drivers for reduction in the Beca CEC estimate were due to further refinement of geotechnical and structural assumptions following consultations between the respective design teams, estimators and NDC.

The key differences between the reconciled RLB & Beca estimates are:

1. Project delivery approach i.e. private developer lead turn-key project (higher risk profile in the Concept Estimate) versus public sector lead project (more risk constrained, multiple parties, design-tender-construct),
2. Design assumptions relied on and slightly higher rate differentials for Parallel estimate. As shown in Table 1 and stated above.

3. Seawall Upgrade/Ground improvements has been split from CEC building costs to simplify the basis of estimate (draft Parallel Estimates assumed no seawall upgrade instead a more robust substructure design). Note: this is an area for future value engineering to reduce this cost uncertainty, through design optimisation.
4. Basis of Estimate for the Connecting Bridge – see details in section below.
5. Assumptions for LTP projects: all footpath upgrades around the Oruku Landing site, civil & signals scopes for Punga Grove Ave, and new WW sewer & buffer tank.

A summary of the reconciled capital cost estimates conclusions and differences is in Appendix 1: this takes preliminary figures from RLB, as these were still being finalised when this report was issued.

Bridge Cost Basis

There was little design information for the Connecting Bridge and direction was sought from Council; these are summarised in Table 2 below. A bascule bridge design was selected to minimise operating footprint and impacts on existing berths. A lower capital option (4a) in a narrower span of the Hatea River was also provided. Note: - caution is advised as the design assumptions used for these estimates are conceptual at best, and differ to those for the bridge Concept Estimate: specifically the lifting mechanism, width, and finish.

Table 2: Bridge Estimates

#	Description	Span (m)	Parallel Est. $	Maturity (%)
4	Multi-purpose (pedestrian & cycling), bascule/ lifting bridge: 4m width, 16m lifting section, 2m headroom below @ all tides – middle of Oruku Landing.	133m	20,000,000	Class 5+ (+50%/-50%)
4a	Multi-purpose (pedestrian & cycling), bascule/ lifting bridge: 4m width, 16m lifting section, 2m headroom below @ all tides – north end of Oruku Landing.	82m	12,400,000	Class 5 (+40%/-20%)

1.3 Consenting Risks

There are two parallel resource consent processes running at the time of writing this report. The applications for the Conference and Events Centre (CEC) proposal have been lodged with the Environmental Protection Authority (EPA) and a 4-Lot subdivision of the site has been lodged with the Whangarei District Council (WDC).

The subdivision application is very low risk from a time and cost risk perspective. It is likely it will be granted and with no conditions requiring physical works to gain title to a site that appears to wholly contain the CEC. Title could be expected within 3 months of the granting of the consent.

The CEC application to the EPA is pending acceptance. The applicant has advised the EPA processing time is currently 7 months to a decision. While longer than the 45 days under the legislation, it still provides a positive time risk benefit compared to a Council led process that is open to delays from public notification and appeals. The key risks of the EPA process are:

- Increased cost implications of conditions that may be more 'onerous' that might be expected via a Council-led process.
- A consolidated set of conditions being issued, which may make construction of the CEC alone complicated.
- Additional consents are likely required, to address activities that are required for the project, but not included in the application.

1.4 CEC Building & Structural Design

In general, it appears to be structurally feasible to build a conference and events centre of the scale and form of construction indicated in the architectural plans in the proposed location. The quality and completeness of the information provided in the structural preliminary design falls a short of some of the requirements set out in the NZCIC Guidelines and is poorly coordinated with the architectural plans. Subsequent review feedback on the draft report has confirmed the structural design is actually concept, this may explain some of the inconsistencies seen.

There is significant design opportunity to provide a more evenly distributed and efficient lateral system (loads typically from earthquake and wind forces) that is better coordinated with the architectural layouts and gravity system of the building. For instance, there are areas that have insufficient lateral stability or that have disjoined or discontinuous load paths.

The structural design (substructure) does not fully address the ground conditions. The existing ground is not good bearing strata and the ground water level is high; the cost of the foundations and substructure are likely to be significantly higher than the current preliminary structural design would suggest. The superstructure is not particularly robust i.e. there are vertical elements that are not adequately tied in two-directions. Some floor areas and framing appear to be missing from the structural mark ups. A significant contingency should be made in the cost plan to cover structure that will be required but is not currently shown on the drawings.

There are also design opportunities to replace some of these heavier superstructure elements with lighter, more efficient structure (cost effective), and to utilise non-structural partitions where walls do not need to be load bearing.

1.5 CEC Supporting Infrastructure

The review of the supporting infrastructure covered both the general civil, services, utilities, and the services upgrade projects in the LTP (long term plan) that Council want to bring forward to enable this development.

Civil & Services

The level of civil reporting investigation appears adequate for the concept design phase. Overall the site appears to be adequately serviced in relation to power, communications and water supply however further consultation with local providers is recommended to ensure timely connection support (e.g. new transformers). The review raises a number of points that may have considerable cost implications. At this project phase adequate contingency should be allowed for these items.

- Recommended floor level is currently below future 1%AEP flood level, these levels have been updated again since the consent was lodged with the EPA, so will need to be addressed with a consent amendment.
- Rationalisation of earth works cut to waste against proposed floor levels to minimise cut material going off site.

Long Term Plan (LTP) Projects

Three projects were reviewed for planned LTP services upgrades in the area of the CEC. The drivers and scopes of these have been summarised:

- Punga Grove Avenue Intersection Signal Upgrade – is required for safe, traffic access to Oruku site and to Punga Grove Avenue from Riverside Drive. It will involve some civil scope from intersection realignment that is not well defined (e.g. retaining walls on the Punga Grove side with limited real estate due to the substation requiring expansion on the corner).

- Wastewater sewer upgrade - increasing the size of this gravity pipeline (running around the Riverside Drive side of the Oruku development) appears to be unnecessary, as any flooding from Riverside Drive manways has been identified as caused by an existing system constraint downstream at the Riverside Drive Pump Station (RDPS). Further engineering modelling is recommended before a decision is made to continue with this pipeline upgrade and whether to proceed with a new 300m3 underground tank at RDPS; a complex and expensive build due to the size and ground conditions.
- Oruku Boardwalk, seawall, and path upgrades – both Board walk and path upgrades (connecting to the Boardwalk and along the length of Riverside Drive) are required for the CEC. The seawall static stability is not high but in its current condition does not require an immediate upgrade to meet design standards. However, if the CEC building foundation design is dependent on seawall stability, then a costly seawall upgrade will be required. Following optimisation of the building pile assumptions during the estimate reconciliation, a separate allowance for seawall upgrade/ground improvements has been included. This assumption remains a design opportunity to reduce capital costs by selecting a building foundation and seawall strengthening solution that work together (i.e. part of value engineering at the next project stage).

Landscaping

In general, there is a mismatch between the landscaping content proposed and the budget expectations for the CEC project. There are limited drawings to show clear relationships to uses inside the building and to confirm whether the landscaping described can be achieved without further capital investment. For instance, the design shows several mature trees alongside the promenade that conflict with proposed ground level and seawall, with no obvious allowance to address this. Another cost risk is uncertainty around volumes of contaminated land for removal and any planting media that needs to be imported.

Finally, the requirement for no stormwater runoff into Hatea river was identified in the cultural assessment but two outlet pipes are shown in engineering design. Unclear too is the selection of principles of “living urbanism” and connection to “Te Aranga Design” principles. The expectations of cultural requirements should be consistent through all design documents.

1.6 Marine and Connecting Infrastructure

The marine elements of the project are seen as secondary to the CEC development however there are some significant interactions with the development which will need to be considered should these future facilities go ahead.

In general, there appear to be inconsistencies in the conversions of Chart Datum (CD) to Land Datums in the reports and drawings (between site and boardwalk and seawall levels). This needs to be addressed at the next project stage and set at a suitable level.

Electric Ferry Terminal (future)

There are a number of key assumptions made in the NDC documents relating to the ferry terminal which require validating. In terms of the amenity for the town centre the ferry terminal would seem to be in the incorrect position unless the bridge is also in place. Given the collapse of the cruise industry during the COVID-19 pandemic some of the justification for this facility will need to be revisited.

Bridge (future)

Assumptions have been made on the conceptual design and location of this bridge due to a complete lack of detail in the review material. There are also a number of gaps and key risks associated with

the justification, planning, construction and operation of an opening bridge at the site that need to be addressed to confirm feasibility and enable appropriate cost estimates to be made for this element of the Oruku Landing development.

Marina Expansion (future)

The inclusion of this facility and the associated dredging requirements raises more questions that cannot be assessed without further details and the timing of these activities. The major questions to be answered include:

- Impacts on the existing Whangarei marina and operations.
- Impacts from dredging e.g. strengthening Hatea River seawalls and marine structures. See Figure 2 (next page) which shows proposed dredge level changes in the Hatea River bed and batter slopes at the Oruku landing seawall.

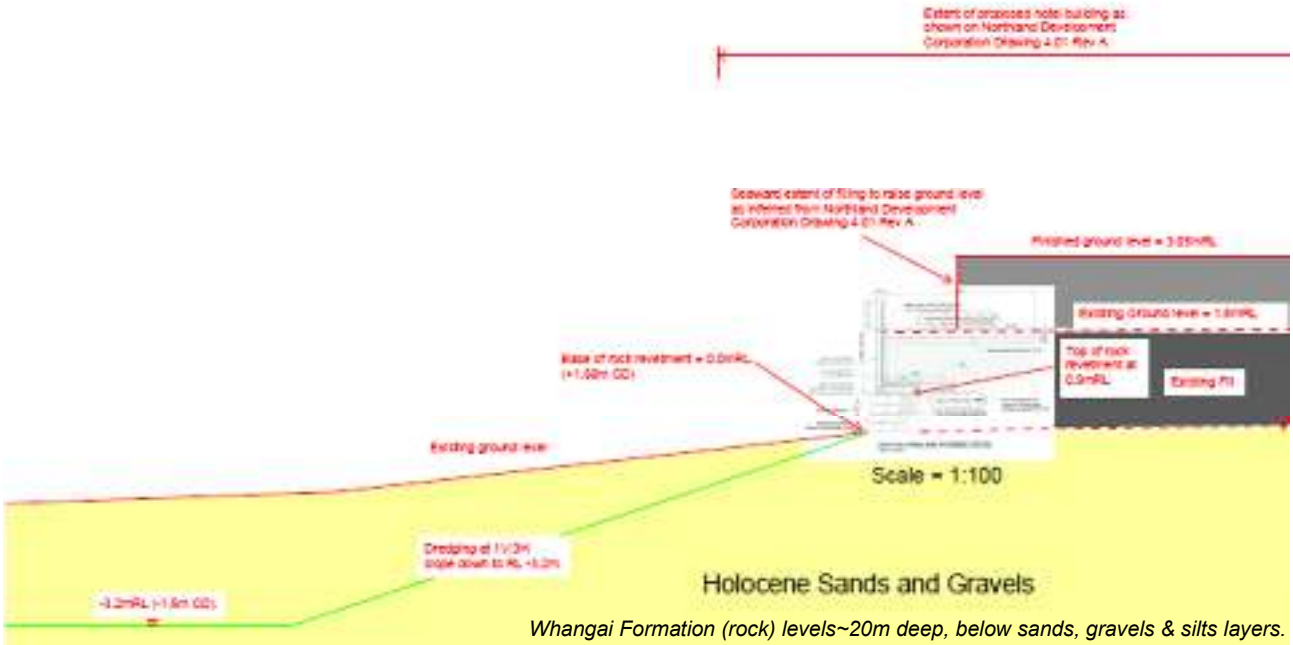
There is also contradicting information supplied about dredge volumes required in the figures and report (no siltation allowance is quoted as is normal practice, only over-dredge).

1.7 Geotechnical

The level of geotechnical investigation appears adequate for the concept design phase. The geotechnical report is high level. Cost estimation based on the current level of guidance has a relatively high level of uncertainty, particularly in the area of the sea wall.

The report raises issues that may have considerable cost implications so adequate contingency must be allowed for these items, until further geotechnical investigations and analyses are completed (at the next project stage) to understand and mitigate these risks. Figure 2 (below) illustrates the role the seawall will have to fulfil to retain the building platform and provide a stable platform for the building. A significant allowance for strengthening the seawall and/or ground improvement works is considered essential as it appears unlikely that the substructure of the CEC building can be strengthening economically to retain the platform, given the proposed additional site fill and dredging.

Figure 2: CEC Development Cross Section at Oruku Landing



Whangai Formation (rock) levels~20m deep, below sands, gravels & silts layers.

The associated reports and drawings appear to have been developed in parallel with each other, with some evidence of lack of coordination between disciplines, e.g. structural foundation design and costing do not appear to consider the full recommendations of geotechnical report.

1.8 Project Programme

It is understood that the CIP funding (Crown Infrastructure Partners) for the project is contingent on construction commencing in September 2022. It is also understood that construction commencement is defined as being the start of foundation construction as opposed to demolition and site clearance.

Review of the developer's programme highlighted mainly that Beca assumed a slightly longer construction programme and also the differences in the delivery approach (developer turn-key versus design-tender-construct); see comments and parallel programme in Appendix 7

The key point to note is that to meet the September 2022 commencement date WDC must:

- Commence procurement of consultants immediately after the July 2021 decision date. Note: Any timing delay in this decision will need to be added to the project programme finish date.
- Be prepared to commence design in advance of receiving resource consent should the current application be rejected.
- Undertake to carry out the various associated infrastructure packages which are required to enable the project.
- Allocate sufficient experienced internal management resource to work alongside the project team.

1.9 Project Risks

A review of the project risks across concept design information highlighted both schedule and cost risks (Appendix 8). These will need to be addressed promptly to meet Council expectations for cost certainty and schedule milestones, particularly external and internal funding deadlines. Prompt, considered decision making with an experienced team of project and building design personnel will assist mitigation of these risks. None are insurmountable but several could cause significant cost and/or delays if the right level of competence and oversight is not completed.

The next project phase should include a full risk review with all partners / stakeholders.

1.10 Project Delivery Models

The options that could be considered by WDC to complete development and deliver the CEC project fall under the three categories:

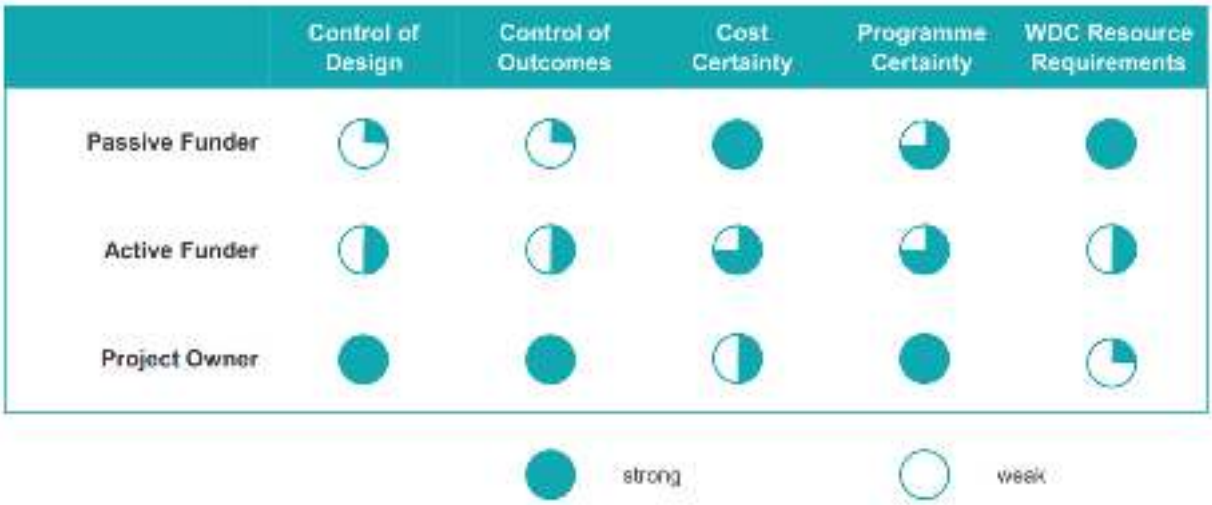
1. Passive Funder: Provide funds to a development entity and leave it to complete the development
2. Active Funder: Provide funds to a development entity and take a governance role to ensure WDC objectives are met
3. Project Owner: Take over the development of the CEC and associated infrastructure

Under each broad heading there will be options that amend the risk profile for the WDC. For the first two options this will be dealt with by the terms of any funding or development agreement. This will involve extensive and detailed legal advice for a project of this size to safeguard WDC's position. The viability of options 1 and 2 will also be contingent on finding a suitable partner who is willing to undertake the role and accept some of the risk attached to the project within the project timescale. Option 3 will involve the selection of the project delivery mechanism which can be selected through a procurement workshop(s). Several options are available to manage project control and risk allocation.

This report includes an addendum in Appendix 9 expanding on the potential contractor procurement options strengths and weaknesses for this project; as well as the drivers, methodologies and commercial frameworks that could be considered. The addendum finishes with a possible outline on the process for Procurement Strategy Development.

The key features of the three options are summarised in the graphic below.

Figure 3: Development Options



1.11 Concluding Comments

The Beca project team has carried out a review of the supplied project documents for the CEC development at the Oruku Landing and prepared a parallel cost estimate within a relatively short timescale. While some of the documents provided for the review are of the expected quality for a concept design phase, there are discrepancies and gaps identified.

The constraints on the programme imposed by the CIP funding cut-off limit are a key consideration when selecting the project delivery model together with the normal desire to maintain control of the design of a major civic facility.

The parallel cost estimate has highlighted the CEC as the largest cost uncertainty risk. This is unsurprising, given the early phase of this building design and assumptions for ground conditions, contamination, and demolition costs. The uncertainty and risks around these costs can be reduced with further condition assessments and confirmation of design scope, which will occur during the next stage of the project.

Other project risks highlighted in the report can be dealt with through the design process and correct allocation of contingency amounts.

Key decisions required by WDC are as follows:

- Decision on the preferred delivery model
- Immediate identification and planning of a suitable project structure that can be activated in July 2021 (as soon as decisions are made to continue this project)
- Decision to bring forward supporting LTP projects to enable proposed CEC programme
- Complete the full feasibility studies for the CEC related future projects i.e. Bascule bridge, Electric Ferry Terminal etc.

A1

Appendix 1 – Cost Estimate

Whangarei Vertical Infrastructure
1/07/2021

Beca Cost Advisory

Estimate Reconciliation

			A			B			C			D		B - D	
			Beca May 2021			Beca - Post Peer Review - 1/07/2021			RLB Dec 2019			RLB - Post Peer Review - 10/06/2021		Difference	
			GFA	5,234		GFA	5,234		GFA	5,069		GFA	5,069		165
		%	$	$/m2	%	$	$/m2	%	$	$/m2	%	$	$/m2	$	$/m2
D1	Land Acquisition		*Excluded*			*Excluded*			*Included below*			*Included below*		0	0
D2	Development Contributions, Site Preparation and Infrastructure		Site Preparation and Infrastructure allowed in E1 and E23			0				-			-	0	0
E1	Site Preparation		4,664,000	891		1,749,000	334		2,592,125	62		3,641,525	718	-1,892,525	-384
E2	Substructure		12,285,000	2,347		6,694,000	1,279		3,717,863	733		3,792,863	748	2,901,137	531
E3	Frame		5,358,000	1,024		5,084,000	971		4,128,819	815		4,128,819	815	955,181	157
E4	Structural Walls		1,851,000	354		1,851,000	354		1,643,025	324		2,118,825	418	-267,825	-64
E5	Upper Floors		784,000	150		688,000	131		636,315	126		790,095	156	-102,095	-24
E6	Roof		2,906,000	555		1,734,000	331		1,881,570	371		1,881,570	371	-147,570	-40
E7	Exterior Walls and Exterior Finish		2,458,000	470		2,458,000	470		1,660,475	328		1,660,475	328	797,525	142
E8	Windows and Exterior Doors		109,000	21		109,000	21		1,316,500	260		1,316,500	260	-1,207,500	-239
E9	Stairs and Balustrades		659,000	126		659,000	126		200,000	39		200,000	39	459,000	86
E10	Interior Walls		1,387,000	265		1,387,000	265		2,450,825	483		2,450,825	483	-1,063,825	-218
E11	Interior Doors		244,000	47		244,000	47		243,530	48		243,530	48	470	-1
E12	Floor Finishes		772,000	147		772,000	147		759,700	150		759,700	150	12,300	-2
E13	Wall Finishes		1,010,000	193		1,010,000	193		932,625	184		932,625	184	77,375	9
E14	Ceiling Finishes		1,699,000	325		1,699,000	325		1,352,750	267		1,352,750	267	346,250	58
E15	Fittings and Fixtures		3,740,000	715		3,740,000	715		1,677,575	331		1,677,575	331	2,062,425	384
E16	Sanitary Plumbing		887,000	169		887,000	169		797,490	157		797,490	157	89,510	12
E17	Heating and Ventilation Services		2,000,000	382		2,000,000	382		4,128,750	815		4,128,750	815	-2,128,750	-432
E18	Fire Services		794,000	152		794,000	152		871,200	172		871,200	172	-77,200	-20
E19	Electrical Services		1,787,000	341		1,787,000	341		1,888,250	373		1,888,250	373	-101,250	-31
E20	Vertical and Horizontal Transportation		1,500,000	287		1,500,000	287		410,000	81		410,000	81	1,090,000	206
E21	Special Services		321,000	61		321,000	61		592,325	117		592,325	117	-271,325	-56
E22	Drainage		119,000	23		119,000	23		224,850	44		224,850	44	-105,850	-22
E23	External Works		2,871,000	549		2,871,000	549		1,065,650	210		1,065,650	210	1,805,350	338
E24	Sundries		586,000	112		586,000	112		2,010,375	397		2,010,375	397	-1,424,375	-285
	Subtotal		**50,791,000**	**9,704**		**40,743,000**	**7,784**		**37,182,587**	**7,335**		**38,936,567**	**7,681**	**1,806,433**	**103**
E26	Preliminaries	14.3%	7,264,000	1,388	14.3%	5,827,000	1,113	12.0%	4,471,000	882	14.6%	5,697,000	1,124	130,000	-11
E27	Margin	7.6%	4,420,000	844	7.6%	3,546,000	677	6.3%	2,615,413	516	6.8%	3,024,733	597	521,267	81

Whangarei Vertical Infrastructure
1/07/2021

Beca Cost Advisory

Estimate Reconciliation		**A**			**B**			**C**			**D**		**B - D**	
		Beca May 2021			**Beca - Post Peer Review - 1/07/2021**			**RLB Dec 2019**			**RLB - Post Peer Review - 10/06/2021**		**Difference**	
		GFA	**5,234**		**GFA**	**5,234**		**GFA**	**5,069**		**GFA**	**5,069**		**165**
	%	**$**	**$/m2**	**%**	**$**	**$/m2**	**%**	**$**	**$/m2**	**%**	**$**	**$/m2**	**$**	**$/m2**
Subtotal (Physical Works)		**62,475,000**	**11,936**		**50,116,000**	**9,575**		**44,269,000**	**8,733**		**47,658,300**	**9,402**	**2,457,700**	**173**
Professional Fees	13.0%	8,107,000	1,549	13.0%	6,503,000	1,242	12%	5,375,000	1,060	12%	5,875,000	1,159	628,000	83
Consents and Insurances	2%	1,175,000	224	3%	1,270,000	243	1%	650,000	128	3%	1,510,000	298	-240,000	-55
Client Direct Costs	3%	1,687,500	322	3.4%	1,687,500	322	3%	1,250,000	247	2.6%	1,250,000	247	437,500	76
Escalation	5%	3,070,000	587	14%	7,000,000	1,337	4%	1,575,000	311	13%	5,958,500	1,175	1,041,500	162
Design Development Contingency	26%	16,430,000	3,139	8%	4,075,000	779	22%	9,616,000	1,897	3%	1,369,000	270	2,706,000	508
Construction Contingency				18%	9,105,000	1,740				26%	12,225,000	2,412	-3,120,000	-672
Rounding	0%	55,500	11	0%	243,500	47	0%	0	-	0%	-800	- 0	244,300	47
Escalation												-	0	0
TOTAL - Excluding Land Purchase		**93,000,000**	**17,768**		**80,000,000**	**15,285**		**62,735,000**	**12,376**		**75,845,000**	**14,963**	**4,155,000**	**322**
Land Purchase		**0**			**0**			9,300,000			9,300,000		-9,300,000	
TOTAL - Including Land Purchase		**93,000,000**	**#DIV/0!**		**80,000,000**	**#DIV/0!**		**72,035,000**	**#DIV/0!**		**85,145,000**	**#DIV/0!**	**-5,145,000**	**#DIV/0!**

Estimate Summary

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total	$/m2
	GFA:	5,234	m2			
E1	Site Preparation				1,749,000	334
E2	Substructure				6,694,000	1,279
E3	Frame				5,084,000	971
E4	Structural Walls				1,851,000	354
E5	Upper Floors				688,000	131
E6	Roof				1,734,000	331
E7	Exterior Walls and Exterior Finish				2,458,000	470
E8	Windows and Exterior Doors				109,000	21
E9	Stairs and Balustrades				659,000	126
E10	Interior Walls				1,387,000	265
E11	Interior Doors				244,000	47
E12	Floor Finishes				772,000	147
E13	Wall Finishes				1,010,000	193
E14	Ceiling Finishes				1,699,000	325
E15	Fittings and Fixtures				3,740,000	715
E16	Sanitary Plumbing				887,000	169
E17	Heating and Ventilation Services				2,000,000	382
E18	Fire Services				794,000	152
E19	Electrical Services				1,787,000	341
E20	Vertical and Horizontal Transportation				1,500,000	287
E21	Special Services				321,000	61
E22	Drainage				119,000	23
E23	External Works				2,871,000	549
E24	Sundries				586,000	112
	Subtotal (Physical Works)				**40,743,000**	**7,784**
E25	Design development contingency (10%)				4,075,000	779
E26	Preliminaries (13%)				5,827,000	1,113
E27	Margin (7%)				3,546,000	677

Estimate Summary

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total	$/m2
	Subtotal (Including on-costs)				**54,191,000**	**10,354**
E28	Professional fees (12%)				6,503,000	1,242
E29	Construction phase contingency (15%)				9,105,000	1,740
	Total (Including professional fees & contingencies)				**69,799,000**	**13,336**
E30	Escalation				7,000,000	**1,337**
E31	Consents and insurances				1,270,000	**243**
E32	Client direct costs				1,687,500	**322**
E33	Rounding				243,500	**47**
	Total out-turn cost estimate				**80,000,000**	**15,285**
	BASIS OF ESTIMATE					
	Drawings provided:					
	Beca comments on structural plans					
	Whangarei Vertical Infrastructure - Architecture					
	Roof structure					
	ASSUMPTIONS & EXCLUSIONS					
	Standard Exclusions:					
	Goods and services tax (GST)					
	Land acquisition costs					
	Finance / sales / marketing costs					
	Legal / accounting fees					
	Operational costs					
	Major market fluctuations					

Estimate Summary

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4

Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total	$/m2
	Noise mitigation during construction phase No allowance has been made for the impacts of extraordinary global events (such as the current COVID-19 outbreak) within the base estimate The estimate does not allow for the risk of a public health shut-down where social distancing measures are adopted, nor does it allow for the risk of indefinite suspension of projects due to unavailability of materials and/or labour due to restrictions in response to COVID-19 Project funding cost Land sub-division cost Sole source procurement routes for main contractor Decanting of existing residents or tenants Main infrastructure services / upgrades outside that allowed for in this estimate Repairs to adjacent existing buildings from any damage caused by any of the proposed works on site Repairs to adjacent existing infrastructure from any damage caused by any of the proposed works on site Boundary fencing and gates etc. other than site hoarding **Notes:** These are concept level estimates and as such are considered to reflect an accuracy range of -20% to +25%. If more accurate estimates are required (eg. for funding or similar), then further site investigation, engineering and architectural inputs will be required to enable these more accurate estimates to be prepared.					

Estimate Summary

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4

Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total	$/m2
	An design development contingency has been included at 10% in the estimate to cover items of unforeseen detail and design development. This contingency is expected to be converted to scope, and therefore should not be regarded as discretionary. The accuracy range indicated above reflects the accuracy after and including the estimating contingency. The estimate is inclusive of main contractors P&G @ 13% & margin @ 7%. We have allowed only for professional fees at 12% of the total construction costs. We have allowed for consents and insurances with the Event Centre estimate, with this allowance to cover the cost for other periphery elements of the development as estimated, including the Ferry Terminal, Bascule Bridge, Punga Grove Intersection, Promenade/Boardwalk and buffer/surge tank. Elements of cost included within this estimate are based on costs from similar projects and other Beca cost benchmarks. **<u>Assumptions:</u>** Existing structures and buildings to be demolished contain asbestos, with a provisional allowance included in the estimate for this. Approximately 9% of the bulk excavation is contaminated (as per Cato Bolam report) and will need to be removed to an approved site (Hampton Downs). Significant ground water will be encountered during excavation due to the proximity to Hatea River as well as the tidal nature of the river.					

Estimate Summary

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4

Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total	$/m2
	Pile length of 20m for CHS steel driven piles. An allowance for unknown geotechnical conditions during piling has been included in the estimate. Ground beams, caps, slabs and other elements of the substructure have been assumed based on advice from design teams Additional framing has been allowed due to the maturity of the structural design and adjustments to account for inconsistency between the Structural and Architectural drawings provided. Frame excludes glulam or exposed timber structure as not shown on Structural drawing set. If required then this will increase cost for framing local to this area. Roof light sizes have been assumed based on indicative size and location indicated Operable wall assumed for panel storage area. Floor finishes assumed by functional area - timber veneer floor coverings assumed for foyer and conference / event areas. Acoustic panels to perimeter of event space has been allowed for acoustic performance. Feature walls have been allowed to cafe and foyer Ceiling finishes have been assumed per functional area Fittings, fixtures and equipment for kitchens, entrance foyer, meeting rooms, office areas, storage areas, dresser rooms, pre-function area have been assumed an allowed in the estimate. Stage, tables and chairs assumed and allowed for event space area					

Estimate Summary

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4

Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total	$/m2
	Acoustic operable walls allowed to create break-out spaces in event space area - assumed 4m height. Retractable seating with drop down mechanism for below G level area assumed - risk item dependent on exact operation required. Building services allowances have been made based on benchmarks in the absence of services design to inform the estimate. Extent of paving, roading and planting assumed for external works to events centre. Existing Riverside Drive Pohutukawa planter beds assumed retained with new soil/mulch to surface only. Outdoor seating and freestanding planters assumed. Allowance of $200K for sculptures/artwork. Client costs have been assumed as the exact involvement is yet to be determined. Estimate assumes procurement approach with WDC as project owner, with control over design, programme and the like. It is assumed that all of the work will be undertaken by a single 'Main Contractor' through a single contract for the project. It is assumed that a robust tendering process will be followed and that a competitive process with commercial tension between bidders will be in place as part of the agreed procurement process. It is assumed that all works are carried out during normal daytime working hours for the Event Centre and areas within the site of the Event Centre. It is assumed that all work will be carried out in minimal phases, in line with the indicative programme					

Estimate Summary

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4

Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total	$/m2
	It is assumed that the contractor will have unobstructed access to the whole site throughout the construction phase. All base prices are current to 2nd quarter 2020. A construction escalation allowance has been included in line with the Beca indicative programme whereby construction of the events centre is complete in Jan 2024. Professional fees and consent fees are to be developed and subsequently an allowance has been applied to the estimate to cover these anticipated costs. **Disclaimer:** This estimate is solely for the purpose for which it is intended in accordance with the agreed scope of work. It may not be disclosed to any person other than specified or to which Beca has not given its prior written consent. This report must be read in its entirety and no portion of it should be relied upon without regard to the full report, especially the assumptions, limitations and disclaimers set out in the estimate notes and elsewhere. While the Cost Manager believes that the use of the assumptions, as set out elsewhere, are reasonable for the purposes of this study, the Cost Manager makes no assurances with respect to the accuracy of such assumptions and some may vary significantly due to unforeseen events and circumstances. To the extent that the conditions differ from those assumed in this report, the opinions expressed by the Cost Manager in this report may no longer be valid and should be reviewed.					

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E1	**Site Preparation**				
	Demolition				
E1.1	Allowance to demolish existing buildings on-site	1	Sum	150,000.00	150,000
E1.2	Extra over allowance to remove asbestos from existing buildings - Provisional Sum	1	PSum	100,000.00	100,000
	Site Clearance				
E1.3	Allowance to clear site	3,384	m2	15.00	50,765
	Bulk Excavation Incl. Basement Excavation				
E1.4	Allowance to excavate to reduced levels - assumed 0.5m across building footprint in addition to basement excavation	9,191	m3	9.50	87,315
E1.5	Extra over for tipping of non contaminated material including travel time - assumed local tip site	10,022	m3	35.00	350,770
E1.6	Extra over for asbestos contaminated fill including travel time - assumed truck and trailer can be utilised to Hampton Downs - allowed as per Cato Bolam report - Provisional Sum	900	m3	225.00	202,500
E1.7	Allowance for specialist license Asbestos removal during the surface layer of topsoil being removed - Provisional Sum	1	Psum	40,000.00	40,000
	Bulk Filling and Consolidation				
E1.8	Allowance for imported fill to make up levels - assumed 1m average to CEC site (less basement area)	4,311	m3	120.00	517,320
	Diversion/Termination of existing services, water courses, etc.				
	No diversions required		*Note*		
	De-watering				
E1.9	Allowance for de-watering during excavation	1	Sum	250,000.00	250,000
E1.10	Rounding	1	Sum	330.55	331

Estimate Details

Beca
Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E1	**Site Preparation**				*(Continued)*
	Subtotal				**1,749,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E2	**Substructure**				
	Piling				
	Piling including all necessary mobilisation, testing, producer statements, de-mobilisation				
E2.1	Mobilisation/de-mobilisation of piling rig	1	Sum	150,000.00	150,000
E2.2	Allowance for 610mm CHS driven piles - assumed 20m	1,400	m	750.00	1,050,000
E2.3	Pile Mat - allow for 500 thick hard-fill	2,543	m2	60.00	152,580
E2.4	Allow to dispose off site 20% of pile mat material - assume balance used in substructure	1,272	m2	10.00	12,715
E2.5	Allowance for unknown geotechnical conditions (Provisional Sum)	1	PSum	500,000.00	500,000
	Strip foundations, incl. excavation, concrete, formwork and reinforcement				
	40 MPa concrete 250kg / m3 reinforcement				
E2.6	400W x 650D ground beam	1,157	m	670.00	774,902
	Isolated base foundations, incl. excavation, concrete, formwork and reinforcement				
	40 MPa concrete 250kg / m3 reinforcement				
E2.7	900Lx900Wx900D pile cap	70	No.	1,310.00	91,700
	Concrete in floor slabs on grade, incl. reinforcement, hard-filling and damp proof membrane				
	40MPa concrete slab with 15kg / m2 reinforcement				
E2.8	300mm thick RC slab	2,123	m2	400.00	849,200
	Additional filling under slabs				
E2.9	Inc.		m3		
	Under-slab service ducts, incl. excavation, concrete, formwork, reinforcement and duct covers				
E2.10	Allowance for service ducts below slabs - formation works only - ducts etc measured elsewhere	1	Sum	75,000.00	75,000

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E2	**Substructure**				*(Continued)*
E2.11	Allowance for forming rebates in slabs	1	Sum	100,000.00	100,000
	Lift pits, incl. excavation, concrete, formwork and reinforcement				
E2.12	Allowance for lift pits	1	Sum	446,000.00	446,000
	Tanking, incl. protection				
E2.13	Allowance for tanking to basement walls, basement floors and ground floors	3,293	m2	170.00	559,810
	Bulk filling around basement walls				
E2.14	Allowance to fill back basement walls	2,926	m3	120.00	351,120
	Temporary ground retainment				
	Piling including all necessary mobilisation, testing, producer statements, de-mobilisation				
E2.15	Mobilisation/demobilisation of piling rig	1	Sum	150,000.00	150,000
E2.16	Allowance for sheet piling - assumed 8m deep	260	m	5,500.00	1,430,111
E2.17	Rounding	1	Sum	862.08	862
	Subtotal				**6,694,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E3	**Frame**				
	Concrete beams, incl. reinforcement, formwork and fair-face finish				
	40mpa with temporary formwork				
E3.1	800w x 800d reinforced concrete beam (HD25)	68	m	1,300.00	88,400
	40mpa precast concrete				
E3.2	200mm rib	1,163	m	140.00	162,820
	Structural steel in columns				
E3.3	200x9 SHS	1,005	kg	6.80	6,834
E3.4	200x10 SHS	4,432	kg	6.80	30,138
E3.5	250x10 SHS	7,661	kg	6.80	52,095
E3.6	310UC158	34,365	kg	6.80	233,682
E3.7	Allowance for secondary steel not detailed - 30%	14,239	kg	6.80	96,825
E3.8	Extra value plates, connections, bolts etc. 20%	12,340	kg	12	148,085
E3.9	Extra value priming and intumescent paint to steel beams - assumed all steel	821	m2	75	61,575
E3.10	Extra value for topcoats to steel - assumed 50% exposed	411	m2	50	20,525
	Structural steel in beams				
E3.11	310UB96	1,128	kg	6.80	7,670
E3.12	410UB60	2,865	kg	6.80	19,482
E3.13	460UB82	5,980	kg	6.80	40,664
E3.14	530UB92	7,374	kg	6.80	50,143
E3.15	610UB101	10,041	kg	6.80	68,279
E3.16	610UB113	7,270	kg	6.80	49,436
E3.17	610UB125	4,660	kg	6.80	31,688
E3.18	300 PFC	1,350	kg	6.80	9,180
E3.19	DB25 (20mm bracing system)	2,011	kg	6.80	13,675
E3.20	150x10 EA	684	kg	6.80	4,651
E3.21	Allowance for secondary steel not detailed - 30%	13,009	kg	6.80	88,461
E3.22	Extra value plates, connections, bolts etc. 20%	11,274	kg	12	135,293

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E3	**Frame**				*(Continued)*
E3.23	Extra value priming and intumescent paint to steel beams - assumed all steel	1,362	m2	75	102,150
E3.24	Extra value for topcoats to steel - assumed 50% exposed	681	m2	50	34,050
E3.25	Allowance for structural steel frame, connections, fire protection and topcoats; to support precast walls and rain screen cladding	2,563	m2	329.00	843,227
E3.26	Allowance for structural steel frame, connections, fire protection and topcoats; to support operable walls	266	m2	329.00	87,514
	Steel trusses				
E3.27	150x9 SHS	4,650	kg	6.80	31,620
E3.28	460UB82	79,621	kg	6.80	541,423
E3.29	150x90x10 UA	51,919	kg	6.80	353,049
E3.30	150x90x10 UA	19,656	kg	6.80	133,661
E3.31	Allowance for secondary steel not detailed - 30%	46,754	kg	6.80	317,926
E3.32	Extra value plates, connections, bolts etc. 20%	40,520	kg	12	486,240
E3.33	Extra value priming and intumescent paint to steel beams - assumed all steel	4,484	m2	75	336,300
E3.34	Extra value for topcoats to steel - assumed 50% exposed	2,242	m2	50	112,100
	Timber roof frame members				
E3.35	Allowance for timber framing to underside of roofing	3,120	m2	50.00	156,010
	Steel roof frame members				
E3.36	150x15 purlin	165	m	40.00	6,600
E3.37	200x15 purlin	3,051	m	40.00	122,040
E3.38	Rounding	1	Sum	492.38	492
	Subtotal				**5,084,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E4	**Structural Walls**				
	Concrete walls, incl. reinforcement, formwork and fair-face finish				
E4.1	200mm precast basement wall - internal walls	886	m2	420.00	372,120
E4.2	300mm precast basement wall - external walls	1,156	m2	630.00	728,280
E4.3	200mm precast wall - internal	1,785	m2	420.00	749,700
E4.4	200mm precast wall - external - included under exterior walls and exterior finishes	Inc.	m2	520.00	0
E4.5	Rounding	1	Sum	900.00	900
	Subtotal				**1,851,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E5	**Upper Floors**				
	Proprietary type floors, incl. reinforcement, formwork and concrete topping				
	Hollow core with 40mpa reinforced concrete topping slab				
E5.1	200mm hollow core with 150mm topping slab	1,593	m2	340.00	541,477
	40mpa reinforced concrete topping slab				
E5.2	120mm topping slab to ribs	1,046	m2	140.00	146,440
E5.3	Rounding	1	Sum	82.80	83
	Subtotal				**688,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E6	**Roof**				
	Roof coverings				
E6.1	Roof coverings with pitches not exceeding 5 degrees - Warm Roof	2,132	m2	270.00	575,640
E6.2	Roof coverings with pitches not exceeding 5 degrees - BOH Green Roof	341	m2	850.00	289,850
E6.3	Roof coverings with pitches not exceeding 5 degrees - Cafe Roof	505	m2	300.00	151,500
E6.4	Roof coverings with pitches not exceeding 5 degrees - Tech Room Roof	260	m2	300.00	78,000
E6.5	Roof coverings with pitches not exceeding 5 degrees - Shade Box and Light Box Roof	37	m2	300.00	11,100
E6.6	E/O for flashings and the like	3,274	m2	15.00	49,110
	Eaves facing and soffits, incl. supporting framing				
E6.7	Soffit cladding to exposed roof-sheeting	369	m2	620.00	228,780
	Verge facing and soffits, incl. supporting framing				
E6.8	Panel cladding to sides of roof	318	m	310.00	98,580
	Secret or parapet gutter, incl. supporting framing				
E6.9	Allowance for parapet gutter to roof	194	m	350.00	67,900
	Gutters and downpipes				
E6.10	300mm diamond box pre-painted aluminum gutter installed with internal fixing brackets	55	m	275.00	15,125
	Downpipes				
E6.11	Allowance for downpipes	134	m	250.00	33,500
	Roof Lights, incl. frames, up-stands, flashings and linings				
E6.12	Skylights - design and sizes TBC	5	No.	20,000.00	100,000

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E6	**Roof**				*(Continued)*
	Roof walkway system				
E6.13	Provisional allowance for MonkeyToe aluminum walkway system	99	m2	350.00	34,650
E6.14	Rounding	1	Sum	264.66	265
	Subtotal				**1,734,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E7	**Exterior Walls and Exterior Finish**				
	Precast concrete wall panels, including integral finishes				
E7.1	200mm precast wall - external	1,120	m2	520.00	582,400
	Rain screen cladding system fixed to framework (framework members elsewhere measured)				
E7.2	Rain screen cladding system	520	m2	700.00	364,000
	Curtain wall supporting framework comprising structural steel mullions, fixed to a bottom- and top rail complete				
E7.3	Pre-finished aluminum framed curtain wall system with clear laminated safety glass	749	m2	1,700.00	1,273,300
E7.4	Extra over for automatic bi-parting doors	2	No.	10,000.00	20,000
	Sunscreen louvre panels				
E7.5	Allowance for decorative sunscreen panel louvers to facade	218	m2	1,000.00	218,000
E7.6	Rounding	1	Sum	300.00	300
	Subtotal				**2,458,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E8	**Windows and Exterior Doors**				
	Solid core exterior door, including frame and hardware				
E8.1	910 x 2100mm high single solid core timber door	4	No.	7,000.00	28,000
E8.2	2200 x 2400mm high double solid core timber door	1	No.	10,500.00	10,500
	Roller shutter, folding or tilt doors, complete with all trim, fixings, special supports and the like				
E8.3	Allowance for roller-shutter door to loading area	1	No.	70,000.00	70,000
E8.4	Rounding	1	Sum	500.00	500
	Subtotal				**109,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E9	**Stairs and Balustrades**				
	Stairs				
E9.1	Internal stair including treads, balustrades, handrails etc. - straight	1	Sum	130,000	130,000
E9.2	Internal stair including treads, balustrades, handrails etc. - u shaped	1	Sum	173,000	173,000
E9.3	Allowance for small stairs to stages	2	No.	7,500.00	15,000
	Handrails				
E9.4	Inc.		*Note*		
	Balustrades				
E9.5	Glazed balustrades to mezzanine	21	m	2,000.00	42,000
E9.6	Allowance for balustrade to catwalk	556	m	250.00	138,970
	Cat ladders and cat walks				
E9.7	Allowance for catwalk to upper floor level	456	m2	350.00	159,602
E9.8	Rounding	1	Sum	428.45	428
	Subtotal				**659,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E10	**Interior Walls**				
	Operable walls and relocatable screens				
E10.1	Operable panel board wall, including all necessary framing, accessories and tracks	266	m2	1,500.00	399,000
E10.2	Operable walls to meeting rooms	127	m2	650.00	82,550
	Timber framed partitions				
E10.3	Full height timber framed wall, 140mm wide bottom plate and 1 No. layer of 13mm GIB standard plasterboard and paint on both sides	624	m2	230.00	143,520
	Strapping behind linings				
E10.4	Allowance for timber strapping to concrete walls including plaster board, stopping, paint and finishing trims	4,947	m2	120.00	593,640
	Interior shop fronts				
E10.5	Allowance for internal glazed shop-front to pre-function / cafe	101	m2	1,200.00	121,200
	Laminated cubicle system complete with supports and hardware. Stainless steel self opening hinges. including wall stiles and doors				
E10.6	2000mm wide x 2200mm high partition (toilet cubicle)	18	No.	2,600.00	46,800
E10.7	Rounding	1	Sum	290.00	290
	Subtotal				**1,387,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E11	**Interior Doors**				
	Internal timber door and frame, including hardware, non fire rated				
E11.1	920 x 2100mm high	12	No.	4,500.00	54,000
E11.2	1620 x 2100mm high	17	No.	6,000.00	102,000
	Internal swing double door to kitchen, including hardware				
E11.3	1620 x 2100mm high	2	No.	8,000.00	16,000
	Internal timber door and frame, fire rated				
E11.4	920 x 2100mm high	12	No.	6,000.00	72,000
E11.5	Rounding	1	Sum	0.00	0
	Subtotal				**244,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E12	**Floor Finishes**				
	Floor finishes and coverings				
E12.1	Allowance for carpet floor coverings	514	m2	125.00	64,250
E12.2	Allowance for tile floor coverings	117	m2	320.00	37,440
E12.3	Allowance for vinyl floor coverings	378	m2	190.00	71,820
E12.4	Allowance for timber floor coverings	1,923	m2	250.00	480,750
E12.5	Allowance for floor covering to stage area	235	m2	150.00	35,250
E12.6	Allowance for concrete seal	910	m2	20.00	18,200
	Floor finishes and coverings to stairs and intermediate landings				
E12.7	Allowance for floor coverings to stairs and landings at foyer	27	m2	300.00	8,100
	Junction strips, nosings and the like				
E12.8	8mm aluminum straight edge trims	54	m	28.00	1,512
	Provisional allowances				
E12.9	Allowance for stair nosing to stairs	259	m	39.00	10,101
E12.10	Allowance for entrance mat to foyer	46	m2	950.00	43,700
E12.11	Rounding	1	Sum	877.00	877
	Subtotal				**772,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E13	**Wall Finishes**				
	Wall linings and finishes				
E13.1	E/O allowance for wall tiling to ablutions	521	m2	420.00	218,820
E13.2	E/O allowance for splash-back to kitchen	154	m2	420.00	64,680
E13.3	E/O allowance for acoustic paneling to event space room	1,252	m2	500.00	626,000
	Provisional Allowance				
E13.4	Allowance for feature wall to cafe	1	PSum	40,000.00	40,000
E13.5	Allowance for feature wall to foyer	1	PSum	60,000.00	60,000
E13.6	Rounding	1	Sum	500.01	500
	Subtotal				**1,010,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E14	**Ceiling Finishes**				
	Ceiling linings and finishes				
E14.1	Allowance for timber veneer fire rated panels with acoustic backing	1,076	m2	850.00	914,600
E14.2	Allowance for suspended baffled ceilings	856	m2	510.00	436,560
E14.3	Allowance for GIB aqua-line suspended plasterboard ceiling	466	m2	200.00	93,200
E14.4	Allowance for standard GIB suspended plasterboard ceiling	767	m2	150.00	115,050
E14.5	Allowance for suspended ceiling	708	m2	140.00	99,120
	Provisional Allowance				
E14.6	Allowance for vertical and horizontal bulkheads	1	Sum	40,000.00	40,000
E14.7	Rounding	1	Sum	470.00	470
	Subtotal				**1,699,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

E15 Fittings and Fixtures

Code	Description	Quantity	Unit	Rate	Total
	Fixtures, furniture and equipment				
E15.1	Allowance for fit-out to cleaner's room	1	Sum	10,000.00	10,000
E15.2	Allowance for fit-out to kitchen	1	Sum	450,000.00	450,000
E15.3	Allowance for fit-out to entrance foyer	1	Sum	141,000.00	141,000
E15.4	Allowance for fit-out to meeting rooms	1	Sum	40,000.00	40,000
E15.5	Allowance for fit-out to office areas	1	Sum	15,000.00	15,000
E15.6	Allowance for fit-out to storage areas	1	Sum	25,000.00	25,000
E15.7	Allowance for fit-out to dresser rooms	1	Sum	40,000.00	40,000
E15.8	Allowance for fit-out to pre-function area	1	Sum	200,000.00	200,000
E15.9	Allowance for stage, tables and chairs to event space area	1	Sum	231,000.00	231,000
E15.10	Allowance for acoustic operable walls to create break-out spaces in event centre	1	Sum	1,100,000.00	1,100,000
	Theater hall				
E15.11	Allowance for seating, seating structure and coverings to theater hall	1	Sum	878,000.00	878,000
E15.12	Allowance for relocatable stage to theater hall	1	Sum	250,000.00	250,000
	Miscellaneous hardware				
E15.13	Allowance for miscellaneous hardware and furniture	1	Sum	60,000.00	60,000
E15.14	Allowance for cool stores and ambient cool rooms in kitchen	1	Sum	15,000.00	15,000
	Signage				
E15.15	Allowance for signage to light box and other miscellaneous signage	1	Sum	285,000.00	285,000
E15.16	Rounding	1	Sum	0.00	0
	Subtotal				**3,740,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E16	**Sanitary Plumbing**				
	Incoming water supply, including meters, valves, connections and insulation				
E16.1	Allowance for hot/cold water reticulation and waste water pipework	5,234	m2	130.00	680,420
	Sanitary fittings, sinks and bowls, including associated taps, traps and valves				
E16.2	Allowance for accessible wash hand basin	2	No.	3,500.00	7,000
E16.3	Allowance for accessible water closet (including flush valve)	2	No.	5,000.00	10,000
E16.4	Allowance for wash hand basin	18	No.	4,000.00	72,000
E16.5	Allowance for water closet	24	No.	4,000.00	96,000
E16.6	Allowance for grease trap to kitchens	2	No.	2,500.00	5,000
E16.7	Allowance for cleaner's sink	1	No.	2,500.00	2,500
E16.8	Allowance for shower and accessories to bathrooms at dresser rooms	4	No.	2,600.00	10,400
E16.9	Allowance for sinks to kitchen areas	2	No.	1,500.00	3,000
E16.10	Rounding	1	Sum	680.00	680
	Subtotal				**887,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E17	**Heating and Ventilation Services**				
	General allowances				
E17.1	Allowance for HVAC services	1	Sum	2,000,000.00	2,000,000
E17.2	Rounding	1	Sum	0.00	0
	Subtotal				**2,000,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E18	**Fire Services**				
	General allowances				
E18.1	Allowance for fire services	1	Sum	794,000.00	794,000
E18.2	Rounding	1	Sum	0.00	0
	Subtotal				**794,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E19	**Electrical Services**				
	General allowances				
E19.1	Allowance for electrical services	1	Sum	1,787,000.00	1,787,000
E19.2	Rounding	1	Sum	0.00	0
	Subtotal				**1,787,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E20	**Vertical and Horizontal Transportation**				
	Passenger/goods lifts				
E20.1	Glazed passenger lift	1	No.	410,000.00	410,000
E20.2	Standard passenger lift	1	No.	270,000.00	270,000
E20.3	Goods lift	1	No.	320,000.00	320,000
E20.4	Floor lifts / stage lifts - Provisional Sum	1	Psum	500,000.00	500,000
E20.5	Rounding	1	Sum	0.00	0
	Subtotal				**1,500,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E21	**Special Services**				
	General allowances				
E21.1	Allowance for special services	1	Sum	321,000.00	321,000
E21.2	Rounding	1	Sum	0.00	0
	Subtotal				**321,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E22	**Drainage**				
	General allowances				
E22.1	Allowance for general drainage	1	Sum	119,000.00	119,000
E22.2	Rounding	1	Sum	0.00	0
	Subtotal				**119,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E23	**External Works**				
	Excavation to paths and roads				
E23.1	Allowance to excavate to reduced levels for - allowed for 5x6x32m	1,426	m3	9.50	13,547
E23.2	Extra over for tipping of non contaminated material including travel time - assumed local tip site	1,216	m3	35.00	42,560
E23.3	Extra over for asbestos contaminated fill including travel time - assumed truck and trailer can be utilised to Hampton Downs - allowed 0.1m surface excavation only - Provisional Sum	241	m3	225.00	54,225
	Roads				
E23.4	Allowance for access road from Riverside Drive to loading dock	989	m2	180.00	178,058
E23.5	Allowance for pavement markings	1	Sum	2,000.00	2,000
	Kerb and channel				
E23.6	Kerb, channel and subsoil drain to both side of the road	631	m	110.00	69,410
	Paths, terraces and paved areas				
E23.7	Permeable pavers to exterior of Event Centre - assumed no excavation required due to filling required to make up levels across the site	1,779	m2	700.00	1,245,643
E23.8	Allowance for drainage to exterior of Event Centre	1	Sum	100,000.00	100,000
E23.9	Footpath to exterior of Event Centre	369	m2	110.00	40,590
E23.10	3m wide concrete new pedestrian footpath to Riverside Drive	1,050	m2	110.00	115,500
	Site retaining walls				
E23.11	0 - 3m high timber pole cantilever walls to load bay entrance - assume average 2m height exposed	30	m	2,450.00	73,500
	Screen walls and fencing				
E23.12	Allowance for new boundary fence to Riverside Drive frontage	154	m	500.00	77,195

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E23	**External Works**				*(Continued)*
	Planting				
E23.13	Planter beds including top soil (non-rain-garden type) to boardwalk frontage and adjacent to loading dock including low level planting	368	m2	80.00	29,420
E23.14	Planter beds to Riverside Drive frontage - existing retained, allowance for new soil and mulch only	804	m2	25.00	20,107
E23.15	Allowance for relocated Pahutukawa trees	2	No.	25,000.00	50,000
E23.16	Allowance for outdoor planter boxes including plants	1	Sum	26,000.00	26,000
E23.17	Allowance to protect existing Pohutukawa during construction	1	Sum	20,000.00	20,000
E23.18	12 month maintenance of planting areas	368	m2	8.00	2,944
	Seats, furniture and the like				
E23.19	Allowance for outdoor seating	1	Sum	36,000.00	36,000
	Sea Wall Remediation or Land Improvement				
E23.20	Allowance to improve land condition to front of CEC only - risk item for seawall in seismic conditions - excluded in this estimate, see separate allowance	Excluded	Sum		0
	Storm-water drains				
	Excavation				
E23.21	Allowance to excavate to reduced levels for tank - allowed for 5x6x32m	624	m3	9.50	5,928
E23.22	Extra over for tipping of non contaminated material including travel time - assumed local tip site	544	m3	35.00	19,040
E23.23	Extra over for asbestos contaminated fill including travel time - assumed truck and trailer can be utilised to Hampton Downs - allowed 0.1x32m for surface excavation only - Provisional Sum	16	m3	225.00	3,600
	Piles				

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E23	**External Works**				*(Continued)*
E23.24	Allowance for 1000mm CHS driven piles - assumed 20m	192	m	1,200.00	Excl.
	Footing and pads				
E23.25	1000w x 450D ground beam	56	m	780	Excl.
E23.26	2500Lx2500Wx1250D pile cap	4	No.	11,120	Excl.
	Slab				
E23.27	300mm thick RC slab	160	m2	400	Excl.
	Tanks				
E23.28	300,000l/300m3 (3.5m diameter and 32m long) buffer/surge tank	1	Sum	312,000.00	Excl.
	Pipes				
E23.29	225mm AC pipe, gravity draining; depth ranging 1-1.5m	400	m	330.00	132,000
E23.30	225mm AC pipe, gravity draining; depth ranging 2m-2.5m	450	m	390.00	175,500
	Manholes				
E23.31	Allowance for new manholes; depth ranging 1-1.5m	5	No.	5,500.00	27,500
E23.32	Allowance for new manholes; depth ranging 2m-2.5m	5	No.	7,000.00	35,000
	External Lighting				
E23.33	Allowance for external lighting	1	Sum	125,000.00	125,000
	Traffic management				
E23.34	Traffic management allowance	1	Sum	150,000.00	150,000
E23.35	Rounding	1	Sum	732.95	733
	Subtotal				**2,871,000**

Estimate Details

Beca Cost Advisory

Project: Oruku Landing **Details:** Rev 4
Building: Conference Events Centre

Code	Description	Quantity	Unit	Rate	Total
E24	**Sundries**				
	Canopies				
E24.1	Allowance for canopies to loading dock	1	Sum	55,000.00	55,000
E24.2	Allowance for screening of plant and the like	1	Sum	170,000.00	170,000
	Sculptures and artwork				
E24.3	Allowance for sculptures / artwork - Provisional Sum	1	Sum	200,000.00	200,000
	Curtains and blinds				
E24.4	Allowance for curtain drop to stage area	1	Sum	161,000.00	161,000
E24.5	Rounding	1	Sum	0.00	0
	Subtotal				**586,000**

A2

Appendix 2 – Consent Reviews

Memorandum

Oruku Landing – Concept Design Risk Review			
To	File	Date	06 May 2021
From	Leon Keefer	Our Ref	4242638-893458273-34
Other Contributors	Blair Masefield		
Planning Assessment			

1 Introduction

A review of the concept design and submitted resource consent application for the above project was completed to inform this consenting risk analysis of the resource consent process for the establishment of the Oruku Conference and Events Centre (CEC).

This review was based on the following documents:

Report	Author	Date
Assessment of Environmental Effects	Reyburn and Bryant	March 2021
Rules Assessment	Reyburn and Bryant	March 2021
Archaeological Assessment	Geometria Ltd	26 September 2019
Ecological Report	4Sight	8 October 2019
Ground Contamination Assessment	Tonkin and Taylor	January 2020
Acoustics Assessment	Marshall Day Acoustics	21 January 2020
Traffic Impact Assessment	Engineering Equilibrium	11 February 2020
Cultural Impact Assessment	Ngāti Kahu O Torongare Te Parawhau	12 February 2020
Flood Hazard Report	Tonkin and Taylor	18 March 2020
Coastal Processes Impact Assessment	4Sight	26 June 2020
Engineering and Infrastructure Feasibility Report	Cato Bolam	9 July 2020
Landscape and Visual Assessment	Bridget Gilbert	July 2020
Concept Design Drawing Set	HB Architecture	17 January 2020
Marina Drawing Set	Total Marine Services Ltd	30 September 2020
Subdivision Application	Reyburn and Bryant	29 March 2021

Memorandum

Priorities for any review actions are assessed using the following:

U/ Urgent - show stopper for project. Decision / action required immediately.

H/High - very important for project (must have). Action to address or provide direction before starting next project stage.

M/Medium - important for the project (must have). Action in the next project stage(s) and should be addressed as part of good project practices.

L/Low - somewhat important (nice to have). Note for future stages if budget, schedule etc allows.

2 Findings

As at the date of this Memo, the resource consent applications for the Conference and Events Centre (CEC) proposal and subdivision have been lodged with the Environmental Protection Authority (EPA) and Whangarei District Council (WDC) respectively.

2.1 Subdivision Application via WDC

The subdivision application seeks to split the site from one existing lot into 4 proposed lots. The proposal is staged, and Stage 1 provides for a 2-lot subdivision to create a title that appears to wholly contain the CEC. The site zoning is Waterfront and subdivisions exceeding the minimum lot size of 100m^2 are controlled activity consents that must be granted. The four lots significantly exceed this area; however, the application is discretionary as it is not proposed to connect to 3 Waters infrastructure due to the intended subsequent site redevelopment.

Based on a discussion with the WDC Consents Manager, on a without prejudice basis, it is reasonable to assume that the subdivision consent is able to be granted with no conditions that require physical works (e.g. vehicle crossings or 3 Waters connections) in order for the title to be issued. Based on recent experience of subdivisions that do not require physical works, Title issue is achievable within 3-6 months of the granting of subdivision consent.

If the subdivision is granted with the requirement for physical works, then the scope and timeframe for works would need to be assessed. A programme allowance of 3-9 months is suggested.

The Stage 1 boundary shown on the Scheme Plan is irregular. This does not align with the regular line between the Hotel and CEC Plaza on the Overall Site Plan (Dwg 24). A future boundary adjustment may be required to formalise this boundary.

2.2 CEC Application via EPA

The application to the EPA is for a comprehensive site re-development including the CEC, apartments, retail, a hotel, boardwalk, marina and ferry terminal. This has added complexity to assessing the consenting process and risks for just the CEC.

The scope of the proposal has not been specifically described in the AEE, so this had to be assumed based on a review of the plans, and the descriptions in the technical assessments. These have not all been consistent.

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There are two potential scenarios that have been considered for Risks and Opportunities in this assessment:

- Scenario 1: The lodged consent application under the EPA process is accepted for processing and granted with conditions; and
- Scenario 2: The lodged consent application under the EPA process is rejected at the s88 stage. WDC would then need to take ownership of the consent process and re-lodge with the EPA for the CEC as a stand-alone project. We assume this form of development would be accepted for processing due to the project being directly funded as a Covid Response initiative.

The two scenarios have different risks, and a have been assessed separately. The programme risks summarised in the tables below have also been **highlighted in blue**, due to the timeframes to which the project must adhere. The tables below are informed by more in-depth assessments of the relevant documents in the attachments.

Table 2.1. Scenario 1 – Fast Track consent is granted with conditions.

Item	Description / Mitigation *(if appropriate)*	Risk/ Gap / Opportunity	Priority (U/H/M/L)
	Fast track consent process removes programme risk and uncertainty of a consent process that under a Council-led process has a risk of being publicly notified	Opportunity	
	Decision and consent conditions may be a comprehensive set incorporating both the private aspects (Apartment / Hotel) and the CEC, making compliance and assigning responsibility to conditions challenging. *If this occurs the consent will need to be changed to split the relevant conditions apart. Council can make comments during the process and should seek to have the conditions separated out in the final decision.*	Risk	
	Gaps in technical information and assessments supplied in the resource consent application lead to onerous conditions. *Can be changed later via a s127 process if only 'technical' matters*	Risk / Gap	
	Application could lead to contradictory conditions. Discrepancies identified between AEE and: ■ Flood Hazard Assessment on applicability of coastal inundation and flooding risks ■ Cultural Impact Assessment/Infrastructure Report on stormwater treatment and infrastructure ■ Infrastructure report notes stormwater treatment necessary, but devices not provided for in any drawings or design notes	Risk / Gap	

Memorandum

	▪ Geotechnical Assessment on construction methods / site suitability *Can be changed later via a s127 process if only 'technical' matters*		
	The need for additional consents (particularly construction related) exists due to the application being based on a concept design	Risk / Gap	
	Cost implications of onerous conditions due to use of Fast Track process which precludes public participation or due to insufficient / unaligned assessments	Risk	
	Additional consents required for prerequisite and enabling infrastructure, including: ▪ Riverside Pump Station upgrade ▪ Pedestrian bridge *Could extend programme. Bridge could be contentious and potentially notified*	Risk / Gap	
	Potentially additional consent triggers not accounted for or applied for in the lodged fast track application, including: ▪ Diversion of (ground) water ▪ Discharge of contaminated groundwater ▪ Development within a coastal hazard zone ▪ Underwater noise from piling works for the Boardwalk ▪ Earthworks within the riparian management zone ▪ Stormwater discharges from earthworks requiring Discretionary Activity consent ▪ Height in relation to boundary infringements for the CEC ▪ Road lighting non-conformity with AS/NZS 1158 *Could extend programme.*	Risk / Gap	

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Table 2.2. Scenario 2 – Fast Track consent application is rejected under s88.

Item	Description / Mitigation *(if appropriate)*	Risk/ Gap / Opportunity	Priority (U/H/M/L)
	Re-lodging the application would require effort and time to reframe the application to be specific to the CEC. *Could extend programme if this takes too much time.*	Risk	
	Cost implications of onerous conditions due to use of Fast Track process remain.	Risk	
	The need for additional consents (particularly construction related) remains when basing an application on a concept design	Gap	
	Programme benefits of a fast-track process that precludes notification and public input and has narrow appeal scope remains.	Gap / Opportunity	
	There is an ability to comprehensively consent all known activities that trigger consent, or are required to enable the project	Opportunity	

3 Conclusions

There are two parallel resource consent processes running. The applications for the Conference and Events Centre (CEC) proposal have been lodged with the Environmental Protection Authority (EPA) and a 4-Lot subdivision of the site has been lodged with the Whangarei District Council (WDC).

The subdivision application is very low risk from a time and cost risk perspective. It is likely it will be granted and with no conditions requiring physical works to gain title to a site that appears to wholly contain the CEC. Title could be expected within 3 months of the granting of the consent.

The CEC application to the EPA is pending acceptance. We understand the EPA have asked the Councils four questions. It appears that subject to satisfactory responses it is more likely than not to be accepted for processing. The applicant has advised the EPA processing time is currently 7 months to a decision. While longer than the 45 days under the legislation, it still provides a positive time risk benefit compared to a Council led process that is open to delays from public notification and appeals.

The key risks of the EPA process are:

- Increased cost implications of conditions that may be more ‘onerous’ that might be expected via a Council-led process.
- A consolidated set of conditions being issued, which may make construction of the CEC alone complicated.

- Additional consents are likely required, to address activities that are required for the project, but not included in the application.

4 Assumptions

The assessments and conclusions made in this memo are based on the information provided and the following assumptions:

- As of 3 May 2021, the resource consent application for the CEC was being assessed for acceptance by the Environmental Protection Authority under the COVID-19 Recovery Act 2020 and the subdivision application to enable the CEC to be contained within a single title was being processed by the Whangarei District Council
- It is understood from the applicant, that decision timeframes under the COVID-19 legislation as currently taking 7 months.
- There is no clear description of the proposal, so this has been assumed based on a review of the plans and summaries in the Technical Assessments.
- If the current comprehensive site re-development proposal was rejected from the EPA process, a revision seeking only to consent the CEC would be accepted by the EPA.
- The application documentation provided is full, complete, and up to date.

Attachment 1 – Summary of Consent Application

The Assessment of Effects on the Environment and the Rules Assessment, both prepared by Rayburn and Bryant, were reviewed to understand the wider planning context of the proposal. These documents did not provide an overview of the proposal, nor a summary of activities and consents applied for. The table below has been prepared to clarify the activities and consents relevant to the fast-track consenting process and has been informed by reviews of the Rules Assessment.

Table 4.1. Summary of activities requiring resource consent, and which have been included in the application by Reyburn and Bryant.

RMA	Activities	Planning Documents	Activity Statuses
S9(1)	Disturbance of contaminated Soil	NES: CS	Restricted Discretionary
S9(2)	Earthworks	Operative RW&SP Proposed RP	Controlled Discretionary
S9(3)	Land Uses in Zones Road Transport / Car Parking Natural Hazards Noise and Vibration	Operative DP Proposed DP (Decisions)	Discretionary Discretionary

Memorandum

S11	Subdivision	*Not part of Fast Track Consent – undertaken separately.*	
S12	Structures Dredging Marinas Mangrove Removal	Operative RCP Proposed RP	Discretionary Non-complying
S15	Stormwater Discharges	Operative RW&SP Proposed RP	Controlled Permitted
S15	Discharge of contaminants (from disturbing soil)	Operative RW&SP Proposed RP	N/A? Controlled

Attachment 2 – Summary of Effects Assessments

The AEE concludes that, overall, there are less than minor adverse effects on all aspects of the environment assessed. This is largely corroborated by the conclusions of the appended expert technical assessments. Key conclusions from these assessments as they relate to 'effects' are set out in the table below.

Assessed Effect	AEE Assessment	Technical Assessment
Ecology	▪ Dredging for marina within a highly modified area adjacent to dredged area within river ▪ Small area of mangroves to be removed ▪ Disturbance of benthic sediment temporary – disturbed invertebrate populations could recover quickly ▪ Sediment quality includes elevated levels of copper and lead but not concerning levels ▪ Operation of marina will be aligned with best practice to minimise bacteriological and viral contamination ▪ Overall less than minor	▪ Elevated levels of zinc as well. Cu and Zn above "Threshold Effects Levels" and "Default Guideline Values", Pb mostly below ▪ Tributyltin (TBT), historically used as a biocide in boat antifoulants, also found ▪ Contaminants were greater concentration 'inshore', which is along the intertidal mark ▪ Dredging unlikely to result in measurable effects on ecological values ▪ Operation of marina unlikely to result in measurable effects on ecological values ▪ **Does not consider removal of intertidal zone as a permanent effect;**
Traffic / Parking	▪ Acknowledges shortfall of parking available for hotel guests, civic guests, and 'public' ▪ Events to be subject to Event Transport Management Plan by condition of consent	▪ Parking availability reliant on external car parks (839), 10 – 17 minutes walking distance ▪ Effects on network safety and efficiency will be less than minor

	▪ No adverse effects generated by parking shortfall ▪ Loading of coaches and trucks internalised on site ▪ Pedestrian access to be improved through boardwalk widening	▪ Proposes a new signalised intersection with Riverside Drive and Punga Grove Avenue to improve safety and access ▪ Drawings indicate a future pedestrian bridge across the Hatea River
Reticulated	▪ Wastewater network will require upgrade due to capacity restrictions at Riverside Drive P/S ▪ 'Less than minor effects' dependent on upgrade of the P/S, which is not part of the application ▪ No stormwater attenuation proposed or considered necessary ▪ 'Standard' treatment of stormwater from paved areas	▪ Wastewater/greywater recycling may be part of the proposal – unclear ▪ Effects on wastewater network to be offset by development contributions ▪ Using Auckland Council GD-01 as stormwater treatment standard ▪ Identifies raingardens as primary treatment device for 'driving surfaces' ▪ Unclear if raingardens treat car parks as well
Noise and Vibration	▪ Wide range of activities and noise sources ▪ Typical activities including outdoor dining unlikely to exceed permitted standards ▪ Large-scale events (concerts etc) indoors will be subject to noise management plans ▪ Hotel/apartments to be sound insulated ▪ Construction noise / vibration largely from piling activities ▪ Effects minimal – no cosmetic or structural damage to buildings and all short term ▪ **No comment on underwater piling for boardwalk.**	▪ Main operational noise effect would be from loud music events, with bass-beat effects potential on ~4 dwellings on Punga Grove Ave ▪ End of event (nearing 10pm) noises likely to be more noticeable ▪ Effects 'reasonable' ▪ Outdoor events likely to result in wider catchment of receivers experiencing noise levels over PA standards ▪ Pedestrian and traffic noise following large events to be transitory ▪ **No comment on underwater piling for boardwalk.**
Cultural Values	▪ Cultural Impact Assessment prepared by Ngāti Kahu O Torongare Te Parawhau Hapū ▪ CIA sets out mitigation measures that are agreed to by the client ▪ Expect effects on cultural values to be positive	▪ Mitigation on effects to Mana Whenua and Mana Moana include retention of all stormwater (i.e. no discharge) ▪ Dredging/piling mitigation requires contaminated sediment to be disposed to an approved facility
Public Access to CMA	▪ Boardwalk likely to improve access / attraction to CMA ▪ Provision of marina to provide additional capacity for berthing	
Natural Hazards	▪ Assessment is framed as 'activity's effects on natural hazards' and states these will not be exacerbated ▪ Rules Assessment states no consent required as Engineering Report provides assessment ▪ Possible that final designs have taken recommendations of hazard report into account and amended accordingly	▪ Notes the site is subject to risks from rainfall events, coastal inundation, and overland flows from upper catchment ▪ Flood assessment undertaken in March 2020 – prior to site plans? Unclear if car parks are within flood zone ▪ Civic centre appears to be above predicted flood levels with more

Memorandum

		than 300mm freeboard out to 2120
Amenity Values / Landscape Character	▪ Effects noted to be extremely positive ▪ Assessment somewhat subjective ▪ Notes that some properties will have reduced view of the river ▪ Adverse effects are offset by the "improvement to visual amenity provided by the high quality of the Oruku Landing Development"	▪ Prominent features are bush-clad Parihaka, the River, ▪ Visual simulations not prepared in accordance with Best Practice but 'fit for purpose' ▪ Visual impacts on receivers assessed as low – very low ▪ No mention of any positive values of existing industrial/maritime character
Ground Contamination	▪ AEE limits discussion on ground contamination to NES and presence of asbestos ▪ Works to be undertaken in accordance with DSI and Site Management Plan;	▪ In addition to asbestos, DSI notes that elevated levels of copper also exist ▪ DSI recommends additional investigations are needed to determine contaminants in groundwater to support an application for resource consent (this has not been undertaken)
Earthworks	▪ In operative RP, earthworks stated to be outside of Riparian Management Zone – review of Regional Water and Soil plan indicates it is (5m adjacent to MHWS where slope is <8 degrees) ▪ No RMZ only where slope is 0 degrees or less (i.e. flows away from CMA) ▪ Requires discretionary activity consent under operative RP, rather than controlled ▪ Additionally, stormwater discharges from earthworks to become discretionary activity ▪ Temporary visual amenity to be minimal / typical of construction site ▪ Notes that best practice methods to control sediment will be used but does not describe these ▪ No erosion and sediment control plan;	▪ N/A
Hydrological / Coastal Processes	▪ Considers existing environment to be highly modified due to ongoing dredging for Town Basin marina and river channel ▪ Existing morphology not likely to change and any additional sedimentation can be managed through maintenance dredging	▪ MHWS @ 3m ▪ MSL @ 1.8m ▪ MLWS @ 0.5m ▪ Proposed dredging ~10-12% increase of total dredging within river ▪ Dredging for marine to create sediment sink, resulting in increased sedimentation rates within the area
Construction / Temporary Effects	▪ Piling likely to be the main source of vibration and construction noise ▪ All earthworks to require spoil taken off-site ▪ Laydown areas and stockpiles to be within proposed building footprints ▪ Minimal removal of trees to enable access and construction	▪

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Appendix 3 – CEC Building & Structures Review

Memorandum

Oruku Landing – Concept Design Risk Review			
To	File	Date	06 May 2021
From	Liz Richardson	Our Ref	4242638-893458273-34
Other Contributors	Krish Shekaran, Vijay Patel		
Memorandum – Structural Review			

1 Introduction

A high-level review of the structural design of the Event Centre at the Oruku Landing development has been undertaken based on the following documents:

- *Concept Structural Design Drawings and Report (Jan 2020) – Silvester Clark (Drawings stamped as Preliminary Design)*
- *Architectural Concept Design (17 Jan 2020) – Brewer Davidson*
- *Geotechnical Report (16 Jan 2020) – Tonkin Taylor*

Our review is based on the sketches, notes and design assumptions contained within these drawings and reports for the Events Centre only.

No calculations have been undertaken to verify the sizes and weights of structural elements noted in the drawings. Our comments seek to identify the key gaps, risks and opportunities of the current scheme and to provide an indication of an appropriate level of confidence in the structural design. We have also sought to identify areas where it would be prudent to investigate further or allow additional contingency to mitigate elevated levels of uncertainty

Priorities for any reviews actions to be assessed as:

U/ Urgent - show stopper for project. Decision / action required immediately.

H/High - very important for project (must have). Action to address or provide direction before starting next project stage.

M/Medium - important for the project (must have). Action in the next project stage(s) and should be addressed as part of good project practices.

L/Low - somewhat important (nice to have). Note for future stages if budget, schedule etc allows

Memorandum

2 Findings

2.1 General Observations.

Generally, it appears to be structurally feasible to build an Events centre of the scale and form of construction indicated in the architectural plans in the proposed location. However, the site does present particular challenges with respect to the design of the foundations and basement structure.

Upon review, our initial impression of the structural preliminary design is despite carrying matching issue dates, the mark ups are poorly coordinated with the architectural plans. Examples of this include inconsistencies in the footprint of the basement area and the type of cladding forming the building envelope in some areas, in addition to a number of smaller discrepancies.

The quality and completeness of the information provided in the structural preliminary design also falls short of some of the requirements as set out in the NZCIC Guidelines. For example, commentary around key risks / design issues, building movement deflections and construction methodology /considerations are not covered. There will also need to be some additional primary structure to provide adequate stability to the current structural scheme.

The following schedule provides more specific technical commentary of the Preliminary Structural Design

The following opportunities, gaps and risks were found:

Item	Description / Mitigation *(if appropriate)*	Risk/ Gap / Opportunity	Priority (U/H/M/L)
Foundations / Substructure			
1	Preliminary structural design based on very limited geotechnical investigation - 1 borehole in a reclaimed site with variable ground conditions – recommend more detailed geotechnical investigation is done as early as possible.	Risk / Gap	H
2.	Generally preliminary structural design is poorly coordinated with the architectural design. Mark ups are inconsistent and building envelope / cladding types are incorrect in some areas.	Gap	H
3	The foundation plan indicates piles under columns and strip foundations under some walls. The geotechnical report suggests the building should be supported on piles and the ground isn't suitable for shallow bearing foundations, it also indicates a high likelihood of liquefaction under a ULS earthquake. This would result in significant settlement for ground bearing structures. We would expect to see a lot more piles than shown in the preliminary foundation plan. There are no foundations shown under much of the load bearing structure.	Risk	H

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4	The geotechnical report suggests that ground-bearing slabs would require ground improvement works, alternatively they should be suspended. This isn't reflected in the foundation plan.	Risk	H
5	Pile caps should be tied together with ground beams (the design may have intended for the 450 thick rc slab to do this)	Gap	M
6	The structural report doesn't mention how lateral loads will be transferred into the ground. The geotechnical report states that lateral capacity of UC piles could be problematic and suggests 1000dia piles. It may be intended for lateral loads to be transferred through earth pressure on basement walls but the basement area is now smaller and eccentric that shown in the structural mark ups. This requires further exploration in the structural design. Eccentricity of the basement will also require consideration to ensure there is a robust lateral load path	Gap	H
7	Buoyancy may be an issue with the basement in the event space. Design ground water level at existing ground level. Not much structure above to weigh it down. Tension anchor piles may be required. Foundation plan notes that the basement structure has been designed for hydrostatic pressure, but the report or drawings make no reference to buoyancy.	Risk	H
8	Geotechnical report states that temporary or permanent cut off wall will be required for excavation of basement – this needs to be considered in costing. Sheet pile wall is the preferred option due to soft / soft / lose retained soils.	Risk	H
9	Impact of driving piles adjacent to existing sea wall needs to be considered. Already some evidence of loose boulders in sea wall.	Risk	H
10	Basement structure is close to sea wall in places, practicality / methodology for basement excavation needs to be considered.	Gap	H
11	It is assumed the architectural plan governs. i.e there is no basement carpark in the proposed scheme	Gap	H
12	Slab areas and foundations missing to loading dock and café area.	Gap	M

Memorandum

Superstructure

13	It is not clear from the structural report which structural elements form the lateral system. Elements do not appear to have direct load paths.	Gap	H
14	Podium level foyer slab has no basement below. Should be insitu construction.	Gap	M
15	Superstructure in general seems to be missing a lot of tie beams. Structural systems appear to be incomplete	Gap	H
16	Building envelope / cladding systems and corresponding structural support is not consistent with the architectural plans. There should be steel frame and secondary steelwork supports for corten rainscreen cladding to the back of house area.	Gap	H
17	Precast panels relatively thin (200mm thick / 7.5m span), will require steel subframe to resist out of plane loads	Gap	H
18	Tie beams and lateral system not apparent to café mezzanine level	Gap	H
19	Roof structure shown for back of house area doesn't account for the step-in level between technical space floor level and lower roof over back of house. Additional structure will be required in this location	Gap	M
20	Steel frame required around perimeter of loading dock and back of house area.	Gap	H
21	Floor slab and framing missing for toilets on mezzanine level adjacent to stairs.	Gap	M
22	No additional structure shown to support operable walls. These can be very heavy and can have tight tolerance and deflection requirements. This need to be considered in roof structural design.	Gap	M
23	Floor slab and framing missing to meeting rooms on mezzanine level as well as support to wall at higher level	Gap	M
24	Structural plan at catwalk level missing	Gap	M

25	Additional structure required to roof framing over café and chord ties for roof trusses.	Gap	M
26	Architect has specified timber beams over entrance area – inconsistent with steel trusses shown on structural plan.	Gap	M
27	Healthy allowance should be made for secondary steelwork – trimming beams, support to the Corten cladding, glazed facades, fixing and supports for precast walls, seating angles. No indication made on preliminary drawings	Risk	H

3 Structural Commentary

3.1 Foundations / Substructure

Based on the geotechnical report the preliminary structural design does not fully address the ground conditions. The existing ground is not good bearing strata and the ground water is high. This would require deep foundations (piles) across the footprint of the whole building and the stability and dewatering of the basement excavation will be more challenging. Whilst it does appear that a suitable piling scheme and basement construction methodology can be developed, the cost of the foundations and substructure are likely to be significantly higher than the current preliminary structural design would suggest.

3.2 Superstructure

Generally, the superstructure is not particularly robust i.e there are a number of vertical elements that aren't adequately tied in two-directions. Some floor areas and framing appear to be missing from the structural mark ups. Structural frames are required to most of the perimeter walls of the event space and back of house area but are not currently indicated on the plans.

The proposed gravity scheme can be made to work, subject to some supplementary structure and rationalisation of load paths.

Rationalising suspended floor systems would also be more economical, rather than using different types of floor system at different levels.

The structural plans indicate a significant amount of precast walls and concrete structure, this adds significant mass to the building resulting in higher gravity and seismic loads and larger corresponding foundations and structural elements to support these loads. There is potential to replace some of these heavier elements with lighter, more efficient structure, or non-structural partitions where walls don't need to be load bearing.

3.3 Lateral System

Lateral loads on the building are typically due to wind and earthquake forces. To ensure the stability of the building there needs to be a continuous load path through all of the building levels, from the roof down to the basement and into the ground. This is typically achieved through any, or a combination of the following systems: bracing, portal frames or shear walls.

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Based on the architectural drawings, the layout and arrangement of walls lends itself to a predominantly shear wall stability system with portals or braced frames for the back of house and café areas. This is roughly the scheme adopted in the preliminary structural design, with the exception of the inconsistency in the back of house area between the architectural and structural plans.

The lateral system indicated on the structural mark ups does not appear to have been completely thought through. There are areas that have insufficient lateral stability or that have disjoined or discontinuous load paths. The proposed lateral system is concentrated in one half of the building footprint, this results in eccentricity and potentially amplification of lateral forces and associated displacements.

There is significant opportunity to provide a more evenly distributed and efficient lateral system that is better coordinated with the architectural layouts and gravity system of the building.

4 Summary

The Events Centre looks to be an exciting and interesting project. The structural scheme above ground (superstructure) is relatively straight forward and there is opportunity to improve the efficiency of the current scheme to potentially make savings in cost and carbon. Noting that any cost estimates based on the preliminary design drawings are likely to be lower than the actual cost of construction due to the additional structure that will be required to make the current scheme code compliant.

There are a number of shortcomings in the current structural scheme, but none that can't be readily resolved. A significant contingency should be made in the cost plan to cover structure that will be required but is not currently shown on the drawings.

The most significant risk is in the ground. The soil conditions are challenging and will present the greatest uncertainty to the cost plan. Steps can be taken to mitigate this risk including:

- Geotechnical Investigation – extensive / comprehensive ground investigation to gather as much information as possible ahead of the structural design.
- Consider alternative shallower foundations / ground improvement options to remove / reduce likelihood of striking below ground obstructions.
- Design to minimise size / volume of basement below ground water level – to reduce risk of water ingress and reduce buoyancy / ground water pressure on substructure and corresponding size of basement slab and walls.
- Early engagement with Contractor to advance / develop construction methodology, determine most cost-effective piling options to incorporate in structural design.

5 Opportunities

In reviewing the structural package, the following opportunities have been identified:

Structural Opportunities

- Raise building by a storey (i.e lift basement out of the ground). An undercroft area for parking could be provided under the entrance / foyer area/ podium level. This would provide elevated views across the river, removed the costly cut off wall and requirement for

dewatering the basement excavation. Additional benefits include less excavated material to remove from site, significantly less water excluding structure would be required and the risk of water ingress would be significantly reduced. Without the need to resist large hydrostatic water pressures, the structure can reduce in size. Less concrete structure results is less mass and correspondingly smaller / cheaper foundation. Less structure also means less embodied carbon and cost savings. Planning conditions would need to be checked against the maximum development height if the building is lifted out of the ground.

- The main structure is predominantly concrete, this may be for acoustic reasons. Lighter weight steel structure and composite floors will reduce the weight of the building and consequently reduce the size / number of piles required. Lighter structure generally requires less construction material overall.
- Rationalising the structural system will provide greater flexibility for potential future change of use / modification of the building.
- A portal frame option could be considered in lieu of trusses. This scheme could potentially result in a more efficient structure and shallower structural zone (any saving in height could be taken out of overall building height creating saving in the building envelope quantities). Or it may be that fabrication costs of lower for a portal frame option than for trusses.
- The structural grid could be increased. The current scheme has adopted a 4m grid. This is inefficient. The number of structural elements could be reduced by increasing grid to 8m.
- There is potential to introduce more timber primary structure in some areas (e.g pre-function / café / mezzanine level). Timber structure is lighter structure, more sustainable and more aesthetically pleasing.

Sustainability Opportunities

The following options could be considered to improve the environmental impact of the new building:

- Specification of cement replacements in concrete (less Portland cement means less embodied carbon). By specifying certain concrete suppliers over others, significant carbon savings can be achieved due to use of green energy in production and lower road miles for raw materials. Potentially up to 40% of embodied carbon can be saved by specifying particular products and manufacturers.
- Generally, higher adoption of sustainable materials. e.g greener cladding options, timber structure where appropriate.
- Adopting a holistic, integrated design approach to structure and building services to maximise passive ventilation, heating, cooling and lighting.
- Adoption of sustainable design guidelines e.g MBIE – Designing for Climate Change, Greenstar.
- Designing to unitised modules to reduce waste.
- Prefabrication of elements – reuse of forms / reduce waste. Prefabrication typically has the added benefit of construction elements being fabricated in a more controlled environment resulting in a better quality, more consistent finish.
- Requiring contractors to carry environmental accreditation, provide a sustainability plan and establish carbon targets for construction.

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Appendix 4 – CEC Supporting Infrastructure

Memorandum

Oruku Landing – Concept Design Risk Review			
To	File	Date	06 May 2021
From	James Ring	Our Ref	4242638-893458273-34
Other Contributors	-		
Memorandum – Civil Review			

1 Introduction

A review of the concept design for the above project was completed civil engineering. The following documents have been reviewed:

- *Oruku Landing Feasibility Report dated February 2020 (body text)*
- *Cato Bolam, Oruku Landing 44-48 Riverside Drive, Whangarei Engineering & Infrastructure Feasibility Report for Northland Development Corporation dated 9 July 2020*
- *Tonkin and Taylor, Oruku Landing (Riverside Hotel and Entertainment Precinct) Preliminary Geotechnical Assessment for Northland Development Corporation dated January 2020*
- *Tonkin and Taylor, Oruku Landing (Riverside Hotel and Entertainment Precinct) Flood Hazard Assessment.*

Priorities for any reviews actions to be assessed as:

U/ Urgent - show stopper for project. Decision / action required immediately.

H/ High - very important for project (must have). Action to address or provide direction before starting next project stage.

M/ Medium - important for the project (must have). Action in the next project stage(s) and should be addressed as part of good project practices.

L/ Low - somewhat important (nice to have). Note for future stages if budget, schedule etc allows.

Memorandum

2 Findings

The following opportunities, gaps and risks were found:

Item	Description / Mitigation *(if appropriate)*	Risk/ Gap / Opportunity	Priority (U/H/M/L)
1	**Earthworks** As noted in section 2.1 of the Cato Bolam engineering and Feasibility report the site will be extensively earth worked (1.2 Ha) with 7000m3 of fill going to landfill and 1800m3 of imported material. The site levels for proposed buildings are dictated by future flood levels and as indicated in the report a suggested floor level of the conference centre of RL3.05m is suggested and an RL of 4.67m will be adopted for is to be adopted for the mixed use complex will be adopted. Existing ground level is typically RL2.0 taken from drawing 43100-DR-C-7500. Earthworks drawing– Cut to Fill 43100-DR-C-2100 would suggest that the site is extensively being cut to approximately RL2.0 before construction of buildings and open spaces. A review of the building levels to achieve a better balance of cut and fill which in turn will minimise material going offsite is recommended.	Opportunity	H
2	**Retaining Walls** Extensive dewatering and groundwater controls will be required to construct. Ground stabilisation by way of mudcreting to minimise groundwater ingress and minimise temporary shoring and piling should be investigated. Raising basement levels so access is not entirely underground could also result in considerable savings.	Opportunity	H
3	**Sanitary Sewer** The report identifies a downstream capacity issue due to limited capacity at the downstream pump-station. The report suggests upgrades at the pump station and construction of additional storage with costs associated to this upgrade being attributed to this project. On site storage should be investigated as the costs associated with construction of a tank within the site would potentially be less than providing this storage at the pump station. Design could accommodate any future improvements to the pump station resulting in redundancy of on-site storage and discharge from the onsite storage	Opportunity	H

Memorandum

	would be controlled to occur during off peak times and minimise impacts on the existing pump station.		
4	**Stormwater and overland flow** WDC GIS indicates an existing overland flowpath through the site. This flowpath could potentially require diversion through the site. Freeboard from this overland flowpath to and any adjacent floor levels will need to be considered.	Risk	M
6	**Flooding** The Tonkin and Taylor Flood Hazard Report indicates that the present day Town Basin water level for a 1%AEP is RL 2.12 and considering sea level rise to 2020 in a do nothing business as usual scenario in terms of CO2 emissions globally the expected future extreme event sea is RL3.09. This level is higher than the proposed floor level of the convention centre at 3.05. No consideration has been given to wave action either wind or mechanical from passing vehicles and or boats. A review of the proposed floor level is recommended to provide freeboard to the future expected flood levels.	Risk	H
7	**Wastewater contributions** Existing site usage has not been considered which can be offset against proposed usage and resulting in some reduction in development contributions could be achieved. The offset is not likely to be significant but worth pursuing.	Opportunity	L

3 Comments

The level of civil reporting investigation appears adequate for the concept design phase. The report raises a number of issues that require further investigation and assessment that may have considerable cost implications and adequate contingency should be allowed for these items.

- Recommended floor level currently below future 1% AEP flood
- Rationalisation of earth works cut to waste against proposed floor levels to minimise cut material going off site
- Review of potential on site storage options for wastewater to minimise cost implications to the project
- Overall, the site appears to be adequately serviced in relation to power, comms and water supply however further consultation with local providers is recommended

Memorandum

Oruku Landing – Concept Design Risk Review			
To	File	Date	06 May 2021
From	George Woolford	Our Ref	4242638-893458273-34
Other Contributors	Stuart Bowden		
Memorandum – Landscaping Review			

1 Introduction

A review of the concept design for the above project was completed for Landscape and Urban Design looking at the following documents and/or drawings:

- *NDC Oruku Landing Feasibility Report 14-02-20 Final*
- *NDC Oruku Landing Feasibility Report Appendix_1 Sec8 Updated Engineering Report*
- *NDC Oruku Landing Feasibility Report Appendix_1_Site Constraints_Final WEB*
- *NDC Oruku Landing Feasibility Report Appendix_2_Design Proposal_Final WEB*
- *NDC Oruku Landing Feasibility Report Appendix 4 Sec3 Landscape Visual Assessment Final*
- *NDC RC 19-10-08 Ecological Report Updated Final*
- *NDC RC 20-01-17 Contamination Assessment Updated Final T&T PSI DSI*
- *NDC RC 20-01-30 Landscape & Urban Design Report Final*
- *NDC RC 20-02-02 Cultural Design Report Updated Final*
- *NDC RC 20-02-12 Cultural Impact Assessment Updated Final*
- *NDC RC 20-07-09 Engineering & Infrastructure Report Updated Final*
- *NDC RC 20-07-22 Landscape Visual Assessment Updated Final*

Priorities for any reviews actions to be assessed as:

U/ Urgent - show stopper for project. Decision / action required immediately.

H/High - very important for project (must have). Action to address or provide direction before starting next project stage.

M/Medium - important for the project (must have). Action in the next project stage(s) and should be addressed as part of good project practices.

L/Low - somewhat important (nice to have). Note for future stages if budget, schedule etc allows.

Memorandum

2 Findings

The following opportunities, gaps and risks were found:

Item	Description / Mitigation *(if appropriate)*	Risk/ Gap / Opportunity	Priority (U/H/M/L)
1	*"surface material should be carried out as "Class B Asbestos Removal Works". This will require additional oversight by a licensed Removalist, PPE, decontamination measures, earthwork controls and lining of trucks for disposal at a licenced landfill that can accept asbestos contaminated soils"*	Increase cost for site clearance. Risk that further contamination is found with more comprehensive site investigations. Planting media will need to be imported	
2	*"Where required NDC are encouraged to collaborate with the Hapū to include tikanga and mātauranga Maori throughout the proposed works.*	Both opportunity and risk. Opportunity to work with Hapū further enriches the depth of design. Risk is ensuring the appropriate level of engagement and any delays to progress as a result.	
3	*"NDC are requested to prepare a Cultural Management Plan in collaboration with the Hapū, project archaeologist(s) and other specialists as appropriate."*	Site is on reclaimed land so unlikely to find anything of significance.	
4	*No stormwater runoff shall be discharged from the site into the Hoteo River. Stormwater runoff shall be reused within the site for areas such as landscape/gardens etc.*	Cultural Impact Assessment assumes no stormwater runoff from the site will be discharged into the river. There are currently 2 outlet pipes into the river in the engineering design.	
5	*A green roof treatment to the Hotel and part of the Mixed Use Building.*	Cultural Impact Assessment assumes green roofs within the design. These are expensive and usually the first item to be value engineered out.	

Memorandum

6	*Use of permeable pavers*	The use of permeable pavers is referred to in the Cultural Impact Assessment. It is unclear if this is included in the landscape design document. These are expensive and will need to accounted for in the stormwater design.	
	"The retention of the existing pohutukawa street tree plantings (excepting 2 specimens) along the Riverside Drive frontage"	Removal of two mature specimen Pohutukawa trees can be difficult. Arborist required to assess condition of trees and suitability for relocation.	
7	*"The introduction of pohutukawa specimens around the eastern and southern sides of the Events Centre"*	Ground condition and suitability of planting mature specimen trees requires further investigation. Imported topsoil will be required and potentially protection from contaminated soils	
8	*"pohutukawa specimens and planted pots"*	Pohutukawa can survive in pots, but ongoing watering and maintenance will be required.	
9	Design – limited drawings that show clear relationships to uses inside buildings	Unknown if relationships to internal building uses exist	
10	Design – several mature specimen trees planted alongside landing promenade. This is likely to conflict with ground level and seawall as shown in the cross section		

Memorandum

11	Site access strategy – lack of detail or accommodation of all site access demands. For example, parking for events is noted as `offsite' without clarity if use of identified adjacent carparking is accessible or under alternate demand during typical usage requirements. Pedestrian and cyclist movements along Riverside Drive are not described.	Legible, functional and convenient site access for private vehicles, event pick up and drop off, walking and cycling movements and site servicing could lead to the site forming a barrier to free river edge movement.	
12	Site access – staging impacts on access demands is not explained. E.g. without completion of all stages, the riverfront public access paths will not connect along the river.	Connectivity and support for broader activities and programmes along the river are interrupted until all stages are complete.	
13	A `potential pedestrian bridge' over Hātea River is highlighted as a key connector to the town basin and ferry terminal. The bridge is not currently included in proposals or costing.	Any reliance on the bridge to provide access to parking options, town basin activities etc should be defined.	
14	Rationale of the selection of the principles of `living urbanism' is unclear and not connected to Te Aranga Design Principles.	Design outcomes should be connected to agreed principles.	
15	Built form massing and placement dominates the site layout to the exclusion of legible public realm function. Rationale for built form scale and arrangement is inconsistent between the urban design and architectural reporting	Definition of building size and scale should respond to site / context capacity, not functional demands.	

A5

Appendix 5 – CEC Connecting Infrastructure

Memorandum

Oruku Landing – Concept Design Risk Review			
To	File	Date	06 May 2021
From	Andrew Harvey	Our Ref	4242638-893458273-34
Other Contributors	Will Pank, Peter O'Brien, John Youdale		
Memorandum – Ports and Marine Review			

1 Introduction

A review of the concept design for the above project was completed for *the marine elements of the project* looking at the referenced documents and/or drawings: Specifically reviewed are:

- General Site (section 1.1)
- Seawall Condition Assessment / Boardwalk (section 1.2)
- Bridge (section 1.3)
- Electric Ferry Terminal including: Opportunity & Demand, Power, Funding (sections 1.4 to 1.7)
- Navigation (section 1.8)
- Marina (section 1.9)
- Dredging (section 1.10)

2 Findings

The following opportunities, gaps and risks were found:

2.1 General Site

2.1.1 Construction

It is recognised that the marine elements of the project are considered as a secondary aspect of the conference centre development however we feel it important to draw attention to the significant interactions required in order to develop the site in a cost effective and efficient manner whilst also addressing the environmental and sustainability issues associated with the development.

For the marine works, including the sea wall, marina, and the ferry terminal, the following issues need to be considered at development stage. The marine works, in whatever form they come should be considered as phase 1 of the construction works:

- Site location – Vehicular/Pedestrian Access
- Materials delivery for the main site – the opportunity to bring some materials in by barge rather than by road
- Marine construction site requirements and easements for construction
- Working compound for the marine plant and construction materials

- Disposal of materials - the materials will need to be:
  - Used on site to bring levels up or for landscaping, or
  - Removed from site by barge to disposal site, or
  - Taken to land disposal site
- Interaction with footpaths and other users
- Risk of encountering contaminated materials.

The retaining structures associated with the basement car park will also need to be designed with due consideration to the seawall and dredging levels.

2.1.2 Climate Resilience

The latest Sea Level Rise (SLR) guidance is set out in the current national guidance, "Coastal hazard and climate change: Guidance for local government" (Ministry for the Environment (MfE), 2017). The guidance includes various climate scenarios corresponding to different Representative Concentration Pathways (RCPs), and gives the New Zealand-wide SLR allowances for these RCP scenarios, relative to 0m SLR in 1986-2005.

NZ SLR Scenario Year	NZ RCP2.6 M (median) (m)	NZ RCP4.5 M (median) (m)	NZ RCP8.5 M (median) (m)	NZ RCP8.5 H* (83rd percentile) (m)
1986-2005	0.00	0.00	0.00	0.00
2021	0.09	0.09	0.10	0.12
2071 (50 years)	0.33	0.37	0.46	0.62
2121 (100 years)	0.56	0.68	1.07	1.37

Table 1 - Sea Level Rise

- The RCP8.5 M scenario should be adopted for normal structure design. This is a conservative approach, based on the median sea level rise predictions for a continuing high emission baseline scenario, with no effective global emissions reduction. The net SLR allowance for the 50 year and 100-year project design life from 2021 to 2071 and 2121 are 0.36m (i.e. 0.26-0.10) and 0.97m (i.e. 1.07-0.10) for the RCP8.5M scenario.
- The RCP8.5 H* scenario should be adopted for new developments e.g. greenfield or major new infrastructure. This is a conservative approach, based on the median sea level rise predictions for a continuing high emission baseline scenario, taking into account possible instabilities in polar ice sheets. The net SLR allowance for 50 year and 100-year project design life from 2021 to 2071 and 2121 are 0.50m (i.e. 0.62-0.12) and 1.25m (i.e. 1.37-0.12) for the NZ RCP8.5 H* scenario.

For the purpose of this initial review we have rounded these values to 0.5m and 1.0m for 50 and 100 years respectively.

2.1.3 Site Levels

There appear to be inconsistencies in the conversions of Chart Datum (CD) to Land Datums in the reports and this needs to be addressed, The site is a tidal site and therefore the

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governing factor is the tidal range and levels which are all relative to CD. The site level will need to be set at a suitable level to avoid overtopping with relation to:

- MHWS – present value
- Additional storm surge allowance
- Wave height (local)
- Sea level rise to a suitable design period

Dredge values should not exceed the channel depths which show approximately 1m of draft at LAT (CD). However, the reports are showing -1.5m CD which in CD terms is a positive value above CD.

Refer to *Cato Bolam Consultants Ltd – Engineering Feasibility Study - Section 2.0 Earthworks*

The following sets out our understanding of the site levels and datums:

	NZ Nautical Chart Ref	NZ5215	
	LINZ Reference Point	**A2Q9**	
LINZ Level Data	OTP 64	3.270	
LINZ Level Data	NZVD 16	3.140	
	difference	*0.130*	
	CD from chart NZ5215	0.000	CD
	Correction from CD to LNZ	-5.182	RL
	Sea Level Rise 100yrs	1.000	m
	Sea Level Rise 50yrs	0.500	m

Table 2 - Chart Datum and LINZ data

	Metres above Chart Datum	NZVD 16	RL OTP 64
HAT + 100-year sea level rise	4.120	2.078	2.208
HAT + 50-year sea level rise	3.620	1.578	1.708
HAT	TBC	TBC	TBC
MHWS	3.12	1.078	1.208
MHWN	2.64	0.598	0.728
MSL	1.83	-0.212	-0.082
MLWN	1.02	-1.022	-0.892
MLWS	0.52	-1.522	-1.392
CD/LAT	**0**	**-2.042**	**-1.912**
Dredge Depth	-1.5	-3.542	-3.412

Table 3 - Chart Datum to Land Datum conversion

Memorandum

2.2 Seawall / Boardwalk

2.2.1 From the Feasibility Study:

a. Boardwalk:

The boardwalk runs along the whole length of the site and totals 210m long by 10m wide. The function of the boardwalk is to increase the amenity in front of the precinct and to allow for the expected increase in traffic along this portion of the Hātea Loop walkway.

The boardwalk is designed to be constructed primarily out of timber.

Along with increasing the amenity/capacity of the existing Hātea Loop, the extension over the water gives the community the increased connection with the water as found highly desirable and important in the UX feedback.

RLB estimate that the capex cost to build this infrastructure is $8,290,000. Further design is required to determine a final scope of this work, as the design is only to early concept / resource consent level.

Capital funding, ownership and management of this asset is proposed to be primarily by WDC as the landowner and local authority, with the support of PGF. See in the recommendation's further details of this.1

b. Seawall:

Cato Bolam Consultants Ltd – Engineering Feasibility Study - Section 2.2 Retaining Walls

The replacement or modification of the current sea wall retaining structure may need to be considered when deciding upon how to effectively allow the human scale connection to the water and jetty for this area. This retaining is recommended as mass block or mass concrete retaining

Tonkin & Taylor Ltd – Preliminary Geotechnical Assessment January 2020 – Section 2.1 General

A seawall along the Hatea River forms the southern edge of the site. It comprises grouted rock boulders along the base and concrete panels along the upper portion. The seawall appears to be generally in serviceable condition but there are areas of deterioration along the lower portion of the face, where the grout has been removed and the boulders are loose, as shown in Photo 2-1.

2.2.2 Documentation Review and Discussion

There is limited reference in the Feasibility Study or supporting documentation in relation to the boardwalk or the existing seawall.

The Cato Bolam earthworks cut to fill plans indicate dredging of the riverbed back to the toe of the existing seawall along much of its length. Dredging of the riverbed at the base of the existing seawall has potential to destabilise the lower portion of the seawall and, as a result, the upper portion also. As such, the decision on whether to proceed with the dredging and marina development as proposed will be integral in determining the need to upgrade the existing seawall structure. Should the dredging proceed, a sheet pile wall or secant pile wall immediately in front of the existing seawall would be required. Should the dredging not proceed or be amended such that it

[1] Page 100 NDC Oruku Landing Feasibility Report 14-02-20 Final

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does not impinge on the zone of influence of the seawall, then the seawall could be grouted to improve resilience prior to the boardwalk being constructed.

Conceptual cross sections of the proposed buildings show the finished level of the proposed boardwalk varying from +2.5m R.L. to +3.05m R.L. along its length[2]. The current District Plan requires a minimum floor level of +2.5m above One Tree Point Datum for a permitted activity however as the proposed boardwalk will be located in a Coastal Hazard Area 1 the construction of the boardwalk should be considered a discretionary activity. As such, the entire boardwalk level may need to be altered.

The topographic survey of the site indicates a current walkway/footpath level of between approximately +1.8m R.L. and +2.1m R.L[3]. The conceptual drawings[4] show the boardwalk as extending back to the property boundary () which is offset landward from the existing seawall. The existing seawall has an approximately 600mm high nib along the length with a decorative facing. To achieve the levels as outlined in the concept drawings, the boardwalk sub-structure will need to pass through/over the precast concrete upstand of the existing footpath. Removal of these precast elements and replacement with riprap under the boardwalk would likely be required.

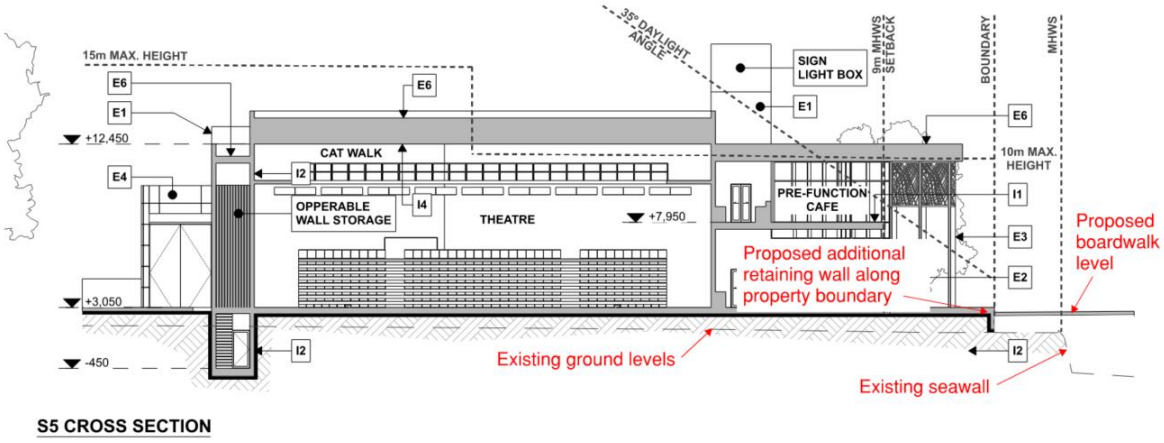

Figure 1 - Marked up cross section through seawall and proposed boardwalk (adapted from HB Architecture Concept Drawing 4.15).

2.2.3 Seawall Condition Assessment

The approximately 180m long eastern portion of existing seawall is comprised of two distinct constructions. The original, lower, portion of the seawall was first constructed in the early 1900's as part of the reclamation and typically comprises of un-grouted, stacked stone of unknown thickness sitting on an unknown footing. It appears that this portion of the wall has had some recent maintenance work, potentially re-stacking, undertaken as there are signs of geogrid at various levels () in the wall. There are several stones similar to those used in the wall's construction sitting

[2] HB Architecture Concept Design Drawing 2.13

[3] Reyburn & Bryant Topographical Survey Job T15311 Sheet 1

[4] HB Architecture Concept Design Drawing 4.15

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on the riverbed at the base of the wall. These stones typically do not align with gaps or holes in the stacked stone seawall indicating that the wall may have been higher in the past. In general, the lower portion of the seawall appears to be in acceptable condition for its current use however there are several discrete locations where single stones have become dislodged.

The newer, upper, portion of the seawall () built in 2015 to 2016 comprises of an approximately 1.5m deep precast concrete panel sitting on a layer of grouted rock at the top of the older stacked stone seawall. The precast panels extend approximately 600mm above an in-situ concrete footpath. Consented drawings indicate that the precast panels are tied into an in-situ toe that extends 1m under the footpath. The upper portion of the seawall is in an 'as new' condition with no signs of deterioration or damage.

The approximately 30m long western portion of the existing seawall is also comprised of two distinct constructions of an unknown period. The lower portion of the wall is partially grouted stacked rock wall while the top comprises of an in-situ concrete capping. There are several locations along this portion of the seawall where the grouting has failed at the interface between the in-situ concrete topping and the stacked stone wall (). The condition of this portion of the seawall is classified as moderate and it is recommended that bi-annual inspection of this portion of the wall is undertaken to monitor future deterioration.

Figure 2 - Original seawall showing presence of geogrid at different levels

Memorandum

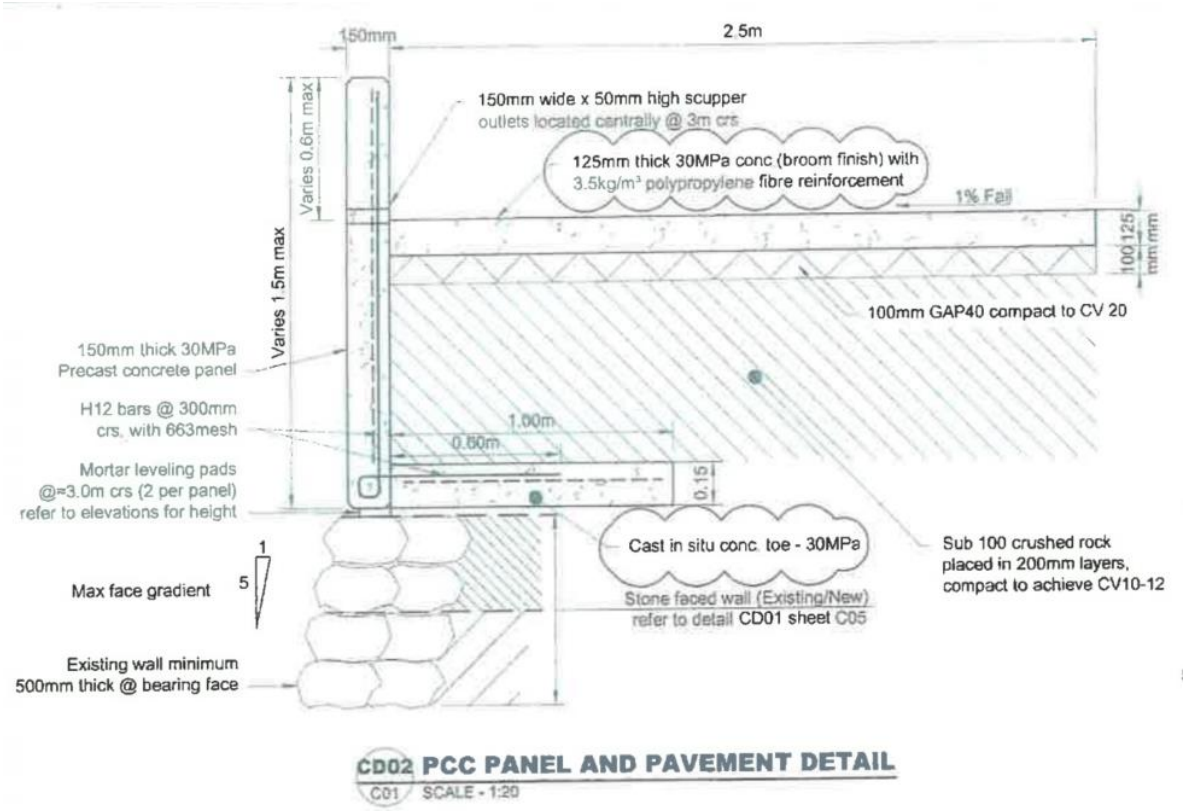

Figure 3 - Seawall Consented Construction Details

Figure 4 - Existing Seawall Typical Construction

Memorandum

Figure 5 - Example of Condition of Western Portion of Seawall

2.3 Bridge

2.3.1 Commentary

The concept for an opening bridge across the Hatea River to provide pedestrian and cycle connections to the popular town basin is mentioned briefly in the feasibility report. There are a number of gaps and key risks associated with planning, construction and operation of an opening bridge at the site that need to be addressed to confirm feasibility and enable appropriate cost estimates to be made for this element of the proposal. Key issues to be addressed are summarised below.

a. Location

A feasibility study for the optimum location of a new walking and cycling bridge needs to assess the amenity value, consentability, constructability and cost for various locations before a site could be confirmed. The location shown on plans in the report adjacent to the centre of the proposed development - at a wide stretch of river splitting the proposed marina in two - does not appear to be optimal. A location approximately 100m upstream where the river narrows with access points on each bank is assumed for assessment purposes. Stakeholder consultation and agreement on bridge location can be a lengthy process that does not appear to be included in the design programme.

b. Site constraints

Access to construct and operate an opening bridge in the central river site is restricted. A number of existing berths and moorings would need to be removed to enable construction of a new bridge.

The level of banks on each side of the river is approximately 2.5-3.5 RL. To provide 2-3m air draft above MHWS level for the passage of small craft without the need to open the navigation span would require considerable lengths of ramps at maximum 1:12 gradient to clear the central navigation channel.

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c. Operational protocols

Liaison with boat owners and river navigation authorities is likely to lead to a requirement for on-demand opening of the bridge to preserve navigation rights. Safe operation of a bascule or swing span of say 16m clear width would require manned operation by a bridge operator from a booth with clear visibility of approaches on each bank and upstream and downstream on the river. Costs of ancillary facilities and ongoing operational costs need to be assessed in the business case for the proposal.

d. Navigational safety

Navigation aids to mitigate risks to boat users need to be allowed for including:

- fender protection from vessel strike in the navigation channel
- mooring points upstream and downstream for vessels in the event of mechanical malfunction of the opening bridge
- navigation signage, lights, markers etc.

e. Ground conditions

Initial geotechnical studies indicate depths to suitable founding material for the bridge to be in excess of 20m and marine piles socketed into bedrock are needed to support the structure. There is a likelihood of potential liquefaction in soft materials on each bank which poses a risk of damage to the structure in seismic events. This may be mitigated by ground improvements or additional foundations which should be allowed for in cost estimates.

f. Opening bridge structure

While there is no proposed bridge form in the feasibility report approximately 30-40m of fixed approach spans on piled foundations are anticipated with a central opening bascule span of around 15-20m. Ramps and tie-ins from bridge abutments to the Hatea Loop track will be needed to connect the shared path on the bridge to existing ground levels on each bank with the associated land-take.

Mechanical and electrical (M&E) equipment to operate the opening span will need to be IP rated for durability in the marine environment and housed in a separate machine room located near the bridge. This will include hydraulic equipment, pumps, motors, electrical operating equipment and standby power supply that will need to be accessible for maintenance and replacement. Maintenance costs for annual inspections and servicing of M&E equipment need to be included in the business case for the asset.

g. Construction impacts

A contractor with relevant experience and skills in marine works, bridge construction and design and installation of operating equipment will be needed for this element of the development. This may well be a different contractor to the building contractor for the hotel and conference centre with potential interface issues during construction.

Laydown areas for delivery and storage of materials will be needed on both banks which will impact the park on the south bank and require diversion of the existing tracks.

Construction over the river on temporary staging suitable for supporting a large piling rig to construct foundations will have environmental impacts on the river which will need to be managed.

Access from each bank will be needed to allow maintenance of a navigation channel during the bridge construction phase. While offsite fabrication can minimise risk of contamination of the river, the installation, testing and commissioning of the bascule span will require periods of navigation closures and allowances for environmental mitigation measures.

h. Cost estimate

The feasibility report has a provisional sum of $10M for the bridge with no breakdown of that sum. With no proposed form, location or design appropriate contingencies need to be included of say 50% for the bridge element. Preliminary and general costs for marine works, bridge construction and design and installation of M&E operating equipment are higher than for standard building construction and need to be assessed to provide a robust cost estimate.

The construction period and methodology for such works is critical for the accuracy of estimates. It is estimated that the bridge would require 8-12 months for procurement of imported equipment, establishment on site, construction and commissioning of the opening bridge.

2.4 Ferry Terminal

2.4.1 Documentation Review

The documentation states that the Ferry Terminal is *a **key design feature of the site*** and the marina and boardwalk are essentially built up around this statement and assumption.

From our understanding of the document review the Ferry Terminal's main purpose is to service the Cruise Industry which operates at the Northport/Marsden Point Port. Further detail on the passenger numbers and terminal requirements is covered in section **Error! Reference source not found. Error! Reference source not found.**. Whilst this appears to be a preference to the existing coach option several issues arise and should be considered in greater detail:

- The location of the terminal is at the conference centre on the East side of the Hatea River and we would assume that any Cruise Vessel day trips would be based around visiting the town waterfront on the West side and bringing trade and revenue to the local businesses rather than visiting the Conference Centre itself.
- The walk time from the potential site to The Quay on the opposite bank is approximately fifteen minutes each way; approximately 1.2km. However, with a bridge crossing at this point the distance is a mere one hundred metres.
- The cruise industry has been significantly impacted by the recent COVID events and has not only been impacted due to border closures but it should be noted that the industry received significant press focus due to the quarantining measures that it had to put in place on a number of vessels that had high infection rates. The industry will surely bounce back, and passenger numbers will return but over what period of time is impossible to predict.

Should the option for a Ferry Terminal be deemed viable following a forecast and viability assessment there are a number of factors that need to be considered further:

- Location of the berth on the Eastern Riverbank
- The volumes of dredging and interaction with both the river wall and the marina pontoons requires additional review and design consideration. These costs will not be insignificant and will fundamentally alter the scheme layouts.
- Power requirements for the proposed electrically powered vessel

Memorandum

- Transit times for proposed commuter use
- Funding – the probable need for public subsidies to make the ferry viable

2.5 Marina

2.5.1 From the Feasibility Study:

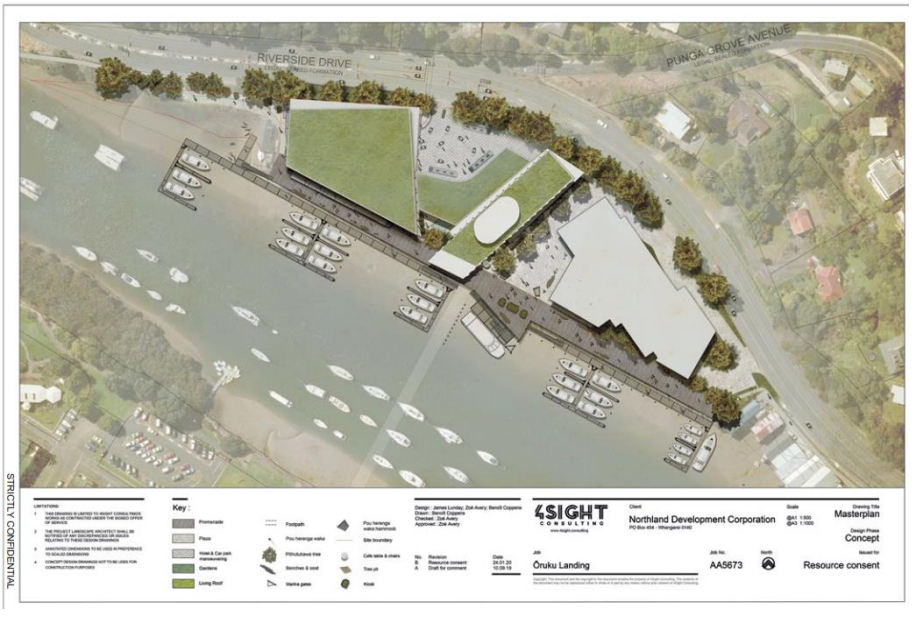


Figure 6 - Marina Layout (Feasibility Report Appendix 1 - Page 114)

2.5.2 Documentation Review

The success of the existing Whangerei marina should be considered in full and discussions had as to whether the Marina would be interested in investing and/or leasing the potential facility. It is unlikely that such a small development would work financially as a standalone facility.

Marine Structures Requirements

To create these berths there will be considerable dredging, piling, pontoon requirements, services and utilities supply and seawall construction. As noted in 2.1 General the sequencing of these works would need careful planning with the landside works in order that adequate access can be gained to undertake the works.

Option consideration

As an alternative to the marina development which appears to have considerable forthcoming competition if the Okara Marina development takes place then and enhanced riverside development and facility making more of the boat ramp and public amenity area.

The ferry terminal could still be built but with a reduced dredge area/volume and a piled staging could access the berth in the deeper waters.

The river wall would also be substantially less cost due to the lower retained height.

Memorandum

2.6 Dredging

2.6.1 Documentation Review

Whilst the Council have agreed that the dredging and the marina developments will occur at a future date the following should be considered:

- Interaction with the Ferry Terminal requirement
  - The construction access and sequencing for the marine works needs to be considered carefully as land-based plant will be of an order of magnitude cheaper than attempting the marine works from Marine Plant
- Location of the Marine and Land side of the Ferry Terminal Facilities
- Interaction with the seawall requirement
  - The construction access and sequencing for the marine works needs to be considered in terms of land access and future dredging works

There is contradictory information contained in the documentation, should it be decided that dredging is to become part of the Oruku Landing scope further investigation would be necessary.

3 Comments

The red flagged items in this memo need to be discussed and evaluated in a careful manner and it would appear clear that further detail is required on some of the main planning elements of the scheme. Further forecasting and stakeholder engagement is now required.

The documentation is extensive and whilst the waterside aspect is almost secondary to the conference centre the schemes are intrinsically linked. Questions of viability need to be asked over the requirement for the marina and the ferry service and alternative options should be considered that provide the facility with a desirable and accessible waterfront and water based transport access to the town and the facility. With these issues better understood decisions can be made on the key items such as dredging requirement and river/sea wall depths and arrangements.

A6

Appendix 6 – Geotechnical Review

Memorandum

Oruku Landing – Concept Design Risk Review			
To	File	Date	06 May 2021
From	Mark Modrich	Our Ref	4242638-893458273-34
Other Contributors	Phil Clayton		
Memorandum – Geotechnical Review			

1 Introduction

A high-level review of the concept design for the above project was completed for geotechnical engineering looking at the following documents and/or drawings:

- Oruku Landing Feasibility Report dated February 2020 (body text)
- Cato Bolam, Oruku Landing 44-48 Riverside Drive, Whangarei Engineering & Infrastructure Feasibility Report for Northland Development Corporation dated 9 July 2020
- Tonkin and Taylor, Oruku Landing (Riverside Hotel and Entertainment Precinct) Preliminary Geotechnical Assessment for Northland Development Corporation dated January 2020
- Silvester Clark Consulting Engineers Structural Calculations for Feasibility Study: 4 Star Hotel & Events Centre Precinct At 44-48 Riverside Drive, Whangarei For Northland Development Corporation dated January 2020
- HB Architecture, Dalman Architecture, Brewer Davidson Architecture, Concept Architectural Design Drawings Oruku Landing – Riverside Drive Whangarei Revision A dated 17 January 2020

Priorities for any reviews actions to be assessed as:

U/ Urgent - show stopper for project. Decision / action required immediately.

H/High - very important for project (must have). Action to address or provide direction before starting next project stage.

M/Medium - important for the project (must have). Action in the next project stage(s) and should be addressed as part of good project practices.

L/Low - somewhat important (nice to have). Note for future stages if budget, schedule etc allows.

Memorandum

2 Findings

The following opportunities, gaps and risks were found:

Item	Description / Mitigation *(if appropriate)*	Risk/ Gap / Opportunity	Priority (U/H/M/L)
1	CPT testing is known to have been carried out on the site in 2016 and should be reviewed for consistency with the recent investigation results.	Opportunity	M
2	Limited investigation of reclamation fill characteristics and extent and assessment of whether it can remain in situ or will require removal/ground improvement. Additional investigation recommended, contingency cost for material improvement (e.g. mass stabilisation) or removal/replacement.	Gap	H
3	Variable depth to suitable founding material. Maximum depth to inferred Whangai Formation founding materials encountered on site may not be representative of maximum depth that exists under site. Additional investigation recommended. Allow for some longer piles, and ensure methodology allows for extension of pile depth on site.	Risk	M
4	There is some uncertainty in the interpretation of rock levels based on the CPT testing (and possibly also in the borehole). This presents a risk around pile lengths and uplift capacity.	Risk	M
5	Interpretation of subsurface profile reliant on correlation with single borehole. Material encountered in CPTs and inferred as Whangai Formation may also be sands/gravels. Refusal depth of CPTs inferred as Whangai formation may be dense gravels/cobbles/boulders (as encountered in other projects in the vicinity e.g. Hundertwasser, Canopy Bridge). If present may obstruct driven foundation and sheet piles. Further investigation recommended.	Risk	H
6	Bored piles with casing driven into Whangai Formation may be able to be poured ‘in the dry’ rather than by tremie. Sometimes achieved on Hundertwasser piles. Subject to further	Opportunity	M

Memorandum

	investigation of potential obstructions outlined in item 5 above.		
7	Based on the structural drawing and the cost estimate it appears that shallow foundations are being considered for some parts of the building. The site soils are generally unsuitable for the use of shallow foundations.	Risk	H
8	The assumed ultimate pile capacities appear relatively high (approx. 32MPa) While this capacity may be theoretically achievable a more modest capacity eg 20MPa would allow the use of shorter piles, driving to larger set with significant reductions in driving time and noise.	Risk	M
9	Pile capacities may not be based on experience with piles founded in Whangai Formation. PDA testing was undertaken on Hundertwasser piles founded in similar materials and these test results could be reviewed to inform anticipated results.	Opportunity	L
10	Apparent discrepancy between cut levels on earthworks plan and finished levels on architectural plans (even allowing for pavements etc). Potential placement of 1m of fill on the site has not been addressed by geotechnical assessment to date and is likely to induce settlement across the site. It is understood that the building platform will be raised somewhat to reduce the flood risk. This additional fill will cause significant settlement within the underlying soft cohesive sediments. If settlement is ongoing after construction this will potentially cause a range of issues that must be addressed in design and detailing of the structure and will add cost. Issues include negative skin friction loading of pile foundations, differential settlement between underground services and the building, differential settlement between shallow founded building elements and those supported from piles. Preloading could be considered to address some of these issues, however consolidation settlement in thick clayey sediments may take months to years to complete. Recommend confirming intended earthworks and undertaking settlement analysis if site levels are to be raised.	Risk	H
11	Allowance for sheet piles or other cut-off wall and dewatering to allow construction of basement below groundwater level not apparent in supplied	Risk	M

Memorandum

	cost estimate. Recommend confirming what has been allowed for.		
12	Summary of Geotechnical assessment in NDC feasibility report erroneously states that high levels of acid sulphate soil were identified in the preliminary results but possibly associated with historic concrete plant operation. T&T report identifies some high pH results (i.e. alkaline) and attributes to the same.	Gap	L
13	Geotech report references 2015 WDC Acid sulphate soil guidance document, this is no longer reflective of current industry (Australian) guidelines. Further investigation recommended to be in accordance with current guidelines.	Gap	L
14	Geotech report states that conservative design principles may be adopted for concrete and steel structures with an assumption that AASS material is present, in lieu of completing an Acid Sulphate Soil management plan. However, this approach would not address the potential environmental impacts of oxidisation of PASS material. Further investigation and assessment recommended to be in accordance with current guidelines.	Gap	M
15	Should PASS be identified (such as at the Hundertwasser site for example) there may be an opportunity to dispose of spoil at Kissing Point, with the receiver taking care of any environmental treatment required. This is likely to be substantially lower cost than any requirement to neutralise the soil prior to disposal.	Opportunity	M
16	It is not clear whether any allowance has been made for mitigation of potential acid sulphate soils, alternative requirements for site dewatering to prevent oxidisation of soils or neutralisation/disposal of spoil.	Gap	M
17	The geotechnical report does not appear to address the stability of the reclamation edge/seawall. If the structure is IL3 the seawall stability will need to consider a significant seismic inertial loading (near to 0.2g) while retaining loose sand/soft clay and founded on soft clay. Depending on the results of a more detailed consideration of liquefaction risk retained soil may also be subject to reduction in strength from pore pressure rise.	Gap	U

Memorandum

	While there is a significant sum appears to have been budgeted for construction of a boardwalk and dredging it is unclear what allowance has been made for strengthening of the seawall.		
18	The report does not address Tsunami risk, this building platform is at a level with a risk of Tsunami inundation.	Gap	H

3 Comments

The level of geotechnical investigation appears adequate for the concept design phase. The geotechnical report is high level, cost estimation based on the current level of guidance has relatively high level of uncertainty. It is unclear how this uncertainty is being communicated. The report raises a number of issues that require further investigation and assessment that may have considerable cost implications and adequate contingency must be allowed for these items. There are some considerations that have not been addressed by the report as outlined in the table for comments above. The associated reports and drawings appear to have been developed in parallel with each other, with some evidence of lack of coordination between disciplines, e.g.:

- differences in basement layout between structural and architectural drawings
- differences in finished levels between civil and architectural drawings
- Structural foundation design and costing does not appear to take into account full recommendations of geotechnical report

A7

Appendix 7 – Programme Review

Memorandum

Oruku Landing – Concept Design Risk Review			
To	File	Date	01 July 2021
From	Glenn Forber	Our Ref	4242638-893458273-34
Other Contributors	-		
Memorandum – Programme Review			

1 Introduction

A review of the programme for the above project was completed looking at the following programmes:

- *Oruku CEC – Whangarei. Revised at 21 April 2021 – DRAFT – Existing Consultants. NDC.*
- *Oruku CEC – Whangarei. Revised at 21 April 2021 – DRAFT – WDC Consultants. NDC.*

Priorities for any reviews actions to be assessed as:

U/ Urgent - show stopper for project. Decision / action required immediately.

H/High - very important for project (must have). Action to address or provide direction before starting next project stage.

M/Medium - important for the project (must have). Action in the next project stage(s) and should be addressed as part of good project practices.

L/Low - somewhat important (nice to have). Note for future stages if budget, schedule etc allows.

2 Findings

The development programmes were received from NDC at a late stage therefore a new programme was drafted from first principles to compare with the NDC options (see attached to this memo). It has been assumed for the programme that WDC will select Option 3 (Project Owner) from the participation models in Appendix 9. Several risks emerged as noted below. The key point to note is that to meet the September 2022 commencement date WDC must:

- Commence procurement of consultants immediately after the 13 July 2021 decision date
- Be prepared to commence design in advance of receiving resource consent
- Undertake to carry out the various associated infrastructure packages which are required to enable the project
- Allocate sufficient experienced internal management resource to work alongside the project team

Memorandum

The following risks are highlighted.

The NDC programme assumes that the fast track resource consent application currently being considered is successful. In order to keep this off the critical path a delivery methodology has been assumed which appoints a main contractor prior to design being completed and all packages let. This is not an unusual delivery option where time is a key driver however this does introduce significant cost risk as the full cost is not known until the last package has been tendered. On the NDC programme this is in December 2022, some 7 months after basement construction commences. This presents a risk of cost overruns and delays if the design is too expensive.

The programmes assume that the resource consent will be approved by 22 Sept 2021. If this is delayed or rejected, then the design will have to proceed at risk in order to meet a September 2022 start date for the piling works (deemed to be the trigger for CIP funding).

The revised decision date for commencement has been changed to 13 July 2021. The revised programme attached is based on this date and shows piling now commencing mid-Sept 2022. Further delays in commencement will put a September 22 start date in significant jeopardy.

The programme from NDC shows an option for the inclusion of FNHL as a development entity which would be an option if WDC decided to adopt option 1 or 2 from the participation options (Passive or Active Funder options) in Appendix 9. The use of this type of model requires WDC to commence negotiations immediately if the construction start date is to be achieved by September 2022. The timescales for negotiations and finalising legal agreements at 30 days do not seem to be long enough in the programme however this would depend on the terms of the agreement.

The programmes from NDC indicate a lengthened timescale for use of a new consultant team however this is due to a different commencement date being used rather than an extended period from decision to design commencement. A close examination of the programme options shows the period for procuring new consultants is shorter. It is unclear at this time as to whether WDC procurement guidelines would allow the direct appointment of consultants for a project of this size. In the Beca programme options it has been assumed that procurement of Consultants will commence as soon as a decision has been made to proceed.

The programme shows the S&P agreement going unconditional before the resource consent is issued. This presents two risks.

The resource consent may contain conditions which impact on both the cost of construction and the value of the land.

The resource consent may contain conditions which affect the design and the timescale for delivery e.g. monitoring conditions could be included that could delay the start on site beyond the CIP trigger date.

Construction periods are generally in line with what is expected although we note the design is basically at concept stage and the programme will need to develop once

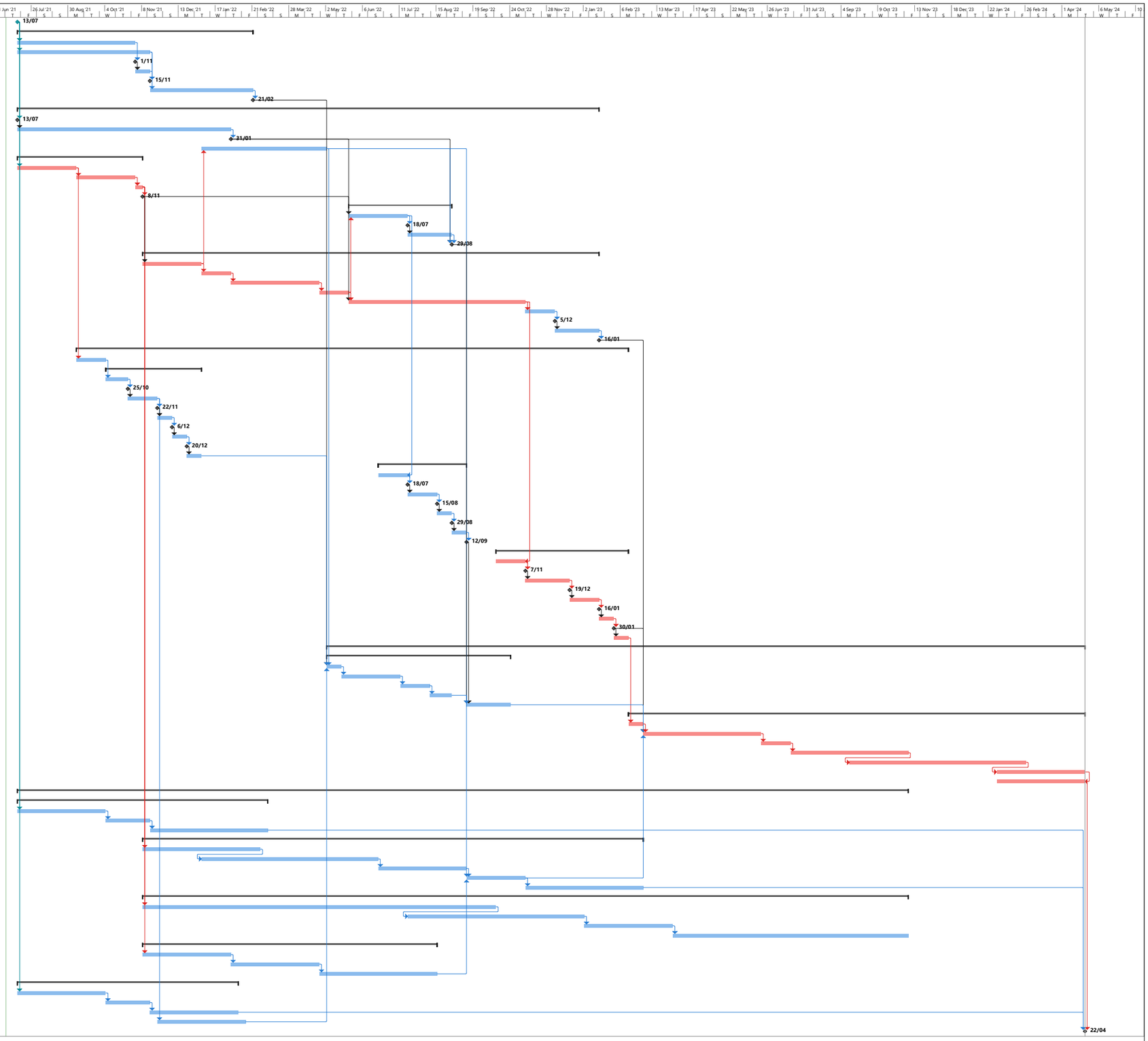
- The design is progressed further
- A contractor procurement strategy is agreed with WDC
- A decision is made on the participation options in Appendix 9

COVID-19. No risk register should be completed without the inclusion of this risk. Further community outbreaks and lockdowns will have an impact on the programme.

3 Comments and Assumptions

- All existing design reports are made available to WDC by NDC to prevent duplication of effort e.g. Geotechnical report.
- Commencement date for programme activities is a WDC decision date of 13 July 2021.
- CIP funding release is triggered by construction commencing on site (piling), not demolition and site clearance.
- WDC opt to act as Project Owner and not as Passive or Active Funders as per Appendix 9.

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors
1		**WDC decision to proceed**	**0 days**	**Tue 13/07/21**	**Tue 13/07/21**		**16,3,4,83,102,**
2		**Land Purchase Process**	**160 days**	**Tue 13/07/21**	**Mon 21/02/22**		
3		Subdivision consent process	80 days	Tue 13/07/21	Mon 1/11/21	1	5
4		Valuations and S&P	90 days	Tue 13/07/21	Mon 15/11/21	1	8,7
5		Consent and S223 issued	0 days	Mon 1/11/21	Mon 1/11/21	3	6
6		LINZ issue title	10 days	Tue 2/11/21	Mon 15/11/21	5	7
7		S&P Unconditional	0 days	Mon 15/11/21	Mon 15/11/21	6,4	
8		Notice period for existing tenants	70 days	Tue 16/11/21	Mon 21/02/22	4	9
9		Vacant posession	0 days	Mon 21/02/22	Mon 21/02/22	8	68
10		**Design and Consenting**	**395 days**	**Tue 13/07/21**	**Mon 16/01/23**		
11		Application accepted	0 days	Tue 13/07/21	Tue 13/07/21	1	12
12		Processing	145 days	Tue 13/07/21	Mon 31/01/22	11	13
13		Decision and uplift	0 days	Mon 31/01/22	Mon 31/01/22	12	30,24
14		Enabling Consents	85 days	Tue 4/01/22	Mon 2/05/22	26	68,72,24
15		**Procure Consultants**	**85 days**	**Tue 13/07/21**	**Mon 8/11/21**		
16		Procure project manager	40 days	Tue 13/07/21	Mon 6/09/21	1	17,36
17		Procure design team	40 days	Tue 7/09/21	Mon 1/11/21	16	18
18		Confirm design brief	5 days	Tue 2/11/21	Mon 8/11/21	17	19,93,87,98
19		Commence design	0 days	Mon 8/11/21	Mon 8/11/21	18	26,21
20		**Piling**	**70 days**	**Tue 24/05/22**	**Mon 29/08/22**		
21		Fast Track design	40 days	Tue 24/05/22	Mon 18/07/22	19,29	22,48FF
22		Lodge building consent	0 days	Mon 18/07/22	Mon 18/07/22	21	23
23		Consent processing	30 days	Tue 19/07/22	Mon 29/08/22	22	24
24		Uplift building consent	0 days	Mon 29/08/22	Mon 29/08/22	23,14,13	72
25		**Main Building**	**310 days**	**Tue 9/11/21**	**Mon 16/01/23**		
26		Preliminary design	40 days	Tue 9/11/21	Mon 3/01/22	19	27,14
27		Design review and sign off	20 days	Tue 4/01/22	Mon 31/01/22	26	28
28		Developed design	60 days	Tue 1/02/22	Mon 25/04/22	27	29
29		Design Review and sign off	20 days	Tue 26/04/22	Mon 23/05/22	28	30,21
30		Detailed design	120 days	Tue 24/05/22	Mon 7/11/22	29,13	31,57FF
31		Design review and sign off	20 days	Tue 8/11/22	Mon 5/12/22	30	32
32		Lodge building consent	0 days	Mon 5/12/22	Mon 5/12/22	31	33
33		Consent processing	30 days	Tue 6/12/22	Mon 16/01/23	32	34
34		Uplift building consent	0 days	Mon 16/01/23	Mon 16/01/23	33	75
35		**Contractor Procurement**	**375 days**	**Tue 7/09/21**	**Mon 13/02/23**		
36		Agree procurement strategy	20 days	Tue 7/09/21	Mon 4/10/21	16	38
37		**Enabling works (Demo, site clearance,**	**65 days**	**Tue 5/10/21**	**Mon 3/01/22**		
38		Prepare tender documents	15 days	Tue 5/10/21	Mon 25/10/21	36	39
39		Release tender documents	0 days	Mon 25/10/21	Mon 25/10/21	38	40
40		Tender period	20 days	Tue 26/10/21	Mon 22/11/21	39	41,105
41		Tenders returned	0 days	Mon 22/11/21	Mon 22/11/21	40	42
42		Negotiate tags	10 days	Tue 23/11/21	Mon 6/12/21	41	43
43		Select preferred tenderer	0 days	Mon 6/12/21	Mon 6/12/21	42	44
44		Council approval	10 days	Tue 7/12/21	Mon 20/12/21	43	45
45		Execute Contract	0 days	Mon 20/12/21	Mon 20/12/21	44	46
46		Contractor mobilisation	10 days	Tue 21/12/21	Mon 3/01/22	45	68
47		**Piling contract**	**60 days**	**Tue 21/06/22**	**Mon 12/09/22**		
48		Prepare tender documents	20 days	Tue 21/06/22	Mon 18/07/22	21FF	49
49		Release tender documents	0 days	Mon 18/07/22	Mon 18/07/22	48	50
50		Tender period	20 days	Tue 19/07/22	Mon 15/08/22	49	51
51		Tenders returned	0 days	Mon 15/08/22	Mon 15/08/22	50	52
52		Negotiate tags	10 days	Tue 16/08/22	Mon 29/08/22	51	53
53		Select preferred tenderer	0 days	Mon 29/08/22	Mon 29/08/22	52	54
54		Council approval	10 days	Tue 30/08/22	Mon 12/09/22	53	55
55		Execute Contract	0 days	Mon 12/09/22	Mon 12/09/22	54	72
56		**Main Contract**	**90 days**	**Tue 11/10/22**	**Mon 13/02/23**		
57		Prepare tender documents	20 days	Tue 11/10/22	Mon 7/11/22	30FF	58
58		Release tender documents	0 days	Mon 7/11/22	Mon 7/11/22	57	59
59		Tender period	30 days	Tue 8/11/22	Mon 19/12/22	58	60
60		Tenders returned	0 days	Mon 19/12/22	Mon 19/12/22	59	61
61		Negotiate tags	20 days	Tue 20/12/22	Mon 16/01/23	60	62
62		Select preferred tenderer	0 days	Mon 16/01/23	Mon 16/01/23	61	63
63		Council approval	10 days	Tue 17/01/23	Mon 30/01/23	62	64
64		Execute Contract	0 days	Mon 30/01/23	Mon 30/01/23	63	75,65
65		Contractor mobilisation	10 days	Tue 31/01/23	Mon 13/02/23	64	74
66		**Construction**	**515 days**	**Tue 3/05/22**	**Mon 22/04/24**		
67		**Enabling Works**	**125 days**	**Tue 3/05/22**	**Mon 24/10/22**		
68		Site set-up	10 days	Tue 3/05/22	Mon 16/05/22	9,46,105,14	69
69		Demolition and site clearance	40 days	Tue 17/05/22	Mon 11/07/22	68	70
70		Contamination removal	20 days	Tue 12/07/22	Mon 8/08/22	69	71
71		Piling mat	15 days	Tue 9/08/22	Mon 29/08/22	70	72,90
72		Piling	30 days	Tue 13/09/22	Mon 24/10/22	71,24,14,55	75
73		**Main Building**	**310 days**	**Tue 14/02/23**	**Mon 22/04/24**		
74		Site set-up	10 days	Tue 14/02/23	Mon 27/02/23	65	75
75		Basement and foundations	80 days	Tue 28/02/23	Mon 19/06/23	34,64,74,90,7	76
76		Structure	20 days	Tue 20/06/23	Mon 17/07/23	75	77
77		Envelope	80 days	Tue 18/07/23	Mon 6/11/23	76	78FS-40 days
78		internal wall, floors etc	120 days	Tue 12/09/23	Mon 26/02/24	77FS-40 days	79FS-20 days
79		Fit out	60 days	Tue 30/01/24	Mon 22/04/24	78FS-20 days	80FF
80		Plaza	60 days	Tue 30/01/24	Mon 22/04/24	79FF	106
81		**Associated Infrastructure projects**	**605 days**	**Tue 13/07/21**	**Mon 6/11/23**		
82		**Punga Grove Intersection**	**170 days**	**Tue 13/07/21**	**Mon 7/03/22**		
83		Design	60 days	Tue 13/07/21	Mon 4/10/21	1	84
84		Procurement	30 days	Tue 5/10/21	Mon 15/11/21	83	85
85		Construction	80 days	Tue 16/11/21	Mon 7/03/22	84	106
86		**Boardwalk**	**340 days**	**Tue 9/11/21**	**Mon 27/02/23**		
87		Design	80 days	Tue 9/11/21	Mon 28/02/22	18	88FS-40 days
88		Consenting	120 days	Tue 4/01/22	Mon 20/06/22	87FS-40 days	89
89		Procurement	60 days	Tue 21/06/22	Mon 12/09/22	88	90
90		Construction - Piling	40 days	Tue 13/09/22	Mon 7/11/22	89,71,100	91,75
91		Construction - Deck and barrier	80 days	Tue 8/11/22	Mon 27/02/23	90	106
92		**Bridge**	**520 days**	**Tue 9/11/21**	**Mon 6/11/23**		
93		Design	240 days	Tue 9/11/21	Mon 10/10/22	18	94FS-60 days
94		Consenting	120 days	Tue 19/07/22	Mon 2/01/23	93FS-60 days	95
95		Procurement	60 days	Tue 3/01/23	Mon 27/03/23	94	96
96		Construction	160 days	Tue 28/03/23	Mon 6/11/23	95	
97		**Seawall remedial works (Optional)**	**200 days**	**Tue 9/11/21**	**Mon 15/08/22**		
98		Detailed Investigation and Design	60 days	Tue 9/11/21	Mon 31/01/22	18	99
99		Procurement	60 days	Tue 1/02/22	Mon 25/04/22	98	100
100		Construction	80 days	Tue 26/04/22	Mon 15/08/22	99	90
101		**Sewer upgrade**	**150 days**	**Tue 13/07/21**	**Mon 7/02/22**		
102		Design	60 days	Tue 13/07/21	Mon 4/10/21	1	103
103		Procurement	30 days	Tue 5/10/21	Mon 15/11/21	102	104
104		Construction	60 days	Tue 16/11/21	Mon 7/02/22	103	106
105		Archeaological Authority	60 days	Tue 23/11/21	Mon 14/02/22	40	68
106		Project Completion and Opening	0 days	Mon 22/04/24	Mon 22/04/24	80,91,104,85	



Project: oruku landing program

Task | Milestone | Project Summary | Inactive Milestone | Manual Task | Manual Summary Rollup | Start-only | External Tasks | Deadline | Critical Split | Manual Progress

Split | Summary | Inactive Task | Inactive Summary | Duration-only | Manual Summary | Finish-only | External Milestone | Critical | Progress

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Appendix 8 – Project Risk Register

Project: Oruku Landing Conference & Events Centre

Project Risk Register (desk top review of project concept)

Updated: 30 June 2021

RID	Sector	Risk Title		Short Risk Name	Probability of Occuring	Basis of Calculation / Impact Assessment	Min	Most Likely Impact	Max	Risk Type	Risk - Weighted
1	Project	Private Carpark not available for CEC		Development	Low	Other carparking within 800m of proposed location, moreseo if bridge goes ahead. Alternative transport options/buses can be arranged for large events.		Low		Cost	Low
2	Project	Adjacent land remains undeveloped.		Development	Low	Demolition of existing site buildings priced in parallel estimate / minimal impact. Adjacent hotel development dependent on CEC, consent lodged as whole development.		Low		Cost	Low
3	Project	Programme delivery		Delivery	High	Assumed Council take project owner role and make early commitments to meet CIP milestones.		High		Schedule & Cost	VHigh
4	Project	Timing of LTP projects to align with CEC		Delivery	High	Planned LTP project scoping and planned work will have to be brought forward to meet this project.		High		Schedule	High
5	Project	Slow staging of future subsequent projects (e.g. hotel, multi-level carpark).		Development	Low	As for Risk ID 2. Options like sealing adjacent area to create a single level carpark possible but not priced in scope.		Med		Cost	Med-Low
6	Project	Resource Consent Process - Lodged		Delivery	High	Fastrack Consent process is experiencing delays e.g. 7 months instead of 3 months.		High		Schedule	High
7	Project	Resource Consent Process - Future Conditions		Delivery	High	Enforced mitigations from this process may bring about higher than expected construction / operating costs and/or additional engineering or project governance.		HIgh		Cost	High
8	Project	Resource Consent Content - Gaps		Development	High	Not all peripheral projects catered for in project costs and lodged consents for CEC - bridge and pump station upgrade not included, and potentially other triggered consents e.g. diversion of ground water, development within a coastal hazard zone, noise etc		High		Schedule	High
9	Project	Resource Consent - CEC Amendment		Development	High	The lodged CEC Building height exceeds the local planning building heights and recent GIS data updates from the NRC (May 2021) will further increase the building height (for AEP flood protection). The details of the building height currently being considered for consent through the fast-track EPA process will have to be amended again, after the consent is granted.		High		Cost & Schedule	High
10	Project	Transformers Upgrade on Riverside Drive (LTP)		Delivery	Medium	Manage float in programme closely (post-Covid trends noted for procurment may adversely impact delivery schedule and prices for long lead equipment).		Med		Schedule	Medium
11	Project	Alignment between landscaping content & budget		Technical	High	Assumed rates for square area / If expectations for finished landscaping cost beyond budget expectations: need to confirm acceptable scope and specification.		Med		Cost	High-Med
12	Project	Landscaping staging		Development	High	Assumed 6 large trees in pots / Impacts of more complex landscaping will effect project programme as access to site limited to Riverside drive.		Med		Schedule	High-Med
13	Project	Cultural requirements e.g. Stormwater runoff		Development	High	Gaps in cultural design intent e.g. Stormwater diversion away from river not incorporated at this stage.		Low		Cost	Medium
14	Project	Delivery Model / Contract		Delivery	High	Model selected based on best outcomes for Council for schedule (foremost) then cost (very close second).		High		Schedule	High
15	Project	CCTV on Boardwalk and around CEC		Development	High	Boardwalk allowances based on structural & lighting requirements not peripheral projects like CCTV.		Low		Cost	Med-Low
16	Project	Local Experience & Competence		Development	High	Complex civil and structural aspects to this project, combined with some mislaignment between the existing concept project documentation, that would benefit from experienced project & construction team to optimise and achieve best outcomes within schedule and budget expectations.		High		Cost	High
17	Services	Sanitary Sewer Upgrade (LTP)		Technical	Low	Assumed unit rate for 250mm line over 850m, Uncertain if this proposed upgrade is required - engineering modelling not completed yet - and preliminary reports suggest problem is caused by and can be mitigated downstream at RDPS with 300m3 tank. Separate item below.		Low		Cost	Low
18	Services	Sanitary Sewer Tank (LTP)		Technical	Medium	Estimated $400k by Cato Bolum is light / Uncertain if cost for installing a complex build for this proposed below ground tank is accurate or required as engineering modelling not completed yet.		Med		Cost	Medium
19	Services	Flooding of site (from rainfall catchment)		Development	Medium	Stormwater diversion around site may be required for high rainfall events and stormwater run-off.		Med		Cost	Medium
20	Services	Transformers Upgrade on Riverside Drive (LTP)		Development	Medium	Cost two transformers / Decision on whether Council only install single new transformer for CEC loads, not the two transformers identified for the full development.		Low		Cost	Med-Low
21	Civil	Contaminated Land		Technical	High	Volumes of contaminated land are based on preliminary assessments - impacts of Cu and asbestos not fully quantified at this stage.		Low		Cost & Schedule	Medium
22	Civil	Geotechnical		Technical	High	Further investigation required at next stage: some challenging ground conditions are expected, which may impact building piling and seawall upgrades design. In addition, construction may prove more difficult and costly as seen at other adjacent site e.g. possibility of boulders impacting pile driving, high water tables, tidal influences.		HIgh		Cost	High
23	Civil	CEC Internal Walls		Technical	High	PC sum proposed / Insufficient detail provided for various room configurations proposed.		Low		Cost	Medium
24	Civil	CEC Building Lateral Structure		Technical	High	Estimate Basis as advised by Structural / Opportunity for more stable and efficient design at next stage.		Med		Cost	High-Med
25	Civil	CEC Substructure		Technical	HIgh	Estimate Basis as advised by Structural / Opportunity for addressing ground conditions through value engineering at next stage.		High		Cost	High
26	Civil	CEC Superstructure - design gaps		Technical	HIgh	Estimate Basis as advised by Structural / Opportunity for addressing missing sections and tie-ins at next stage.		High		Cost	High
27	Civil	CEC Superstructure - general		Technical	High	Estimate Basis as advised by structural / Opportunity to reduce costs with lighter more efficient structure and non-structural partitions.		Med		Cost	High-Med
28	Civil	CEC Earth Works		Technical	High	Estimate Basis as advised / A survey of the site and final CEC building levels to achieve a better balance of cut and fill which in turn will minimise material going offsite.		HIgh		Cost	High
29	Civil	CEC Building Basement & Ground floor Flooding		Technical	High	Estimate Basis as advised / A review of the proposed floor level is recommended to provide freeboard to the future expected flood levels (raising the floor level will also reduce construction costs from retaining walls & dewatering). See also Risk IDs 9 and 19.		High		Cost	High
30	Civil	Pathway upgrades & connections to Boardwalk (LTP)		Development	High	Final scope and extent not firm, potential for overrun.		Low		Cost	Medium
31	Civil	Boardwalk (LTP)		Development	High	Final scope and extent not firm, potential for overrun.		Low		Cost	Medium
32	Marine	Seawall Upgrade		Technical	Low	Will depend on final design of building and board walk - allowancces included in estimate. Monitoring recommended, ongoing access for hatea loop walk (during construction) may add costs.		Low		Cost	Low
33	Marine	Marina Expansion & Dredging (future)		Development	Medium	Comments on impacts to CEC only - an upgrade is not required as the boardwalk piles can be designed for future dredging levels. Final design and business case not firm. If dredging goes ahead then full planning and consultation is necessary including addressing impacts on the marine infrastructure e.g. existing harbour users, all seawall structures, bridge etc.		Low		Cost	Low
34	Marine	Bridge (bascule assumed)		Development	Medium	Final design and business case not firm.		Med		Cost & Schedule	Medium
35	Marine	Electric Ferry Terminal		Development	Medium	Final design and business case not firm.		Med		Cost & Schedule	Medium

A9

Appendix 9 – Project Delivery Options

Memorandum

Oruku Landing – Concept Design Risk Review			
To	File	Date	06 May 2021
From	Glenn Forber	Our Ref	4242638-893458273-34
Other Contributors	-		
Memorandum – Project Delivery Options Review			

1 Introduction

This memo assesses two elements of project delivery for the Conference and Events Centre (CEC) project:

- The role Whangarei District Council (WDC) will take in the project
- The options for delivery of the project with the various risk levels associated with each option

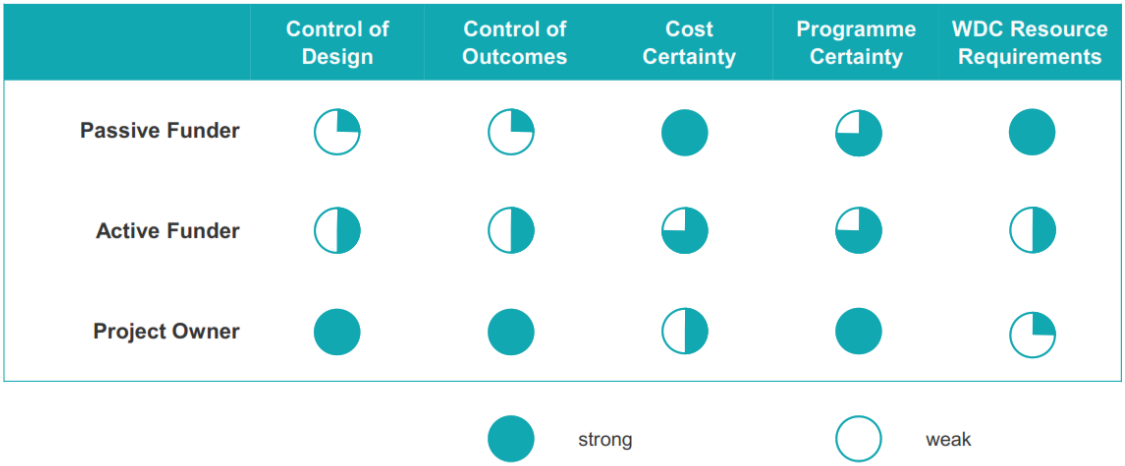
1.1 WDC Role in the Project

External funding has been secured for the CEC project from Crown Infrastructure Partners (CIP) and Northland Regional Council (NRC). Further funding is to be provided by WDC for the associated works to enable the CEC e.g. Boardwalk, landscaping, intersection upgrades, utilities upgrades, potential bridge crossing. The options that could be considered by Council are therefore

1. Passive funder: Provide funds to a development entity and leave it to complete the development
2. Active funder: Provide funds to a development entity and take a governance role to ensure WDC objectives are met
3. Project Owner: Take over the development of the CEC and associated infrastructure

The advantages, disadvantages and risks are described in the body of the report and summarised in the graphic below.

Figure 1: Development Options

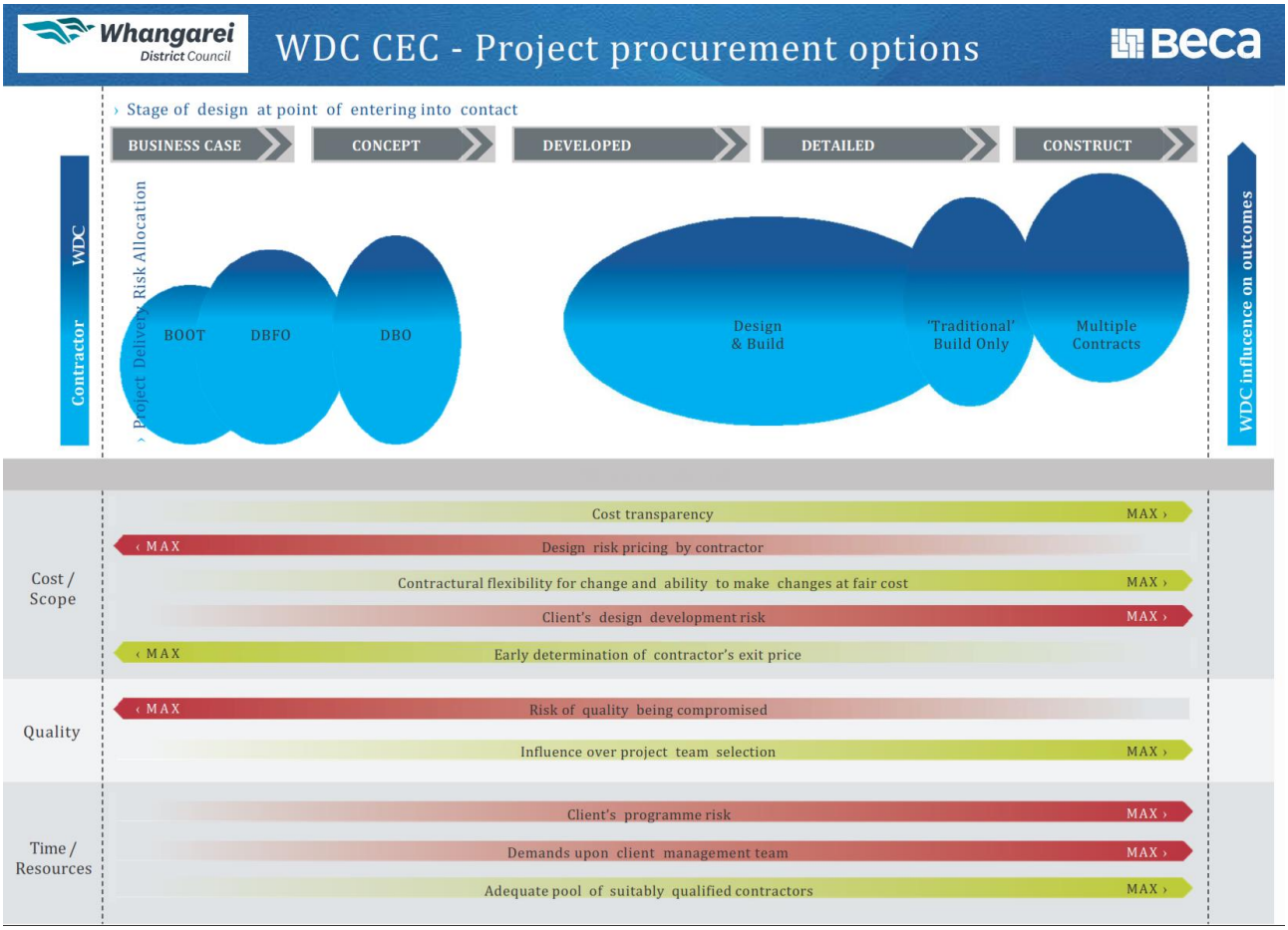


Memorandum

1.2 Procurement Options

In the event WDC decides to become the project owner, there are various options available to procure the project. The preferred option will be determined by WDC's drivers for the project and the relative importance of time, cost and quality. The options are detailed below and have been summarised below to indicate the relative risk level associated with each option.

Figure 2: Procurement Options



2 Purpose

The purpose of this memo is two-fold:

- To describe the main options for WDC to participate in the development
- To describe the delivery options available to WDC should they decide to become the project owner.

Within the options for participation there are a number of sub-options which revolve around the parties to be involved in the project. These will be described briefly below.

3 WDC Role in The Project

The project is currently broadly at concept stage in terms of design and has currently been lodged for resource consent through the fast track process legislated under the COVID-19 Recovery (Fast-track Consenting) Act 2020. The outcome of this process is currently pending.

Memorandum

This leaves several options open for WDC involvement in the project. These are detailed below, and each has advantages and disadvantages attached. It should be noted that these are generic descriptions and each of the first two options can be amended by the form of agreement entered into by WDC and the development entity.

3.1 Passive Funder

In this scenario WDC would enter into an agreement with a development entity who would provide a turnkey solution for the CEC. In other words, WDC would provide a fixed amount of funding in return for the provision of a completed facility. This is an unusual arrangement in the public sector, the key advantage being the ability to transfer cost risk. In principal this sounds very attractive however there are a number of potential problems.

- This process may be unfamiliar to WDC and expert advice would need to be taken at an early stage to protect WDC's interests.
- The cost for transferring risks will not be transparent therefore demonstrating value for money would be difficult.
- WDC are effectively transferring the development risk to another entity and in return that entity would need to price that risk. In doing so they will price for the worst-case scenario for every risk to protect their position. The cost is therefore likely to be higher than with other options.
- This option also takes WDC out of the design decision making process. This means that design requirements need to be very clearly stated in the development agreement. Once signed the development entity will take every opportunity to reduce cost while still meeting the design requirements. This could lead to sub-optimal solutions which could have an impact on functionality or future maintenance and operating costs.
- From a public accountability point of view this option could be risky if a sub-optimal result is achieved whilst cost overruns have a negative reputational effect a long-lasting design issue or ongoing maintenance issue has the potential to be more serious.
- No clear lines of accountability to the design consultants or the construction contractor.
- Drafting and agreeing a development agreement is a time-consuming exercise and would involve substantial legal input.
- This methodology relies on finding a development entity willing to take on the cost and programme risks.

3.2 Active Funder

This option is also relatively unusual in the public sector but more common overall. In this option WDC would act as a funder for the development but play an active role in the governance and decision making through the project. The project would still be undertaken by a development entity who would engage consultants and contractors, the extent of WDC's involvement would be defined in the funding agreement between WDC and the development entity. This would typically include involvement in decisions on appointment of consultants and contractors, changes which have an impact on cost, functionality, timing or future operating and maintenance costs. The key drawbacks of this arrangement are:

- WDC would assume a liability for increase in cost, the extent of which would be defined in the funding agreement
- Although WDC is involved in decision making, most likely at a Project Steering Group level, it does not have total control over the design process or the programme as it is reliant on other parties
- There are no clear lines of accountability to the design consultants or the construction contractor.
- Drafting a funding agreement is time consuming and will require substantial legal input.

3.3 Project Owner

This is the most common and familiar means for a Council to deliver a project. The key advantage is that WDC are in total control of the project which is very important when it comes to a significant civic facility such as this. This control does however come with the complete responsibility for programme and cost. These liabilities are manageable by utilising:

- the correct governance and decision-making structures
- comprehensive planning and management of the project
- rigorous risk management processes
- adequate programme and cost contingencies
- the correct contractual delivery methodology to manage construction risks

This methodology will require greater resource input from WDC from in house staff or consultants.

This option does come with the following advantages

- The appointment of external consultants and Contractors will be directly with WDC therefore they will have direct control and lines of accountability.
- This option also allows WDC to stipulate the procurement options for Contractors e.g. social procurement options, use of local sub-contractors, sustainability goals etc.
- Control of the design means stakeholder objectives can be considered and addressed during the design period, weighing cost against outcomes.
- This is a familiar process and fits well with existing WDC procurement and probity guidelines
- WDC are in control of the programme and can progress keeping in mind the CIP deadlines to trigger funding.

The disadvantages are:

- WDC retain responsibility for programme delays and cost overruns
- Greater input is required from WDC senior staff to maintain good governance and decision making

Memorandum

4 Procurement Options

It has been agreed that a detailed analysis of the different contractual delivery models is not required at this stage.

In the event WDC decide to be the project owner (Option 3.3 above) this can be discussed further. The recommended option would be to hold a procurement workshop with the key WDC stakeholders to determine the drivers for procurement. For example, in this case time to start on site is a critical factor to trigger the CIP funding and this could lead to a preferred delivery model or mixture of models to obtain the required outcome.

From this workshop a procurement strategy with recommendations would be drafted for WDC signoff.

Figure 2 illustrates the relative risks and opportunities with each methodology, in this case the three to the left of the diagram would be the likely options. As a brief explanation of the attributes of each option the green bars are good for WDC the red bars are potential disadvantages. The closer to maximum each option is positioned on the chart indicates how good or bad that option is in respect to the various attributes.

A further layer can be added to those options by considering Early Contractor Involvement (ECI) and possibly a mixture of different methodologies if the project was to be staged to meet the early start requirements.

For the purposes of both estimating and programming a “traditional design, tender, build” methodology has been assumed however this is in no way an indication of the final outcome of the procurement workshop and strategy and does not presuppose an outcome. As far as the programme is concerned an indication has been given of likely programme effects of the different methodologies in the summary memo in Appendix 7 (main report).

Within each of these options there are also various alternatives for the commercial framework between the parties for example a traditional model may use a schedule of quantities or be a lump sum tender. These, together with their relevant merits and drawbacks, can be discussed in further detail during the procurement workshop.

Memorandum

Procurement Options – Addendum

After delivery of the Oruku Landing CEC Project Risk Review report, Whangarei District council (WDC) requested further detail on the potential contractor procurement options available for the Oruku Conference and Events Centre project (the Project).

Procurement Drivers

The means of procurement on a large project are determined by consideration of the project drivers. The selection and prioritising of the project drivers is critical in selecting the appropriate procurement strategy. Project drivers are generally categorised into three areas:

- Client Drivers (Risk, programme, cost, quality)
- Project attributes (project scale, location, complexity)
- Market Conditions (Contractor availability, material supply)

Delivery Methodologies

There are various delivery methodologies used in the New Zealand market that could be considered and these are discussed below together with key considerations in relation to the project.

Full Design, Tender and Build

This is often described as a “traditional” delivery methodology and it entails competitively tendering works based on complete or near complete design documentation. The description “traditional” comes from the fact that most building and civil engineering projects were in the past, and still are, procured under this methodology. The key features of this form of procurement are:

- Tenders are based on the design information at a point in time. The Client holds the risk if subsequent variation claims arise due to changes or development of the design after the tender sum is fixed;
- The works can be measured and scheduled putting all tenders on the same basis and providing rates for valuing variations or costing “value engineering” options; and
- The process provides transparency of pricing before committing to a contract.

The potential advantages to WDC of this methodology are:

- Allows WDC to retain control of the quality and scope through its design consultants;
- An open and transparent tendering process; and
- Risk pricing is reduced by comparison with other methodologies.

Memorandum

The disadvantages are:

- Design development risk is retained by WDC. Incomplete or poorly co-ordinated documentation will result in additional costs for WDC;
- The tendered price is very rarely the final price;
- Can preclude effective Early Contractor Engagement (ECI) (Note: it is still possible to engage a contractor to provide pre- construction services but it is expected this involvement will not provide the same benefits as if a contractor is working under a preferred status); and
- Longer overall programme.

Design Build

There are two distinct design and build methodologies; namely a “pure” design and build based on performance criteria or a “detailed” design build with design consultants novated to a contractor part way through the design process (usually on completion of developed design). The key feature of a design build methodology is that the contractor assumes responsibility for the design. Unless the contract specifications are carefully drafted this can lead to the contractor looking to drive down costs to meet minimum standards.

If it is decided to novate the design consultants, this can be done at different stages of the design. Risk pricing by the Contractor will be different at each stage when there is more or less opportunity to influence the design.

The potential advantages to WDC of this methodology are:

- Early price certainty provided there are no scope variations;
- Transfer of the risk of variations arising from design development;
- Shorter overall programme duration with design and construction overlapping; and
- Single point of responsibility for project design and quality.

The disadvantages are:

- Potential for the quality of the works to be compromised as a result of driving down costs;
- Relatively difficult to control the cost of variations (e.g. purchaser variations) after contract award; and
- Loss of control of design process through novation of the design consultants to the contractor.

It should be noted that the first and third disadvantage points above can only be mitigated by ensuring the specifications and design outcomes are clearly incorporated in any contract documents. Unless already developed upfront this step will add to the overall project schedule.

Separate Contracts

This method of delivery is a variant of the traditional delivery methodology (with the associated advantages and disadvantages) whereby two or more physical works or procurement contracts are let as documentation is progressively completed. This methodology is usually employed when an “early works” contract will provide a programme benefit or materials have a long lead delivery duration requiring an early procurement contract to be awarded.

Memorandum

The potential advantage to WDC of this methodology is a programme advantage.

The disadvantages are:

- The risk of costs arising from conflicts across the interface of contracts; and
- Lack of early cost certainty.

Other methodologies

Other methodologies such as partnering and alliancing are available but are not considered relevant to this Project, due to the lead times required to negotiate these.

Relevance to WDC

The following matrix indicates the relevant merits of each of the above methodologies:

Attribute	Relevance to WDC (TBC)	Traditional	Design and Build	Separate Contracts
Early Cost Certainty	**Medium**	🟡	🟢	🟡
Programme	**High**	🔴	🟡	🟢
Control of design	**High**	🟢	🟡	🟢
Transfer of Risk	**Medium**	🟡	🟢	🟡
Competitive tendering	**High**	🟢	🟡	🟢

Key: red dot = weakest through to green dot = strongest

Conclusions

Due to the requirement to start early to secure CIP funding separate contracts would seem to be the best approach. The programme contained in the original Oruku Landing CEC Project Risk Review report envisaged separate contracts for demolition and site clearance, piling, and the main building works. These would be procured in a traditional, design, tender, build format to satisfy the WDC drivers of control over design and transparent competitive tendering.

Memorandum

Commercial frameworks

Once the overall delivery methodology has been decided there will be a number of commercial frameworks which could be employed. A brief outline of these generic approaches is described below. Subtle variations on the generic approaches that deal with specific disadvantages are not addressed in this paper.

Lump Sum

Lump Sum contracts are generally appropriate for projects where risks can be clearly allocated and all parties fully understand their obligations. In this framework, commercial rewards are based on competitive market pressures through the tender process with the client making decisions based on detailed submissions and pricing. This framework is commonly used in a traditional design-bid-build procurement methodology.

Guaranteed Maximum Price

Guaranteed Maximum Price (GMP) contracts are generally used where a client requires price certainty before all design documentation has been completed. With a GMP the contractor makes an allowance for design development and carries the risk of delivering the project within the GMP. The actual cost of the contract is usually determined through trade letting after contract award and as the design is progressively completed. Savings made on the GMP can be shared between the contractor and client with savings formulae varying widely. Cost overruns above the GMP cap are absorbed by the contractor. It is noted the value of the GMP is only varied with scope variations and not by variations arising from design development although in practice this can lead to disagreements on the definition of the different type of variations. The allocation of risk is particularly important as this will be priced by the contractor as part of the GMP.

Measure and Value

A measure and value framework utilises a schedule of prices (or bill of quantities) as the basis for pricing a tender. The risk of quantity variation is retained by the client and the contractor carries the risk of unit pricing. This framework is particularly good for civil works contract where there can be significant quantity variation and the premium for the transfer of this risk is high. The other advantage of tendering based on a full measure is that all tenders are bid on the same basis providing a greater degree of transparency. Priced schedules also provide a basis for valuing variations.

P&G and Margin

The Preliminaries & General (P&G) and Margin tender framework is used where there is a desire to employ a contractor and commence construction but there is insufficient information to determine a lump sum or GMP i.e. there is an overlap of design and construction. A P&G and Margin tender includes a lump sum for on-site overheads (P&G) and a percentage for its off-site overheads and profit (margin). The percentage is applied to trade prices as they are progressively let. The contract will specify a methodology for trade tendering to provide process transparency.

Others

Profit Share/Target Cost, Cost reimbursable and other frameworks are also used in New Zealand but are not considered relevant to this Project.

Memorandum

Relevance to WDC

The following matrix indicates the relative merits of each of these frameworks:

Attribute	Relevance to WDC (TBC)	Lump Sum	GMP	Measure and Value	P&G and Margin
Pricing Transparency	**High**	🟡	🟡	🟢	🟢
Risk Transfer	**Medium**	🟢	🟢	🟡	🔴
Early Cost Certainty	**High**	🔴	🟢	🔴	🔴
Competitive Tendering	**Medium**	🟢	🟡	🟢	🟢
Control of Variations	**High**	🟡	🟡	🟢	🟡
Flexibility	**Low**	🔴	🔴	🟡	🟡

Key: red dot = weakest through to green dot = strongest

Conclusions

Measure and value would appear to be the most suitable framework from the above assumptions but comes with the caveat around early cost certainty. It also transfers the measurement risk to the client i.e. mistakes in the schedule can become the client's cost liability. Market testing would also be required to determine Contractor's appetite for the various options. Recent experience has shown that Contractors prefer to have a schedule to price but clients prefer to have a lump sum. This compromise can be achieved by having a schedule to price as a tender document but excluding it as a contract document.

Memorandum

Early Contractor Involvement (ECI)

ECI is a further variant on the above delivery methodologies where a contractor is engaged early to provide input into the design to mitigate risk, drive costs down or to shorten the overall programme. It is becoming more common in the current market as it allows clients to secure main contractor resource early for their project. It usually involves a two stage process whereby a preferred contractor status is conferred on a bidder and a pre-construction services agreement is entered into to allow the preferred contractor to input into the design process to address risk and to yield either time or cost benefits.

The preferred contractor can then be appointed through one of the delivery methodologies and commercial frameworks above. Not all lend themselves to ECI but most can be adapted to allow WDC to reap the potential advantages of the chosen framework. The disadvantage of the perceived lack of competitive pricing can be offset by maintaining competitive tension through either competitive sub-trade tendering or a fall-back position of being able to competitively tender the works in the event that the client and contractor are unable to reach agreement on a contract price.

The potential advantages to WDC of ECI are that it:

- Allows the involvement of the builder in the design process in order to mitigate risks around construction, programme and cost;
- Secures resources in a volatile market;
- Allows a shorter overall programme; and
- Enables the overlap of design and construction.

The disadvantages are:

- Early commitment to pay for pre-contract services without final price certainty;
- Scope and deliverables for the ECI stage must be fully defined to ensure value for money;
- Market perception that the ECI contractor has “won” the project therefore limited interest from others if the project does go to market; and
- Lack of price certainty until final price is agreed.

The suitability of ECI for the Project would need to be explored in more detail during the development of the procurement strategy (see next section)

Memorandum

Procurement Strategy Development Process

The following is a proposed process for the development of the procurement strategy:

- A preliminary workshop is held with the appointed project manager to share information and develop an initial strategy. The agenda for this workshop would include:
  - Procurement Drivers (Cost, time, quality)
  - Other procurement objectives (e.g. social procurement expectations)
  - Current market observations
  - Opportunities and market constraints
  - Lessons learnt from other relevant projects
  - Construction market availability and suitable contractors / sub-contractors;
  - Procurement of overseas materials
  - Construction staging options
  - Concurrent regional projects
  - Delivery methodologies and frameworks

- Document draft procurement drivers and shortlisted strategies for further testing and review
- Initial market sounding
- Review with WDC procurement team
- Documentation of preferred procurement strategy
- Finalisation of strategy and documentation of a Procurement Plan

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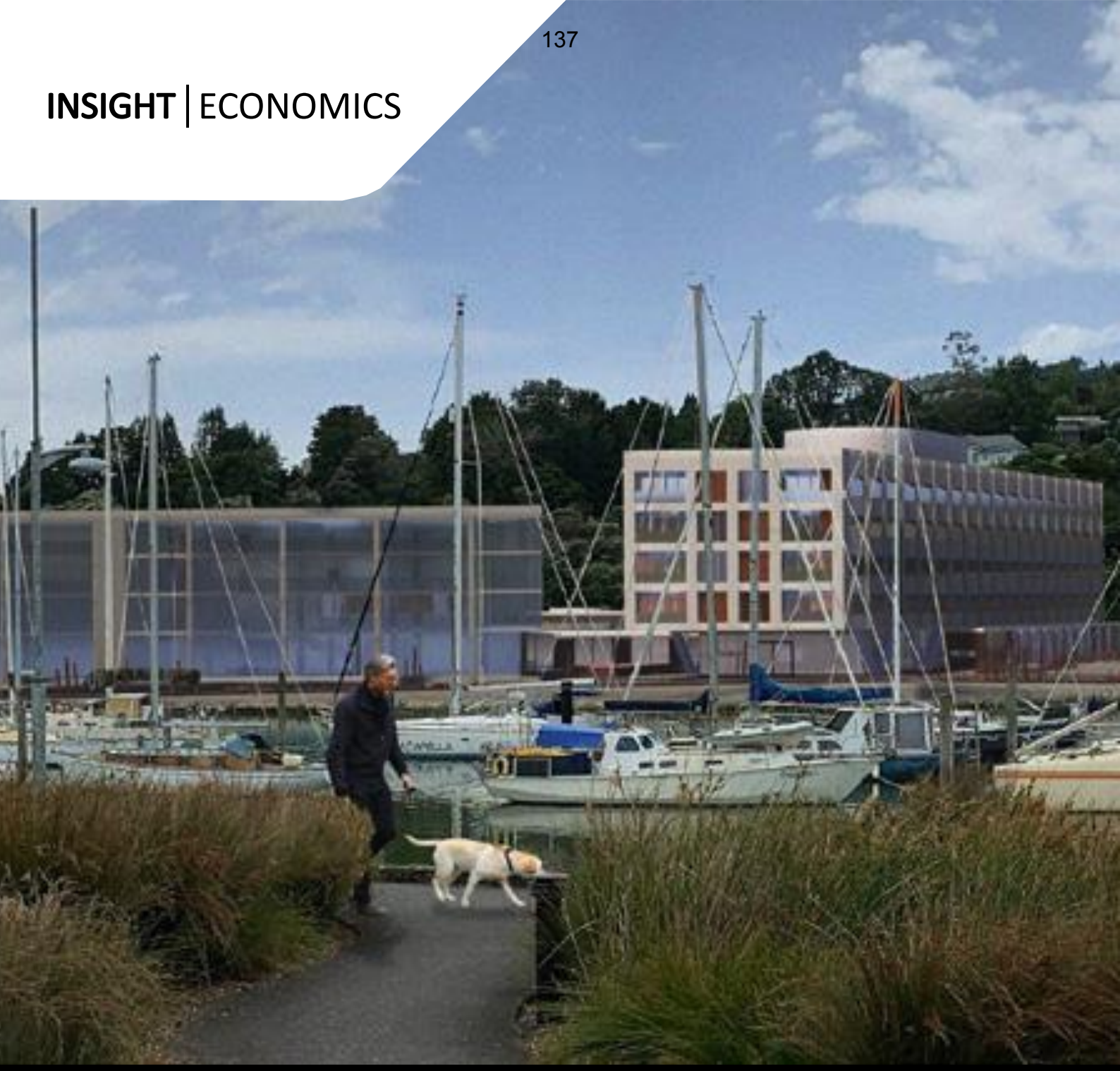

Draft Report: 28 May 2021

Peer Review of the Financial Viability of the Proposed Oruku Landing Development

Prepared for:
Whangārei District Council

Authorship

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Contents

1. Executive Summary

Context and Purpose of Report

Whangārei District Council (WDC) is currently considering a proposal to help fund and develop the Oruku Conference and Events centre (the Events Centre), which will form part of a wider development called Oruku Landing. This report peer reviews the likely financial viability of the Events Centre and comments on other associated issues arising.

Review of Financial Viability

Our peer review included a detailed examination, and full replication, of the financial modelling underpinning the work completed to date. Our review found that the inputs and assumptions used were appropriate, and that the calculations themselves were accurate and free of error. However, the project itself has very poor financial viability with the discounted future value of all revenues (i.e. the NPV) being $56 to $72 million less than the future value of all capital and operating costs (depending on whether depreciation is included).

Importance of Location

The viability of the project is further undermined by the site's location, which is more than a kilometre from the heart of the Whangārei CBD. Research shows that location is a critical factor in attracting conference organisers and delegates, with easy access to tourist activities and accommodation being paramount. The subject site, conversely, is situated outside easy walking distance to the CBD, which fundamentally weakens its overall attractiveness.

Carparking Capacity and Hotel Constraints

Carparking is another issue. Significant parking will be required to make the venue convenient and accessible. However, at-grade parking will consume a large portion of the site's land area, with grade-separated parking being very expensive. Accordingly, more thought is required to determine the optimal number of parks and their configuration. Hotel capacity, however, appears adequate based on the work undertaken by Horwath HTL for the Council.

Facility Size

Finally, we considered optimal facility size. Put simply, a venue that is too small will limit the scale of future events, while a facility that is too large will erode viability. According to Horwath's analysis, most events will be relatively small, except for public shows, which are expected to attract 2,000 people. While it is unclear how many days/nights each show will be spread across, there only three to five such events forecast per year, which will generate only 5% to 6% of total revenues. This invites the question: to what extent has the facility been designed to cater for these much larger events even though they account for such a small share of total revenues/activity? In our view, more work may be required to determine the optimal facility size.

Overall Recommendation

Given the proposal's very poor financial viability, and acknowledging its less-than-ideal location, we strongly recommend that the Council does **not** proceed with the proposed Events Centre.

2. Introduction

2.1. Context

Whangārei District Council (WDC) is currently considering a proposal to help fund and develop prime waterfront land at 44-48 Riverside Drive. Once complete, the proposed development – known as Oruku Landing – will include:

- A conference and events centre
- A hotel - 4 star rated
- Quality apartments
- A public plaza
- Designated car and bus parking
- Bars/restaurants/cafes
- Boutique retail
- Private marina
- Public ferry/water taxi terminal
- A boardwalk along the river's edge.

A detailed assessment of the development, including its likely financial viability, was completed in early 2020. Parts of it were updated in late 2020 by Infometrics to reflect the impacts of Covid-19, with their work focussing on the proposal's likely regional economic effects.

2.2. Scope and Purpose of the Report

This report peer reviews the likely financial feasibility of the Conference and Events centre component within the broader development, which will be partly Council-funded. Our peer review comprised a detailed examination, and full replication, of the financial modelling underpinning the financial assessments completed to date, plus a review of several issues arising in the context of likely project viability.

2.3. About the Proposed Conference & Events Centre

The Oruku Conference and Events Centre ("the Events Centre") will be a multi-purpose venue designed to accommodate up to 1,000 people standing, 750 in terraced seating, and 650 people for banquets. A public plaza will be developed alongside the centre, with a ferry terminal also positioned centrally in the development to cater for ferries and other water taxis.

2.4. Structure of Report

The remainder of this report is structured as follows:

- **Section 3** reviews the financial assessments provided in previous reports by Deloitte, Horwath HTL and, more recently, Infometrics;
- **Section 4** describes the location of the proposed Oruku Landing Development and discusses the importance of location in attracting conference organisers and attendees;
- **Section 5** discusses the importance of carparking requirements and hotel capacity for the successful operation of a Conference and Events centre; and
- **Section 6** discusses other issues, specifically optimal facility size.

3. Peer Review of Financial Assessments

In this section, we review the financial assessment of the Events Centre, as conducted by Horwath HTL and Deloitte on behalf of the Council.

3.1. Scope & Approach

We performed a detailed review of the analyses underpinning the financial summary presented in the Oruku Landing Feasibility Report (February 2020). Our review covered the following:

- Market demand (Horwath HTL);
- Financial performance (Horwath HTL); and
- Financial modelling (Deloitte).

In addition, we reviewed and incorporated information contained in the following supporting documents:

- 'Market Demand and Feasibility Study,' Horwath HTL, November 2019; and
- 'Oruku Landing Precinct – Financial and Commercial Review,' Deloitte, February 2020.

Using the information provided in these various reports, we reconstructed all the calculations embedded in them to assess the:

- Reasonableness of the inputs and assumptions;
- Numerical accuracy of the calculations;
- Treatment, and likely impacts, of Covid-19; and
- The overall viability of the Events Centre.

We report our findings on each aspect below.

3.2. Findings on Inputs & Assumptions

We reviewed the dozens, if not hundreds, of inputs and assumptions contained in the various reports listed above and found them to all be plausible and appropriate.

3.3. Findings on Numerical Accuracy

We also managed to fully replicate the suite of calculations underpinning the various financial analyses, and confirm that they too are all correct and free of any obvious errors. Ignoring minor rounding issues, we were able to reproduce the results reported down to the last dollar.

3.4. Findings on Impacts of Covid-19

The Covid-19 pandemic has resulted in an unprecedented shock to the New Zealand economy, including a near-freeze on international tourism. However, because the original assessments were completed in early 2020 prior to its onset, the effects of the pandemic are not included. This was

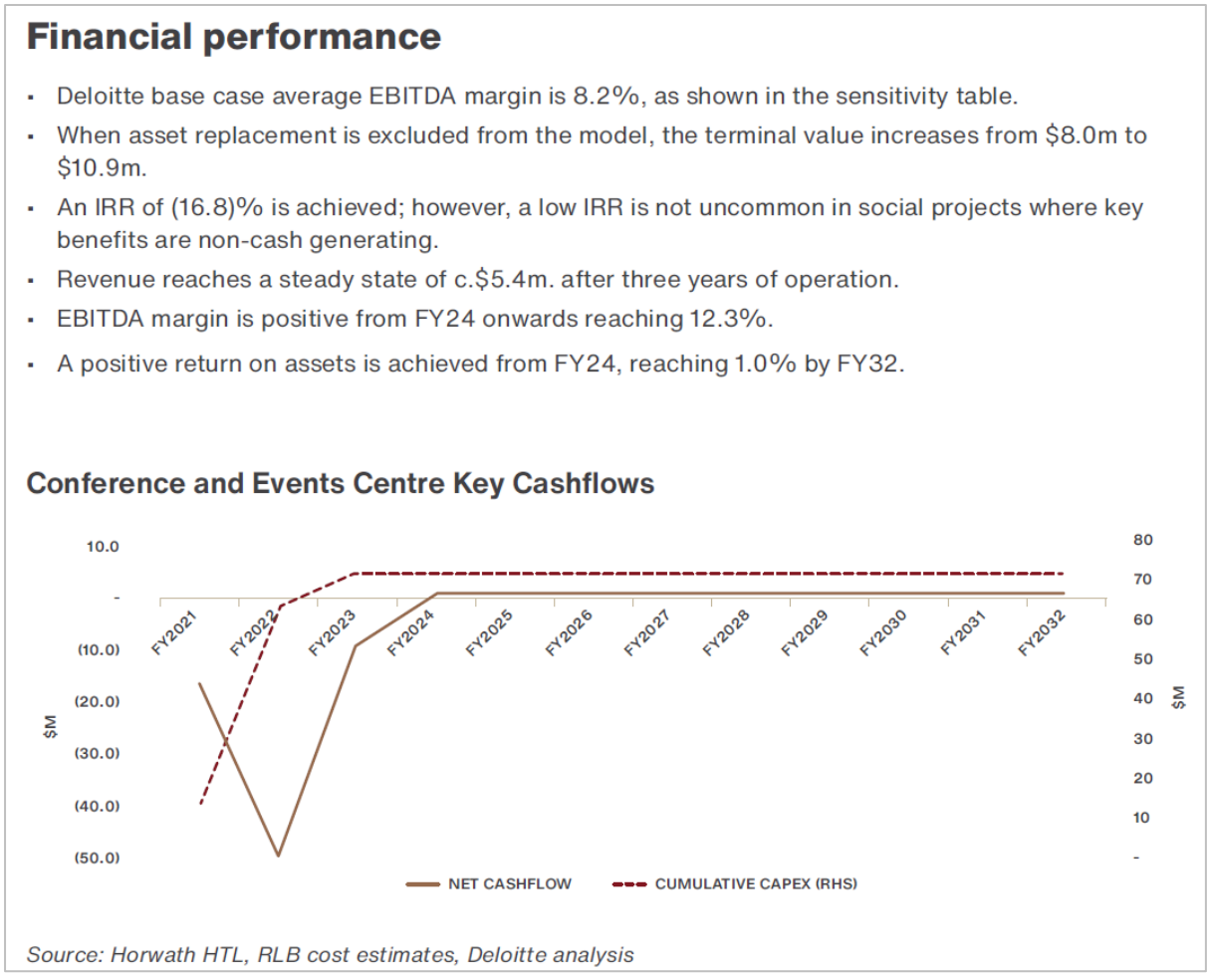
partly resolved late in 2020, when Infometrics was commissioned by WDC to update the economic impact of the Events Centre and associated hotel in light of the pandemic[1].

As part of their analysis, Infometrics determined an annual 'Covid adjustment factor,' which they used to reassess additional visitor demand generated by the Events Centre into the future. We inserted these adjusted demand figures into our replicated financial analysis to understand the resulting impacts on the Event Centre's financial viability. Interestingly, the results were relatively insensitive to these revisions, with only minor changes in projected revenues and profits/losses.

3.5. Findings on Overall Financial Viability

Although the inputs, assumptions, and calculations contained in the various reports listed above are sound, we consider that the reporting fails to clearly convey just how poorly the proposal performs on financial viability grounds. For example, page 54 of the main report includes the following excerpts/summaries from the underlying Deloitte assessment.

Figure 1: Excerpts from Page 54 of Main Report



Other than the reference to an Internal Rate of Return (IRR) of (16.8%) – which means a highly **negative** financial return – there are no clear conclusions reached about viability to inform less

[1] 'Economic impact of proposed hotel and events centre in Whāngārei,' Infometrics, November 2020

numerically-inclined readers. Instead, it just notes that a low IRR is not uncommon for projects of this ilk. However, this is not a low return, it is a highly negative return. The two are not the same.

Our preference is to express the overall financial viability of projects using Net Present Values (NPV). This is a widely-used financial technique that discounts future cashflows back to today's dollars so that they can all be aggregated to assess the overall financial performance of a project in a single figure.

Fortunately, the project's likely NPV can be easily calculated using the net cashflows reported on page 55 of the main document – as highlighted in red below

Figure 2: Cashflows Used To Calculate Net Present Value (NPV) – Page 55 of Main Report

Conference and Events Centre Financial Performance

$000	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	TV
Revenue	-	-	2,431	3,832	5,098	5,395	5,492	5,600	5,712	5,826	5,943	6,062	
Expenses	-	-	(2,572)	(3,646)	(4,448)	(4,727)	(4,821)	(4,911)	(5,008)	(5,108)	(5,210)	(5,315)	
EBITDA	-	-	(141)	187	650	668	671	689	704	718	732	747	
Capex	(16,008)	(48,023)	(8,004)	-	-	-	-	-	-	-	-	-	
Net cash flow	(16,008)	(48,023)	(8,145)	187	650	668	671	689	704	718	732	747	7,970
Key metrics:													
EBITDA margin			(5.8%)	4.9%	12.7%	12.4%	12.2%	12.3%	12.3%	12.3%	12.3%	12.3%	
Revenue per sqm			0.5	0.8	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.2	
Return on asset			(0.2%)	0.3%	0.9%	0.9%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	

Source: Horwath HTL, RLB cost estimates, Deloitte analysis

The only additional information required to estimate the NPV is the Council's average long-term interest rate (otherwise known as the discount rate). Here, we assume a long-term interest rate of 5%. Applying this to the profile of net cashflows on page 55, we calculate an NPV of -$57 million. This means that the value of all future revenues, discounted back to today's dollars, is $57 million less than the value of all future operating and capital costs (again, discounted back to today).

Although the NPV is often sensitive to the assumed interest rate, with lower interest rates typically painting a more favourable picture (and vice versa), that is not the case here. For example, if we apply the lowest possible interest discount rate of 0%, the overall NPV of the project is still around -$56 million.

To make matters worse, the net cashflows used to derive these NPV figures exclude the effects of interest, taxes, depreciation, and amortisation. Accordingly, it does not include a provision for depreciation of the building itself (which is valued at more than $60 million). If depreciation of (say) 2% per annum is included in the analysis, the NPV decreases even further to -$72 million. This means that the discounted value of all future revenues is $72 million less than the discounted value of future construction and operating costs.

3.6. Summary and Conclusion

The proposed Events Centre will cost approximately $72 million to construct, but will produce only very small positive cashflows each year thereafter. If provision is made for depreciation (i.e. renewal), those future cashflows turn negative on an annual basis. As a result, the overall NPV of the project is less than -$70 million.

A financially viable investment, conversely, requires a positive NPV. The proposal misses this financial hurdle by a considerable margin. Accordingly, we strongly recommend that the Council does not proceed with the funding or development of the Events Centre.

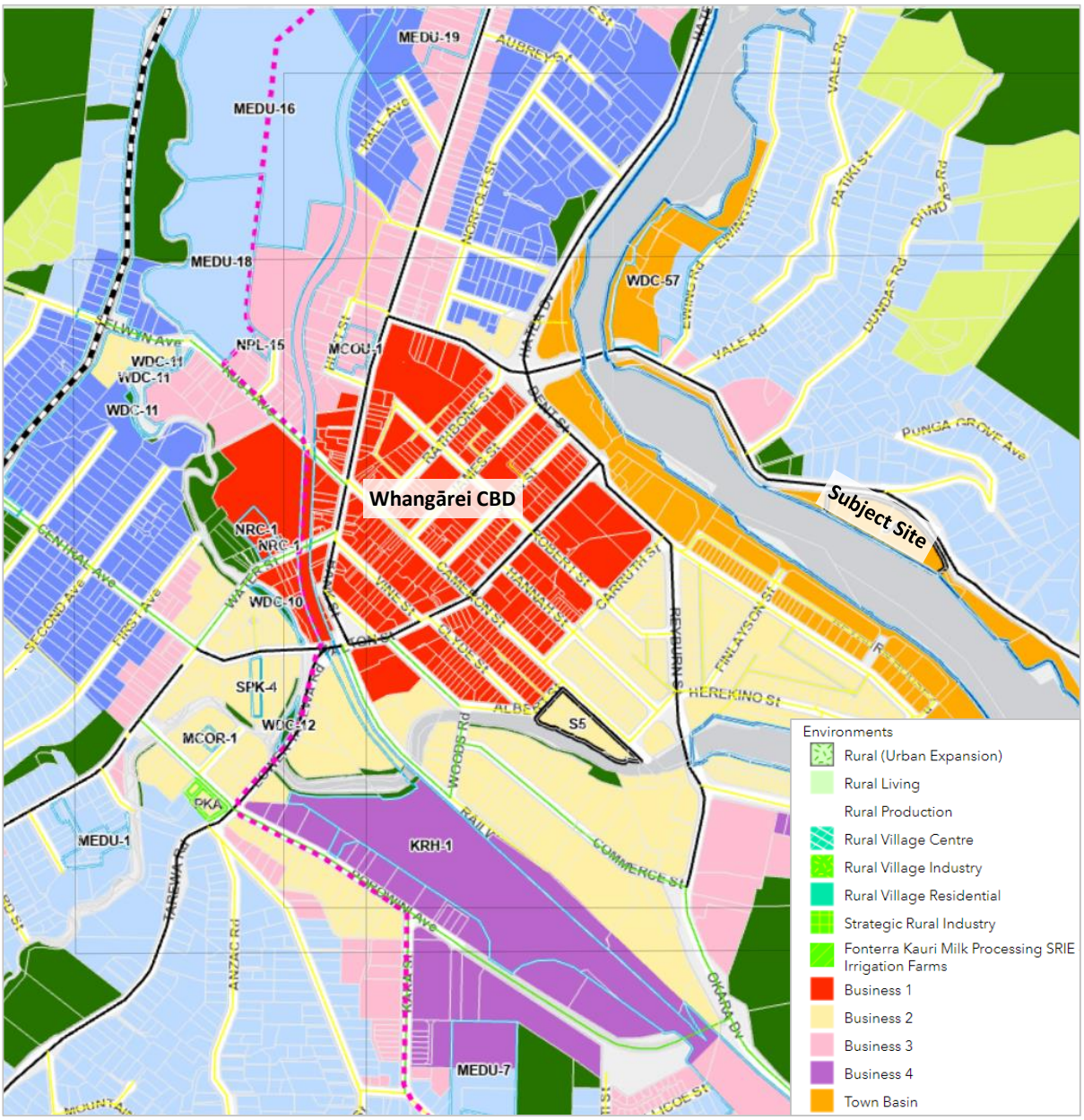
4. Location

This section identifies the proposal's location and discusses the importance of a good location to the financial viability of conference and events venues.

4.1. Proposed Location

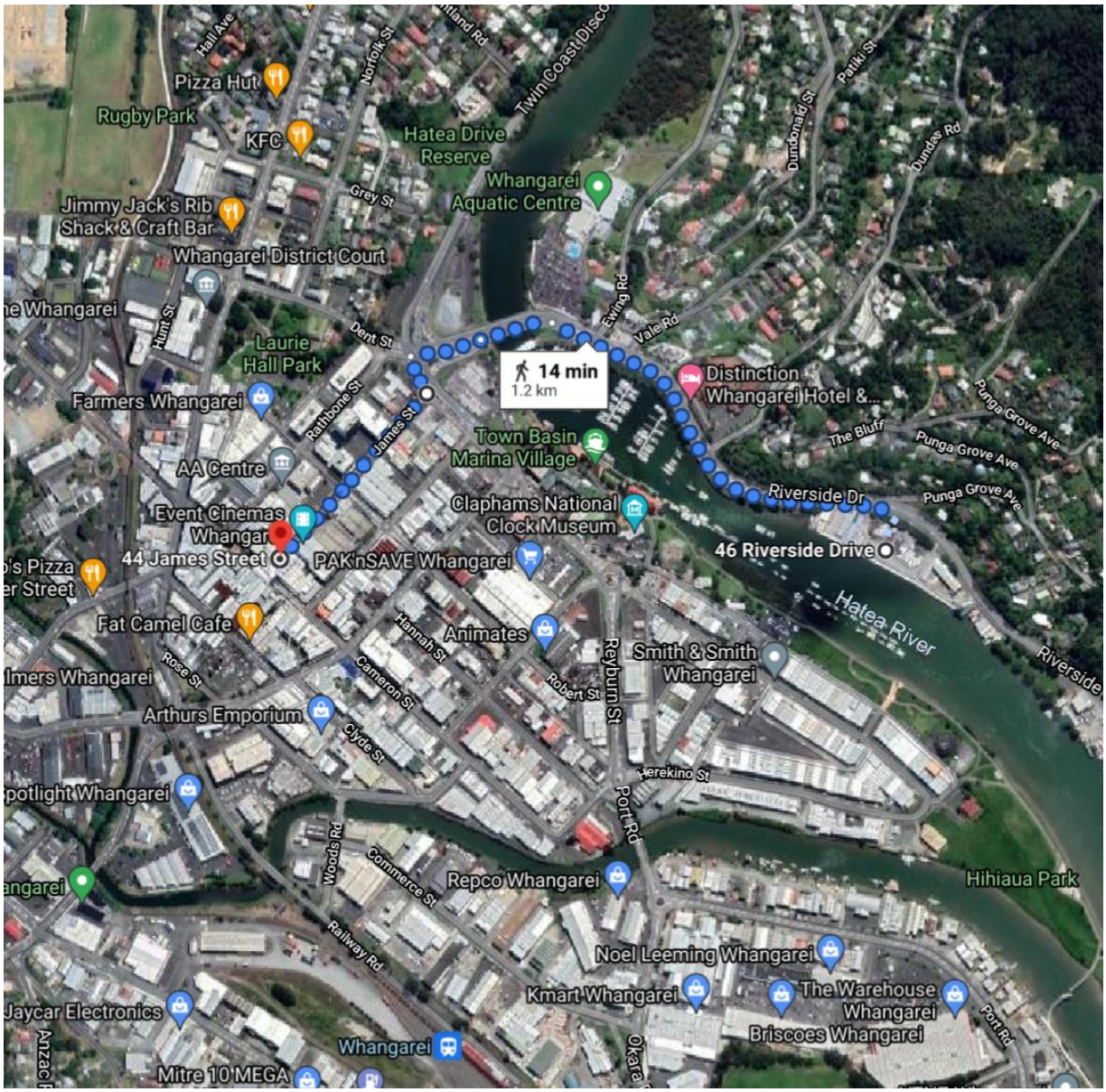
The subject site for the proposed Events Centre is located at 44-48 Riverside Drive. This is illustrated in the zoning map below, with the large red area denoting the Whangārei CBD. In short the subject site is separated from the CBD by the Hatea river. However, there is a foot bridge to it approximately 600 metres west of the subject site.

Figure 3: Location of Subject Site Relative to CBD



We used Google Maps to calculate the walk time and distance from the subject site to the centre of the CBD (i.e. the corner of James Street and Cameron Street). The results are shown in the figure below, and indicate that the walk is approximately a 14-minute, 1.2 kilometre journey.

Figure 4: Walking Time/Distance from 44-48 Riverside Drive to Whangārei CBD



In our view, this walk is too far for many prospective attendees, particularly after dark. While we understand a water taxi may service the subject site, this will not suit some people, with others preferring to walk or travel independently. This relatively long walking distance to the CBD may also be important for larger events that exceed the capacity of the proposed, associated 132-key Novotel hotel. In those circumstances, event organisers will need to organise transportation to and from the venue to other accommodation providers nearby. i.e. in the CBD. Indeed, the baseline assumption in the Horwath reporting is that only half of attendees staying in a hotel remain onsite, with the other half staying in commercial accommodation elsewhere.

To further assess the importance of location, we briefly reviewed the literature, with a summary of our findings presented below.

4.2. Importance of Location

Location is one of the most important factors to consider when an event organiser is deciding where to hold a conference. For example, Borghans, Romans and Sauermann (2010) argue that conference location is the second most important factor, because it is able to shape the decision making process of potential delegates regarding their participation in conferences.

In a study conducted by Breiter and Milman (2006), attendees of trade shows and exhibitions at a large convention centre indicated that the destination in which the event is held is important in their decision to attend. An Australian study by Comas and Moscardo (2005) held in-depth interviews with conference organisers. They found that venue was the most important attribute regarding the decision of the host destination. Other factors that affected the decision-making process included budget constraints and the use of a committee for planning and organising tasks. With regard to venue characteristics, size was one of the main attributes with flexible room options for smaller and larger conferences. Location and access was also important, with most association conference organisers wanting to have a venue that was close to other activities and that would showcase the area as a tourist destination. In a study by DiPietro et al (2008) conference organisers were asked to rate the importance of variables related to the destination in their decision making. All respondent groups rated perceived value for money, overall cost, support services for events, reputation for hosting successful events, and desirable destination image as important to extremely important.

To summarise: research has found that conference locations must be easily accessible to guests visiting from outside the region, and that the location must also have attractions worthy of leisure tourism to attract conference attendees.

The Hotel Feasibility Report prepared for WDC in 2015 by Griffiths and Associates also outlines the necessary connection between a high quality hotel and the surrounding experience its customers would expect to have; 'It is not just the provision of a building that creates demand it is the creation of an experience within the CBD and around the location of the hotel. What else is on offer that makes the destination special, in demand, worth sharing the experience with friends and colleagues attracting repeat business? This business in order to sustain the hotel facility must be from both domestic, national and international tourism as well as the corporate business sector.'

We can distinguish different markets that the conference centre could cater to, and identify the relevant competition and competitive advantage of Oruku Landing Development. The potential markets are; regional, national and international event organisers. The facility has to offer unique features relative to each competitive market to attract these different types of customers.

For regional customers, the competition space includes other conference and event facilities in Northland. The competitive advantages of Oruku are that the conference centre has a 4-star hotel accompanying the event centre, capacity for large local conferences and events, new custom built conference facilities and Whangārei's tourist attractions.

For nation-wide customers, the market size is larger, and the competitive advantage is smaller. There are numerous options for conference facilities with 4-star hotels, new and custom-built facilities and world-class tourist attractions nearby. The international market is even more competitive as Whangārei competes with other countries conference facilities, in addition to the rest of New Zealand.

For a significant project cost of at least $72 million, and a maximum event standing capacity of 1,000 attendees or 750 terraced seats, the facility needs to be competitively placed for at least the national market for conferences in order to recoup the cost of the build through fees charged for holding events and conferences.

Horwath HTL's Market Demand and Feasibility study conducted in 2018 recommends that Whangārei's conference facilities would be suitable for regional audiences given the distance and travel connections; 'Whangarei is relatively remote, having limited connectivity to the national population south of wider Auckland / Waikato / Bay of Plenty. Whangarei also has limited accommodation options in terms of standard and differentiated products. Because of this, we believe the initial conference market target for Whangarei lies in the small to medium size conference category (<300 delegates).'

Additionally, the Howarth HTL report was not site specific, and therefore the report didn't take into account whether the proposed location at 44-48 Riverside drive would offer the convenience and attractiveness of a conference centre as a destination.

In short, we consider the subject site relatively poorly located for the proposed Events Centre.

5. Importance of Car Parking and Hotel Capacity

5.1. Car Parking

Given the subject site's slightly remote location – and the wide range of land uses proposed for it – sufficient car parking will be essential. For example, the Events Centre is a multi-purpose venue intended to accommodate up to 1,000 people standing, 750 terrace seating, and 650 for banquet. The Oruku Plaza is planned to be developed along with the events centre and is designed as a public space between the river, Conference and Events Centre and the Hotel. Commercial hospitality tenancies within the events centre and hotel boarder this space. The Oruku Ferry Terminal is intended to be positioned centrally in Oruku Landing and caters for ferries and other water taxis. It has provision for electric charging facilities. There is also the planned private development of a Novotel 4 star hotel, with 132 key capacity.

The proposed city fringe site at 44-48 Riverside Drive has few alternative options for carparking outside of the Oruku Landing Development. In addition, customers will expect the convenience of adequate carparking from a custom-built venue and associated 4-star hotel. As a result, sufficient carparking is paramount.

Including space for access and manoeuvring, the average car park is approximately 25 square metres. Hence, a 100-space carpark would consume about 2,500m^2, while a 300-space carpark (which may be required for larger public events) would be around 7,500m^2. Assuming all parking is provided at-grade, carparking requirements could consume a significant proportion of the site's 12,460m^2 land area. While grade-separated parking may be an option, it is far more expensive than at-grade, so there will be a trade-off between having enough parks to make the site a convenient and accessible location, versus having enough land to house all the proposed land-uses.

In short, more work needs to be done to understand likely parking requirements and to reconcile those them with the land available.

5.2. Hotel Capacity

The Horwath HTL analysis projects the number of additional visitor nights associated with the proposed development, and converts them to demand for the onsite hotel. According to their calculations, the proposed 132-key hotel will be more than sufficient to meet future demand. However, that said, it is worth noting that they assume only half of visitors staying in commercial accommodation will remain onsite, with the other half staying elsewhere. If that really is the case, it highlights the need for easy movement between the subject site and other locations, such as the CBD.

6. Other Issues

6.1. Facility Size

As noted earlier, we understand that the Events Centre will be designed to accommodate up to 1,000 people standing, 750 people in terrace seating, and 650 people for banquets. This raises the issue of the optimal facility size. On the one hand, a facility that is too small will limit the scale of events that can be hosted. However, on the other hand, a facility that is too large will erode viability.

The table below shows the expected sizes of different events proposed to be held at the Events Centre. Most are relatively small, except for public shows, which are expected to attract 2,000 people. However, only three to five of these are expected to occur per year (which is less than 2% of the total number of events), and they are forecast to generate only 5% to 6% of total revenues.

Table 8.3: Average Event Size

AVERAGE EVENT SIZE	YR 1	YR 2	YR 3	YR 4	YR 5
Conference - Medium / Large	185	185	185	185	185
Conference - Small	85	85	85	85	85
Day Meetings - Corporate	40	40	40	40	40
Exhibition - Conference	96	96	96	96	96
Banquet - Conference	135	133	132	132	132
Banquet - Other	100	100	100	100	100
Functions	50	50	50	50	50
Trade Exhibitions	150	150	150	150	150
Civic Events	250	250	250	250	250
Public Shows	2,000	2,000	2,000	2,000	2,000
Theatre Events - Community	250	250	250	250	250
Theatre Events - Commercial	400	400	400	400	400
Average Event Size	**170**	**169**	**168**	**168**	**168**

This invites the obvious question. What would be the optimal facility size absent public shows? Or to put it slightly differently, to what extent has the facility been designed to cater for these much larger events even though they account for such a small share of total activity?

Unfortunately, we don't have the information in front of us to answer these questions, and it partly depends on how many nights they are spread across. However, we consider it important that the Council consider whether the Events Centre is the optimal size given the expected profile of events and their relative sizes/frequencies.

References

Borghans, L., Romans, M., & Sauermann, J. (2010). What makes a good conference? Analysing the preferences of labour economists. *Labour Economics*, *17*(5), 868-874.

Breiter, D., & Milman, A. (2006). Predicting exhibitor levels of satisfaction in a large convention center. *Event Management*, *10*(2-3), 133-143.

Comas, M., & Moscardo, G. (2005, December). Understanding associations and their conference decision-making processes. In *Journal of Convention & Event Tourism* (Vol. 7, No. 3-4, pp. 117-138). Taylor & Francis Group.

DiPietro, R. B., Breiter, D., Rompf, P., & Godlewska, M. (2008, November). An exploratory study of differences among meeting and exhibition planners in their destination selection criteria. In *Journal of Convention & Event Tourism* (Vol. 9, No. 4, pp. 258-276). Taylor & Francis Group.

From: Hugh Mackie <hughmackie@griffithsandassoc.co.nz>
Sent: Tuesday, 8 June 2021 6:05 pm
To: Simon Weston; Sandra Boardman; Shelley Wharton; Cr. Vince Cocurullo; Cr. Greg Martin; Cr. Gavin Benney; Tony Collins; Ben Tomason; 'Barry Trass'; Rae Hetaraka; Sheryl Mai
Subject: Oruku Landing Group Reports
Attachments: Oruku notes on reports 20210605.pdf

Hi All

Attached are further comments in regard to reviews undertaken by WDC consultants.

Further information is expected from NDC consultants (RLB – Quantity Surveyors and Deloittes on financials) tomorrow and we will forward this on as soon as available

Regards

Hugh

Hugh Mackie
BE (Civil)

Project Consultant

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NDC REVIEW

COMMENTS ON INSIGHT REPORT

The Insight report criticises many aspects of the proposed project and comments on these are:

1. Size of the events centre – does state that this needs to be further evaluated but the size proposed is based on an extensive study by a respected consultant in this field. The size and flexibility of the centre is based on their experience and a study of likely user demand.
2. States that the centre needs to be close to the CBD for accommodation reasons but there is virtually no accommodation in the CBD and nearest alternative accommodation is on the same side of the harbour and close to the events centre.
3. Parking – states insufficient parking available unless whole site is car park. According to the detailed traffic& parking report by Engineering Equilibrium, alternative parking at ground level is available for 839 parks within a 10 – 17 minute walk of the events centre, and states that excellent pedestrian access is available.
4. Criticises the HTL report for the hotel not being site specific. The HTL revised report was site specific, but Insight did not have a copy of this report.
5. Makes reference that they have considered all available reference material in regard to expectations of people attending conferences. The references are all between 11 and 15 years old.
6. Location – states that event centre is a long way from the CBD at 1.2km (15 minute walk) and measures this by the road network. It takes no allowance that the proposed bridge would shorten this considerably, that the bridge lands close to the town basin and that many of the Whangarei tourist activities and restaurants are concentrated at the town basin and not in the CBD.
7. States that although the base parameters established by Deloittes are correct, their analysis is too complex and NPV is the correct analysis method. Comments on the financial analysis are :

    - A purely financial review is not an appropriate way of appraising public infrastructure investments. Analysis and modelling would typically include an assessment of the strategic fit against council objectives as well as a more quantitative analysis of benefits (and disbenefits) such as the economic, social, environmental and health impacts, which may be significant. The latter should be captured via a Cost Benefit Analysis (CBA), in line with Treasury guidelines.

    - The financial model was set up for use by NDC and does not appropriately assess the costs and benefits that accrue to Whangarei District Council. Currently, the NPV captures all financial impacts to all parties. It may be more appropriate for the NPV, in the case of an investment decision for Whangarei District Council, to capture only the impacts to the council. These would be quite different to those included in the modelling, likely including significantly lower capex.

    - The events centre asset makes an ongoing operational surplus, a key metric that should be highlighted in the analysis and was an important focus of the council.

    - Since this analysis was undertaken, a 5% discount rate has been noted as appropriate for infrastructure of this type by Treasury.

- The review notes that provision for renewals is not included. This is incorrect, depreciation is not included, but provision for asset renewal is included in the analysis on a cash basis using the $200k p.a. assumption developed by Harworth HTL and therefore includes the economic impact of future asset replacement / renewal. The additional analysis undertaken in the peer review should be considered for exclusion.

- Taken together, these impacts may have a significant positive impact on the analysis (both NPV (Net Present Value) and a CBA (Cost-Benefit Analysis)).

ARCHITECT'S COMMENTS ON BECA REPORT

References noted are in regard to the Beca report

Page 6 - 5 - Opportunities

Regarding raising the building by a storey. Although this provides for an easy (more affordable) structural system this has a dramatic effect on the overall project in terms of amenity value for those people walking / moving around the building at street level and Hatea Loop, pushes the building through the height limit creating a more dominant building effecting all the surrounding spaces, infringes further the day light angle to the Hatea River. It is hard to see this being acceptable due to the decrease in amenity value!

Appendix 4 - CEC Supporting Infrastructure

Page 2 - item 5 - not relevant! This review is of the Events Centre, not the Hotel and Mixed use building.

Page 4 - item 14 –

As noted above, there was considerable consultation with Hapu through Jade Kake, with her findings and cultural narrative forming the basis for many of the decisions made around design. This was an initiative which was promoted at the very start of the project and continues through to the completion of the concept. This is all outlined in 4Sight's documentation and the cultural document provided by Jade - Matakohe Architecture and Urbanism / Ngāti Tahu O Tonongare, Te Parawhau. It is assumed that BECA received this document?

Sight should comment further particularly around the connection between "living urbanism" and Te Aranga Principles.

Page 4 - item 15 –

Built Form - It is assumed that this comment relates to the overall scheme which I understood to be outside of BECA's brief. Regarding the comment about the exclusion of legible public realm function, it is difficult to understand how that comment can be made considering the very public space adjacent to the Events Centre as highlighted on the image used on the front of the report and then there is the existing walkway to the edge of the Hatea River which is greatly enhanced by widening and connecting to the marina and public plaza?

FURTHER TERMS OF SALE

19. **Definitions**

19.1 In this agreement the following terms have the meanings specified:

"Adjustment Land"	means the area of the Non-MCEC Land set out in Appendix 5.
"**As Approved Value**"	has the meaning given to that term in clause 23.1(b)(ii).
"As Completed Value"	has the meaning given to that term in clause 23.1(b)(iii).
"Feasibility Report"	means the Feasibility Report attached as Appendix 3.
"Vendor Building Consent"	means the building consent(s) that the vendor will require to construct the intended parts of the Project on the Non-MCEC Land, including, without limitation, the apartments and hotel.
"Non-MCEC Land"	means the 6,700 metres square more or less as shown on the plan attached as Appendix 2.
"**MCEC"**	means a multipurpose conference and event centre to be constructed on the property by the purchaser in accordance with this Agreement and the attached designs and specifications as shown in Appendix 3 as part of the Feasibility Report.
"Objective"	to complete the Project promptly and efficiently.
"Project"	the intended construction of a hotel, carparking and apartments & marina by the vendor on the Non-MCEC Land and the construction by the Purchaser of the MCEC on the property in a manner consistent with the Feasibility Report, including the designs and specifications therein.
"Project Resource Consent"	has the meaning given to that term in clause 20.1(e).
"Property"	the property described on the first page of this agreement and depicted in Appendix 1.
"Purchase Price Adjustment"	means the difference between the As Completed Value and As Approved Value which is agreed by the parties under the condition in clause 20.1(h).
"Purchase Price Adjustment Date"	the date that the vendor commences construction of a hotel on the Non-MCEC Land provided such date is no later than 6 years after settlement under this agreement. For the purposes of this definition, commencement of construction of the hotel is the date that building consent for the hotel is in place and consented works of the foundations commences.
"Purchaser"	means the purchaser and all its assigns and successors

(where applicable)

"Vendor" means the **vendor** and all its assigns and successors (where applicable)

20. **Conditions**

20.1 This Agreement is conditional on:

(a) the Northland Regional Council ("NRC") approving its part in the Project through NRC's "Long Term Plan 2021-2031" by 31 August 2021 on terms acceptable to the purchaser;

(b) the Purchaser approving its part in the Project by 31 August 2021;

(c) separate title being issued for the property by 30 November 2021;

(d) the completion of the valuation referred to in clause 23 by 18 August 2021 or such later date stipulated by the vendor by notice to the purchaser provided such date is before 30th of November 2021;

(e) the vendor obtaining a resource consent for the Project related building works ("**Project Resource Consent**") on terms and conditions acceptable to both parties by 30 June 2022;

(f) the purchaser carrying out and being entirely satisfied with a due diligence investigation of the property in relation to such matters that the purchaser considers relevant or desirable and giving written notice of such satisfaction to the vendor or the vendor's solicitors by 31 August 2021; and

(g) Crown Infrastructure Partners Limited ("CIP") providing its written consent or agreement to the purchaser being the recipient of the funding that CIP has dedicated to the construction of the MCEC, (on the condition that the purchaser completes the construction thereof), by 31 August 2021.

(h) The parties agreeing the purchase price (being based on the As Approved Value) and the Purchase Price Adjustment by 3 September 2021~~each being satisficed (acting reasonably) that the purchase price determined under clause 23 is not materially different to what it would have been had it not been for an event or circumstance outside of the reasonable control of the relevant party (including, but not limited to domestic or international financial crisis, act of God; earthquake, flood, fire, storm and adverse weather conditions or natural events; sabotage, riot, civil disturbance, explosion, terrorist acts, epidemic or pandemic (including implementation of further covid-19 lockdowns), national emergency, or act of war governmental restraint, sanction, expropriation, prohibition, intervention, direction or embargo; strike or other labour hindrance) that takes place after the date of this agreement but prior to the determination of the purchase price, and giving written notice of such satisfaction to the other party or their vendor's solicitors by 5 working days after the purchase price has been determined~~.

20.2 The vendor will cooperate with the purchaser in respect of the purchaser's due diligence investigation under clause 20.1(f) provided that if any investigations or information requests of the purchaser or its consultants in connection with its due diligence would result in the vendor incurring costs in order to respond to the same, the purchaser shall reimburse the vendor for such costs incurred after the date of this agreement (to the extent that they are reasonable).

21. **Deposit**

21.1 The Purchaser agrees to immediately pay a deposit of 10% of the purchase price to the Vendor upon the date this Agreement becomes unconditional in all respects.

22. **Settlement Date and Adjustment Land**

22.1 The Settlement Date for the property is the day that is 10 working days after a separate record of title has issued for the Property and this agreement becomes unconditional in all respects. The purchaser shall pay the purchase price (excluding the Purchase Price Adjustment) in full and without deduction to the vendor on the settlement date.

22.2 If this agreement becomes unconditional and the purchaser completes the purchase of the property:

(a) the vendor and purchaser shall co-operate and sign all documents necessary to complete a boundary adjustment between the Non-MCEC Land and the Property so that the area of the Adjustment Land is transferred from the vendor to the purchaser and incorporated into the purchaser's title; and

(d) all provisions of this agreement that apply to or in relation to the property shall also apply to the Adjustment Land as if it was part of the property, including, without limitation, clauses 24, 25 28, 29,30 and 31.

23. **Purchase Price**

23.1 Subject to clauses 23.2, the purchase price for the property will be determined under the following process:

(a) Each party will appoint a nationally recognised registered valuer who is a member of the Property Institute of New Zealand to complete a valuation of the property on the basis that the Adjustment Land forms part of the property for valuation purposes.

(b) Each party will give their valuer the valuer the instructions attached to this agreement as Appendix 4 such instructions to be given on the basis that the valuers, having received the instructions attached in Appendix 4 shall meet together as soon as possible and agree a timeframe to complete the valuation as soon as possible. The parties acknowledge that the valuation will be undertaken by the valuers on a three stage basis as follows:

(i) An "as is" value of the property (including Adjustment Land) prepared on the basis that the Project Resource Consent has not been issued.

(ii) An "as approved" value of the property (including Adjustment Land) prepared on the basis that the Project Resource Consent has been issued ("**As Approved Value**").

(iii) An "as completed value" of the of the property (including Adjustment Land) prepared land on the basis that the approved developments on the property and Adjustment Land (the MCEC) and the Non-MCEC Land (the 4 Star Hotel) and (the apartment, commercial and carparking building) have been completed together with associated developments and infrastructure work ("**As Completed Value**").

~~(b)~~(c) Once the parties have received their respective valuations they shall share them with the other party and shall seek to agree the purchase price and Purchase Price Adjustment for the purposes of satisfying the condition in clause 20.1(h).

~~(c) If the valuers valuations of the Property (including Adjustment Land) are the same, that shall be used to determine the purchase price.~~

~~(d) If the valuers' valuations are different, the value will be determined as follows:~~

~~(i) The vendor and purchaser shall seek to agree the value by reference to their respective valuations and advice from their respective valuers.~~

~~(ii) If the parties are unable to reach agreement under clause 23.1(d)(ii) within 5 working days of completion of both party's valuations, they will each immediately instruct their respective valuers to appoint a third nationally recognised registered valuer who is a member of the Property Institute of New Zealand by agreement between them. If they are unable to agree who that shall be 5 working days of being instructed to do so, the umpire will be appointed by the President of the Property Institute of New Zealand upon application by either valuer or party. The umpire shall then fix the value of the property (including Adjustment Land), for a value no lesser or greater than the amounts determined by the valuers. The valuers and the umpire will act as experts and not as an arbitral tribunal. The umpire will consider submissions provided from the valuers, vendor and purchaser when considering the valuation. The decision of the umpire will be final. The umpire's costs will be paid equally by the parties.~~

23.2 The purchaser agrees to pay to the vendor the "Purchase Price Adjustment" in full on the Purchase Price Adjustment Date. The Purchase Price Adjustment shall be paid to Northland Investment Corporation LP, notwithstanding that Northland Investment Corporation LP may have transferred the Non-MCEC Land to a third party prior to the Purchase Price Adjustment Date.

~~23.2~~23.3 Despite clause 23.1 and 23.2, the maximum aggregate of ~~that~~ the purchase price and Purchase Price Adjustment will be is [redacted] if any. The parties acknowledge that the apportionment of the purchase price as between land and buildings will be:

(a) for the buildings: [redacted] if any; and

(b) for the land: the balance of the purchase price.

24. Purchaser Obligations

24.1 The Purchaser covenants with the Vendor that:

(a) Upon settlement the Purchaser will use its best endeavours to commence the construction of the MCEC on the Property in accordance with the following requirements:

(i) the Purchaser will construct the MCEC on the Property and in doing so will ensure that its final design and construction does not materially deviate from the form, function, scale and intended use of the MCEC set out in the preliminary design and specifications for the MCEC as shown in the Feasibility Report other than where deviation(s) are required to meet engineering and/or construction costs constraints.

(ii) the Vendor will transfer, provide access to, assign and/or licence (to the extent it is legally permitted to do so) all intellectual property and due diligence information that it holds and is relevant to the property and construction of the MCEC to the Purchaser following settlement.

(iii) the Purchaser in tendering contracts for or in connection with the

construction of the MCEC shall follow its Procurement Policy and, to the extent that is appropriate, encourage local supply in accordance with its policy and good industry practice and guidelines that apply for procurement in the public service with weighting for local suppliers to be allowed for in RFP/RFI processes subject to compliance with CIP requirements. Subject to the consent of CIP, which the Purchaser shall use its best endeavours to obtain, the Purchaser, in undertaking any procurement process for the purposes of the construction of MCEC, will include provisions applying social procurement objectives in a manner no less prescriptive than those required by the Ministry of Business, Innovation and Employment in its funding agreement for the Purchaser for its Port Road 1940503 Upgrade Contract with schedule 4 to that contract setting such objectives being annexed hereto as Appendix 4 and will also comply with any additional CIP requirements regarding local procurement requirements in relation to the Project and construction of the MCEC.

(b) The purchaser agrees to carry out the marketing, branding and operation of the MCEC in a manner complimentary to the adjoining hotel and apartments intended to be completed on the Non-MCEC Land including using the "Oruku Landings" brand to do so. The vendor agrees that it will not charge the purchaser any fee or royalty for the use of such brand but the parties agree to share costs related to the brand (including website and brand maintenance costs) on a fair and reasonable basis but only to the extent such applies to MCEC.

(c) The Purchaser shall continue the existing relationship that the Vendor possesses with Ngati Kahu O Torongare as Mana Whenua and its representatives including (but not limited to) Richard Shepherd in the construction and operation of the MCEC.

(d) In constructing and operating the MCEC the purchaser will work with training providers in the Northland region (including Ngati Kahu O Torongare) to create opportunities for career pathways and training for individuals in the Northland region.

(e) The Purchaser will construct all required public infrastructure referred to in the Feasibility Report other than the bridge and ferry terminal to or in relation to the property, the MCEC development and the Non-MCEC Land as detailed in the Feasibility Report at its sole cost and in all material respects in accordance with plans lodged for the Project Resource Consent where applicable. In respect to the bridge and ferry terminal, the parties acknowledge that the purchaser's construction thereof is subject to financial viability, engineering and feasibility. If the purchaser wishes to undertake any material design or scope changes to any such items, (sewer, boardwalk, roading, footpath, bridge and ferry terminal), it must first obtain the prior written approval of the vendor such approval not to be unreasonably withheld.

(f) The purchaser will not attempt to disrupt or obstruct the vendor's resource consent application for the Project Resource Consent (whether by way of fast track or standard application process). The Purchaser shall co-operate with the vendor and not make any application for resource consent to construct the MCEC.

25. **Easements and rights**

25.1 To the extent that they affect the Non-MCEC land, the purchaser will immediately upon request of the vendor where necessary for the demolition of existing buildings and

construction by the vendor of consented buildings on the Non-MCEC Land, surrender its rights under easement instrument 1153227.2 (for pedestrian / cycleway and right to convey electricity easement) provided that the vendor arranges for any services located in such easement area to be relocated onto the purchaser's adjacent property at the vendor's cost. Such relocation works shall be completed in a proper and workman like manner, provided such works may, subject to the consent of the Purchaser (consent not to be unreasonably withheld), be completed in a temporary manner given such services will ultimately become redundant as a result of the purchaser completing the construction of the boardwalk and in doing so installing new/upgraded services. In addition, the vendor may remove and not be required to relocate such services where the purchaser has commenced construction of the intended boardwalk if such services are not required at the time. Without limiting the forgoing, in so far as the easement over area "A" on the plan in Appendix 1 is concerned:

(a) the purchaser agrees that the boardwalk area shown on the plan in Appendix 5 shall replace the need for this easement and that this easement shall be surrendered;

(b) until the boardwalk has been constructed, the purchaser agrees to the relocation of that easement to the area shaded green and identified as "Temporary ROW Easement" in Appendix 5, being the area between the apartment building that the vendor intends to construct on the non- MCEC Land and the western boundary of that land provided always that the vendor shall permit the walkway to continue to a width of at least 2 metres along the western boundary of Lot 2 on the plan for so long as such is required.

25.2 The purchaser will immediately following settlement surrender the car parking right in easement instrument 11153227.3 so as the MCEC can be constructed in its most practical and desirable location on the property with the value of such easement to be assessed as part of the valuation exercise. For the avoidance of doubt, the vendor is under no obligation to provide any public car parking easement or other right on the Non-MCEC Land.

25.3 The purchaser agrees to grant the vendor (and or the vendor's successors in title to the Non-MCEC Land) all rights and registrations necessary to allow the vendor the right to construct, and legally occupy, that part of the airspace over that part of part Lot 3 DP 50078 as depicted in the plan attached as Appendix 5 provided always that the purchaser reserves the right to require a rental for the use of such airspace from any party or person occupying such airspace to be assessed on the then current policy of the purchaser in relation to such matters, but in no event to be any greater than fair market value.

25.4 Purchaser will grant easements over the areas of its land as detailed in Appendix 5 (shaded yellow) for rights or way, rights of access, right to undertake construction, maintenance, demolition and rights to convey services (power, water, telecommunications, sewerage, fuel, gas). These easements are for the benefit of the vendor, the vendor's contractors, apartment, podium level commercial activity, hotel and marina tenants, customers, users and owners (as applicable). The vendor will consult with the purchaser in the placement of those easements and will act in good faith and reasonably in requiring such easements. The vendor shall ensure that such easements will not affect that part of the property on which the MCEC is to be constructed. The terms of such easements will allow the purchaser to construct a

surface finish in keeping with the quality of the Project and amenities for public use.

26. **Marine Coastal Area**

26.1 The vendor will sublet (or provide other appropriate authority under the resource consent that the vendor is to obtain for the marine and coastal area) to the purchaser the right to construct and to operate the boardwalk shown in the Feasibility Study to the extent it encroaches into the marine and coastal area. The purchaser will have 12 months from settlement under this agreement to confirm whether it will proceed with the bridge and ferry terminal referred to in clause 24.1(e) in terms of both location and existence. If such confirmation is not provided, the vendor is not obliged to grant any rights to the purchaser to construct these items in the marine and coastal area for which the vendor has the right to occupy. If the purchaser confirms location and existence within the said timeframe, vendor shall sublet (or provide other appropriate authority under the resource consent that the vendor is to obtain for the marine and coastal area) to the purchaser the right to construct and to operate the bridge and ferry terminal to the extent it encroaches into the marine and coastal area for which is has the right to occupy (but there is no obligation for the vendor to grant any such rights to an area larger than that shown in the Feasibility Study for the bridge and ferry terminal). In all cases, the purchaser must comply with all obligations of such consent (including paying any relevant amounts and costs) in so far as it applies to the boardwalk and any other agreed purchaser infrastructure or activities (including maintenance thereof) within the area governed by the resource consent. In consideration for entering into this agreement, the purchaser agrees to the vendor attaching and fixing the marina gangways and other structures necessary for the marina to the board walk without any payment, provided that the works attaching the same are completed in a proper and workman like manner and are completed at the vendor's sole cost. In constructing the boardwalk the purchaser will consult with the vendor about the location of such attachments and will include in its design consideration and construction of the boardwalk, such features that the vendor requires to complete such attachments on the basis of the foregoing requirement that the additional design and construction works involved (i.e. over and above what would otherwise have been constructed) will be at the vendor's cost.

27. **Hotel requirement and Non-MCEC Land**

27.1 The purchaser acknowledges that the vendor is acquiring the property (before on-selling it to the purchaser) and non-MCEC Land with the intention of arranging the development of a hotel apartment complex (with car-parking, retail/ commercial/ hospitality and other suitable associated activities) on the Non-MCEC Land, the purchaser agreeing that such intention is in satisfaction of the requirement that the purchaser previously imposed that the Non-MCEC Land and property must only be acquired where the purchaser has the intention to construct a hotel apartment complex. The purchaser further acknowledges that the construction of a hotel apartment complex on the non-MCEC land is only feasible should the MCEC and associated infrastructure works by the purchaser be completed (in addition to other feasibility considerations both within and outside of the vendor's control). The Purchaser therefore agrees, for the avoidance of doubt, that the vendor is not under any obligation to construct a hotel apartment complex on the Non-MCEC land if (i) the purchaser does not commence (and ultimately complete) the construction of the MCEC and associated infrastructure works; and (ii) the other feasibility considerations relating to construction of a hotel apartment complex on the Non-MCEC Land cannot be satisfactorily addressed, both promptly after settlement under this agreement.

27.2 From commencement of construction of the MCEC, the vendor will co-operate with the purchaser so as to allow the purchaser and its contractors to park their vehicles on such areas of the Non-MCEC Land as the vendor considers, acting reasonably, are available for such use without cost to the purchaser, provided that the purchaser and its contractors comply with the reasonable requirements of the vendor in utilising such area.

28. **Co-operation and working together**

28.1 The Parties will:

(a) cooperate, act in good faith and openly and honestly to each other at all times in relation to the Objective;

(b) give every assistance within their reasonable control to enable the Objective to be achieved for their mutual advantage and will not intentionally do or cause to be done any act or omission which detrimentally affects the other in pursuit of the Objective.

29. **Subdivision of property**

29.1 The vendor has applied for a resource consent to subdivide the land in record of title NA1549/29 ("Land") to create separate titles for the property and the Non-MCEC Land.

29.2 The vendor will complete the subdivision of the Land generally in accordance with the plan attached as Appendix 1 and Appendix 2, and subject to the following provisions of this clause, at the vendor's sole cost, including payment of any development / financial contributions, levies and consent fees. To the extent any consent conditions, financial / development contributions, levies and consent fees relating to the vendor's subdivision consent for the property relate to works provisioned for in the project budgets in the Feasibility Report and/or relate to or arise from the proposed built development of the MCEC:

(a) to the extent that obligations for such matters can be transferred or passed onto the purchaser, the purchaser shall, in addition to paying the purchase price assume such obligations on and from settlement; and

(b) to the extent that obligations for such matters cannot be transferred or passed onto the purchaser, or require vendor to incur expenses in relation thereto, the purchaser shall, in addition to paying the purchase price, pay all costs and liabilities incurred by the vendor in relation to fulfilling, complying with and/or transferring / passing on such matters.

29.3 The purchaser will not be entitled to call for a transfer of title until a search copy of the new titles for the property is available. The vendor gives no warranty as to the date when title will be available.

29.4 The purchaser agrees that it will not object to or requisition the title to the property, that clause 6.2 of this agreement does not apply, and:

(a) The property is sold subject to all existing encumbrances, restrictions, easements on the record of title to the Land which come down onto the title for the property.

(b) The vendor reserves the right to create, grant or receive and register against the title to the property the benefit or burden of any easements, covenants, bonds, consent notices, memorials, restrictions or other encumbrances or rights or property interests (collectively "encumbrances") which may be required in order to satisfy any conditions of the resource consent for subdivision or the Project Resource Consent, or requirements of any statute, regulation or relevant authority, or which are necessary or, where placed in the areas of the property detailed in Appendix 5 and shaded yellow, desirable to deposit the survey plan

of subdivision. The purchaser will take title subject to or with the benefit of any encumbrances. All documents relating to the encumbrances may include clauses which the vendor, Whangarei District Council or their respective lawyers consider necessary or desirable.

29.5 The vendor may alter the plan set out in Appendix 1 (including but not limited to the boundaries of the property and the location of any mandatory or proposed easements or covenant areas). All measurements and areas of for the property and its title are subject to any variation required by survey, the local authority and/or Land Information New Zealand. The purchaser will not make any objection or requisition for any variations or alterations to the property provided its total area does not alter by more than 4% of the area shown on the plan. If the effect any variation is to reduce the area of the property by more than 4%, then the remedy of the purchaser is limited to electing to avoid this agreement by notice in writing to the vendor or affirming this agreement without amendment or compensation.

29.6 The purchaser shall not lodge a caveat against the vendor's land title.

29.7 The purchase price for the property is the lowest price that the parties would have agreed upon for the property at the date this agreement is entered into under the rules relating to the accrual treatment of income and expenditure in the Income Tax Act 2007 and on that basis, no income or expenditure arises for the sale and purchase of the property under those rules.

29.8 To the extent that any conditions or requirements of the Project Resource Consent and or Vendor Building Consent require any interests to be registered on the title to the property or part Lot 3 DP 50078, the purchaser agrees to co-operate and sign all documents necessary to allow for registration of such interests provided that they do not unreasonably impinge or intrude on the intended use of the property for the MCEC or use of part Lot 3 DP 50078 as a boardwalk. Without limitation to the forgoing, WDC agrees that easements for services, overland flow path, right of way and right of access for demolition, construction and maintenance in the area known as the plaza which is located along the western boundary of the property shall not be considered to unreasonably impinge or intrude on the property.

30. Development and Financial Contributions

30.1 Purchaser acknowledges that vendor has entered into this agreement on the terms and conditions specified on the basis that no development / financial contributions will be payable to Whangarei District Council in relation to the vendor’s subdivision resource consent for the property or the Project Resource Consent and that any such contributions required will only be required at or after the time of any building consent application by the owner of the property and/or the owner of the Non-MCEC Land (as applicable). If any such development / financial contributions are levied in connection with the resource consents referred to in this clause, the purchaser agrees that they will either (i) pay the same when due; or (ii) assume responsibility for them, to the extent that they relate to works provisioned for in the project budgets for public works features in the Feasibility Report and which by this agreement the Purchaser is to construct and/or relate to or arise from the proposed built development of the MCEC or otherwise exceed standard measures. For the avoidance of doubt the Vendor will be responsible for all development and financial contributions otherwise payable under the vendor’s subdivision resource consent for the property or the Project Resource Consent.

31. Parties not to on sell without deed of covenant

31.1 If purchaser wishes (as applicable) to nominate any person other than itself to purchase the property or, either party wishes to transfer the title to the property or

Non- MCEC Land to any other person (the nominee or transferee being a "**Non-Party Owner**"), the vendor or purchaser (as applicable) must, prior to any such nomination or transfer, procure the execution by the Non-Party Owner of a deed of covenant on terms and conditions reasonably required by the other party's (or their successor in title's) solicitors requiring the Non-Party Owner to comply with the terms and conditions of this agreement as if it were the vendor or purchaser (as applicable). The parties will take all steps, including allowing the registration of a covenant or other appropriate instrument on the title to the (as applicable) property or Non-MCEC Land so that the requirements of this clause also apply to any subsequent transfer of (as applicable) the property or Non-MCEC Land until all obligations relating to the vendor or purchaser hereunder (to the extent they relate to the relevant property) have been performed or have become redundant or no longer applicable other than as a result of the transferring party's breach.

32. Purchaser as Regulatory Authority

32.1 The Purchaser has signed this agreement in its non-regulatory capacity. This agreement does not bind the Purchaser in its capacity as a regulatory authority in any way, and any consent or agreement the Purchaser gives under this agreement is not an agreement or consent in its regulatory capacity and vice versa. When acting in its regulatory capacity, Whangarei District Council is entitled to consider all applications to it without regard to this agreement. The Purchaser will not be liable to the Vendor or any other party if, in its regulatory capacity, Whangarei District Council declines or imposes conditions on any consent or permission that the Vendor or any other party seeks for any purpose associated with this agreement.

33. Adjacent Building Demolition

33.1 Upon the Purchaser giving three (3) months' notice of the intended date of completion of the MCEC the Vendor shall, if it has not already done so, remove all existing buildings from that part of the property as is shown as Lot 3 on the plan attached as Appendix 1 ("Lot 3"). The Purchaser shall have the use of Lot 3 (or relevant part thereof) following the removal of such buildings on the following terms:

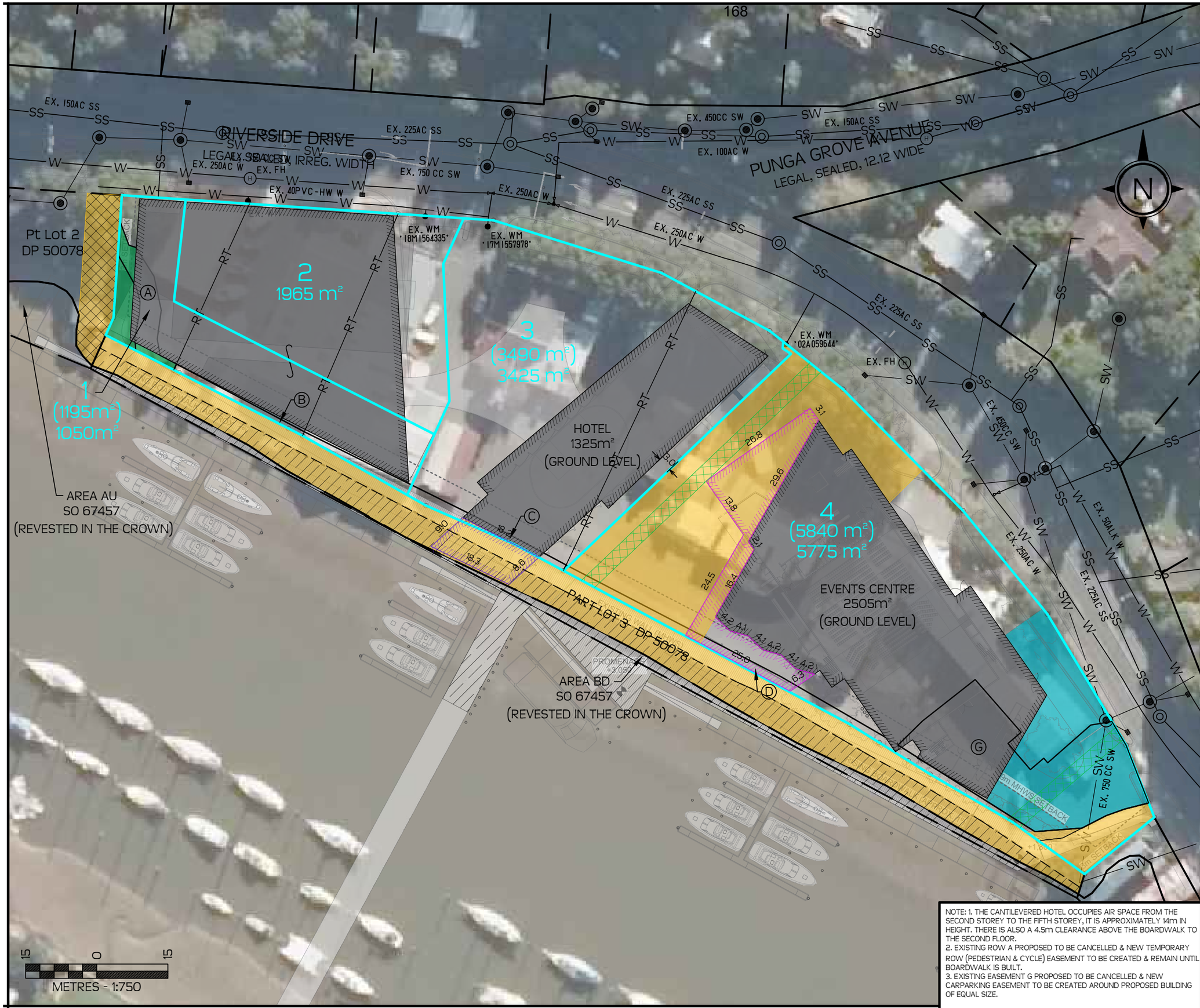
(a) The purchaser shall pay a market rental for the area of Lot 3 that it uses.

(b) The purchaser shall not have the right to use that part of Lot 3 on which the Vendor has already commenced or completed or wishes to commence construction on (which may include temporary structures).

(c) Unless an extension is agreed in writing between the parties, the Purchaser's rights under this clause shall cease on the earlier of two years after the Purchaser gives notice under clause 33.1 or the date on which the vendor gives notice to the purchaser that the vendor requires all of Lot 3 for its own purposes and/or wishes to commence construction of such a scale that the vendor considers it is no longer appropriate or desirable for the purchaser's use of Lot 3 or part thereof continues. The Purchaser's rights under this clause shall also cease on the vendor transferring ownership of the property to any third party.

(d) At all times while it is using Lot 3, the Purchaser will act reasonably and will co-operate with any reasonable requests of the vendor in relation to the Purchaser's use and/or the requirements of the vendor to access or use that part of Lot 3 for its own purposes.

APPENDIX 1 – Plan of property



CAUTION:

1. THIS DRAWING SHOULD NOT BE AMENDED MANUALLY.
2. AREAS & DIMENSIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY.
3. THE VENDOR & PURCHASER MUST CONTACT THE SURVEYOR IF SALE & PURCHASE AGREEMENTS ARE ENTERED INTO USING THIS PLAN.
4. SERVICES MUST NOT BE POSITIONED USING THIS PLAN.
5. DO NOT SCALE OFF DRAWINGS.
6. THIS PLAN IS COPYRIGHT TO REYBURN & BRYANT (1999) LIMITED.
7. DESIGNED BY REYBURN & BRYANT - WHANGAREI - NEW ZEALAND
8. 01m 2014-2015 URBAN AERIAL SOURCED FROM AERIAL SURVEYS LTD INFORMATION AVAILABLE ON LINZ DATA SERVICE.
9. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

EXISTING EASEMENTS IN GROSS SCHEDULE

PURPOSE	SHOWN	SERV.TENE. (BURDENED)	GRANTEE / CREATED
RIGHT OF WAY (PEDESTRIAN & CYCLE ONLY) AND RIGHT TO CONVEY ELECTRICITY	A & B	LOT 1 HEREON	WDC
	C	LOT 3 HEREON	
	D	LOT 4 HEREON	
CARPARKING RIGHT	G	LOT 4 HEREON	WDC

PROPOSED AMALGAMATION CONDITION:

PURSUANT TO SECTION 220 (1)(b)(ii)&(iii) OF THE RMA 1991 THAT LOTS 1 & 2 HEREON BE HELD IN THE SAME RECORD OF TITLE.

- CANTILEVERED HOTEL ABOVE BOARDWALK
- BUILDINGS ABOVE GROUND
- EASEMENT IN FAVOUR OF NDC FOR ACCESS, SERVICES, MAINTENANCE, DEMOLITION & CONSTRUCTION
- FUTURE TBC
- POTENTIAL OVERLAND FLOW PATH
- TEMPORARY ROW EASEMENT
- NEW CARPARKING EASEMENT
- AREA OF BOARDWALK LOCATED IN CMA (1710m²)

TOTAL AREA: 1.2490 Ha

COMPRISED IN: RT NA1549/29

- THIS SITE IS ZONED ' TOWN BASIN ' AND THE BUILDING SETBACKS ARE THUS: 3m FROM LIVING OR OPEN SPACE, 27m FROM MHWS.
- THE ENTIRE SITE IS FLOOD SUSCEPTIBLE.

REV	DATE	DESCRIPTION
E	16-06-21	ADDED FUTURE TBC - EM/MW
D	02-06-21	ADDED NEW NOTE - EM/MW
A	17-05-21	FIRST ISSUE - EM/MW

REF. DATA:

reyburn & bryant
Ph: 09 438 3563
PO Box 191, Whangarei 0140
7 Selwyn Ave, Whangarei
www.reyburnandbryant.co.nz

CLIENT NORTHLAND DEVELOPMENT CORPORATION
RIVERSIDE DRIVE, WHANGAREI

NOTE: 1. THE CANTILEVERED HOTEL OCCUPIES AIR SPACE FROM THE SECOND STOREY TO THE FIFTH STOREY, IT IS APPROXIMATELY 14m IN HEIGHT. THERE IS ALSO A 4.5m CLEARANCE ABOVE THE BOARDWALK TO THE SECOND FLOOR.
2. EXISTING ROW A PROPOSED TO BE CANCELLED & NEW TEMPORARY ROW (PEDESTRIAN & CYCLE) EASEMENT TO BE CREATED & REMAIN UNTIL BOARDWALK IS BUILT.
3. EXISTING EASEMENT G PROPOSED TO BE CANCELLED & NEW CARPARKING EASEMENT TO BE CREATED AROUND PROPOSED BUILDING OF EQUAL SIZE.

LOCAL AUTHORITY: WHANGAREI DISTRICT COUNCIL

TITLE
PLAN TO ACCOMPANY SALE AND PURCHASE AGREEMENT

DATE	JUNE 2021	SCALE	1:750 @A3	
NO.	MP15311a	SHEET	1/1	Rev. E

CEC - Alternate Site Assessment

1 Executive Summary

The purpose of this paper is to provide a high-level assessment of the suitability of two alternative sites for the Conference and Events Centre (CEC), currently proposed to be constructed on the Oruku Landing site. The two possible alternative sites are the:

- James/John Precinct site, and
- Forum North site.

The assessment is summarised in the table below. The assessment criteria have been discussed with Whangarei District Council (WDC) and have been assessed by Beca against the concept level information currently known about the three sites.

	Oruku Landing	James/John Precinct	Forum North
Site Area	5,775m2	5,755m2	Approx. 10,000m2
Site availability	✓	✓	—
Ownership	—	✓	✓
Consenting	✓	—	✓
Outdoor exhibition space	✗	—	✓
Programme	✓	✗	✗ ✓ Note 1
Connectivity to CBD	—	✓	—
Parking	✗	✓	✓
Access	—	✓	✓
Opportunity Cost	✓	✗	—

Note 1: The Forum North site would need a non-notified consent to be approved in order to meet programme dates. The Sept. 22 date cannot be met if a fast track or notified consent is required.

Legend: ✓ Strong advantage; ✗ Significant Issue; — Neutral

The assessment has been carried out over a very short period of three days and used the Oruku Landing site as a baseline for assessment of the alternative sites. This is based on Beca's knowledge of the alternative sites, with supporting information provided by WDC. More detail on the reasons for the above assessments is given in the body of the paper.

Cost has not been considered in the above Table for two reasons: 1) the very tight timescale for this assessment did not allow for any detailed work; 2) it is not known at this stage what infrastructure works and LTP projects associated with the Oruku landing development would still be incurred if the CEC were to be constructed on one of the alternative sites.

That said, if the infrastructure works/LTP projects planned for the Oruku site are not required, then up to $25-30M could not be spent through cancelling or deferring these projects. In addition, the larger site at Forum North could support a change to the proposed basement to be above ground, resulting in a further saving of $5-10M.

It is also understood that the purchase price of the Oruku Landing site is up to $10M. This would not be incurred for either of the alternative sites, however this saving should be offset against any opportunity cost of using those sites for other commercial uses.

Both the alternative sites are suitable (see assessment criteria) for the CEC development but the key risk for both is the project programme. The key constraint with programme is that piling must commence by September 2022 to secure CIP funding. For the James/John Precinct this is not possible due to the consenting timeframes. The activity of a CEC is not anticipated under the rules and activity framework of the District Plan.

For the Forum North site, the September 2022 piling date is achievable if a non-notified Council led consent can be secured. At this time while the consent pathway assessed as a feasible, there is too much uncertainty to conclude that notification can be avoided. If adjoining properties are deemed ‘affected parties’ this would trigger a notification; and if a hearing is not avoided, there would be a programme over-run which would put the CIP funding at jeopardy.

Some programme risk can be mitigated by reducing the design time by either obtaining rights to the design from the current developer or by engaging the current Architect. Immediate engagement with the Consent Authority and potentially affected parties around this site would also be required to understand this risk.

It should also be noted that the programme for the Oruku Landing site was based on a WDC decision to proceed on 1 July 2021. This is now understood to be 13 July 2021. This has extended the programme by this timeframe.

2 Introduction

Whangarei District Council (WDC) has instructed Beca to provide a high-level assessment of two alternative sites for the Conference and Events Centre (CEC) currently proposed to be developed at the Oruku Landing site. These two sites are known as the James/John Precinct and the Forum North site.

Figure 1 – Oruku and Alternate Sites on the proposed District Plan zoning map

KEY:	*Green Star – Forum North Site*	*Pink – Mixed Use zone*
	Blue Star – James/John Precinct Site	*Maroon – City Centre zone*
	Red Star – Oruku Landing Site	*Blue Striped – Waterfront Mixed Use zone*

3 Methodology

This assessment was completed over a three-day period using the two nominated potential alternative sites and followed the below process:

1. Define criteria to inform a comparative assessment
2. Identify available information to support assessment
3. Complete assessment against criteria
4. Document assumptions / rationale for assessment
5. Assess current programme impacts on commencing works 1 September 2022; and
6. Identify potential cost implications of alternate sites.

4 Criteria

The below assessment criteria were developed in conjunction with WDC officers and the Beca authors to enable a differentiated assessment between the three sites. Due to the short timeframe and limited information, a three level scoring system was applied – Advantage (Green), Neutral (Orange), and Disadvantage/Significant Issue (Red).

The criteria broadly relate to functionality of the centre and programme risk due to the requirement to commence piling by September 2022.

Criteria	Explanation
Site Area	Equivalent land area or greater than Oruku location.
Site Availability	Demolition requirements and/or notice(s) to end leaseholder(s) occupancy.
Consenting	Extent to which site zoning supports / anticipates the CEC activity.
Exhibition Space	Ability to utilise adjacent spaces, enhancing facility flexibility and supporting multifunctional use.
Programme	Ability to meet the requirements for CIP funding i.e. commence piling by September 2022.
Connectivity to CBD	Clear access & linkages to the CBD.
Parking	Proximity of the site to sufficient car parking areas.
Access	Ease of access to the site both during and after construction.
Opportunity Cost	The opportunity to utilise the site for other commercial use.

5 Assessment Matrix

	Oruku Landing	James/John Precinct	Forum North
Site Area	5,775m2	5,755m2	Approx. 10,000m2
Site availability	✓	✓	–
Ownership	–	✓	✓
Consenting	✓	–	✓
Outdoor exhibition space	✗	–	✓
Programme	✓	✗	✗ ✓ Note 1
Connectivity to CBD	–	✓	–
Parking	✗	✓	✓
Access	–	✓	✓
Opportunity Cost	✓	✗	–

Note 1: The Forum North site would need a non-notified consent to be approved in order to meet programme dates. The Sept. 22 date cannot be met if a fast track or notified consent is required.

Legend ✓ Strong advantage ✗ Significant Issue – Neutral

6 Assessment Detail

6.1 Oruku Landing CEC benchmark

The approximate[1] dimensions of the Oruku Landing CEC used for comparison in the assessment are:

Element	Dimension
Site area	5,775m2
Plaza	1600m2
Site Coverage	3000m2
Width (max - excluding café)	30m
Length (max)	90m
Height Above ground level)	12.6m Roof, 16.5m Sign lightbox
Height total (inc. Basement)	15m Roof, 18.9m Sign lightbox

6.2 James/John Precinct Site

This site is bordered by James, John and Dent Streets, opposite the Town Basin Park that is under construction. The site dimensions as shown below:

Figure 2 – James/John Precinct site

6.2.1 Zoning and Consenting

- Business 1 zone (operative)
- Mixed Use zone (proposed)
- 3m (Rathbone) and 5m (Dent) road setbacks for development (operative / proposed)
- Flood Susceptible

Operative

- Permitted – Activity
- Permitted – Height 20m
- Restricted Discretionary – Parking

[1] Based on RC Plan Dwg 27-29 and 34-38

- Restricted Discretionary – Signage
- TBC – Lighting
- Veranda is required
- Setbacks and Height on Relation to Boundary controls apply

Proposed

- Non-Complying – Activity2
- Discretionary – Height (not 3 stories and no residential use or 50% green roof proposed)
- Discretionary – If less than 75% ground floor glazing
- Veranda is required
- Setbacks and Height on Relation to Boundary controls apply – seeks active frontage

The Non-Complying activity of the CEC on this site indicates it is an activity that is not anticipated by the District Plan in this location.

It would need to utilise the Fast-Track consenting process. This is because a Council led process would likely result in multiple affected parties being identified and the application being limited or publicly notified. While a consent may ultimately be secured, the timeframe required would exceed what is needed to enable piling in September 2022 (refer consenting discussion for the Forum North site below).

6.2.2 Site Constraints

The site area is fixed and has no room for further expansion or overflow, and in this respect is similar to the Oruku site. However, it may be possible to temporarily restrict access to James and John Streets when exhibition space is required. This could leverage the planned streetscape upgrades to these spaces and the design of this upgrade could respond accordingly. This site also does have a more regular shaped footprint which is a positive.

The site is currently owned by WDC, so no land purchase is necessary. The site is partially cleared but requires some further building demolition.

The site is within the CBD, is well serviced by road access, benefits from ample on and off-street parking close by and is directly adjacent to the Town Basin.

6.2.3 Programme

The site is partially cleared and it is understood the notice period required for the existing tenants is very short i.e. 1 month. If the site can be vacated by early 2022 then the programme will be driven by the resource consent process.

As a CEC is not an anticipated activity under the District Plan for the site, the time taken to obtain a resource consent for this site would mean that the piling cannot commence by the September 2022 deadline for CIP funding.

[2] The CEC is a multiple use activity comprising Food and Beverage, Entertainment / Educational / Recreational Facilities, Place of Assembly – as these are not on the First Floor the activity on this site is discretionary. It may also be General Commercial / Community which make the activity Non-Complying.

6.2.4 Cost

It is presumed this site requires no changes to the cost of the building other than to remove the allowance for the site stabilisation/seawall improvements necessary to the Oruku development. However, a basement carpark may be required if the proximity of parking areas is deemed insufficient.

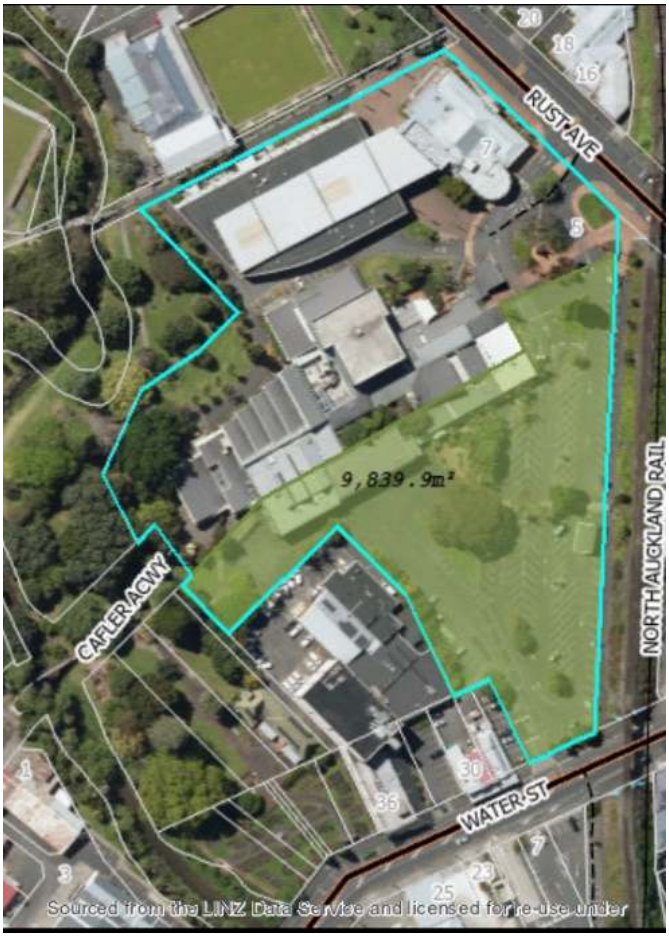
The improvement works associated with the Oruku development, bridge, traffic upgrades, boardwalk and utility upgrades are not expected to be necessary to enable the CEC on this site.

An allowance of at least $3M would be needed for demolition and site clearance as well as some minor traffic and utility changes. This would need more detailed analysis. On this basis, approximate savings compared to the overall Oruku development including the infrastructure works/LTP projects could be in the order of $$25-30M.

6.2.5 Opportunity Cost

This site is one of the more strategic and valuable sites for commercial development based on its proximity to the CBD and the Town Basin. Its use for a facility which provides significant but likely intermittent community events may result in sub-optimal activation of this area and the trickle-down financial benefits may not provide surplus direct revenue.

6.3 Forum North Site



The site is bordered by Rust Ave, The North Auckland Rail-line, Water Street the Waiarohia stream and the new Civic Building site.

The North and Western portion part of the site contains the old and new library and the Forum North building containing the Council administration offices and the Bougainville Theatre.

The administration offices are assumed to be demolished once the new Civic building is complete and the theatre retained and refurbished as a stand-alone building.

The available site area indicated in the plan below is in the order of 10,000m2. However, the irregular shape of the site means that the usable area is likely between 5000m2 and 10,000m2.

Figure 3 – Forum North site

6.3.1 Zoning and Consenting

- Business 1 zone (Operative)
- Mixed Use zone (Proposed)
- Flood susceptible

Operative (same as James/John Precinct)

Proposed

- Permitted – Activity3
- Permitted – Height 16m, or
- Controlled – Height 21m, where a through site link provided
- Permitted – Height in Relation to Boundary (assuming PA Height and set within the site)
- Permitted – 65% of the building frontage is glazed
- Discretionary – Setbacks where frontage is not 1m from boundary
- Discretionary – Café/Hospitality (Food and Beverage)

As a permitted activity the CEC is anticipated on this site under the Mixed-Use zone of the proposed District Plan (which is largely operative with significantly more weight accorded).

Resource Consent would likely be required for not creating an active site frontage with the building, for provision of Food and Beverage, possibly for a breach in height, and possibly for associated construction activities (especially noise and vibration). Most of these can likely be addressed by a design response.

Further investigation would be required to determine whether Construction Noise and Vibration standards could be achieved at adjacent sites (and any others identified as potentially affected) and whether these site owners/occupiers would be considered affected parties and could require notification of a resource consent application. A review of the Civic building application and decision would provide a reliable reference. Material from this project may be adaptable for a CEC application on this site.

Using a realistic programme for a limited notification process via a Council-led consent process results in a consent decision appeal period of 3 October 2022. This means piling by September 2022 is not achieved and the only consenting strategy for this site is to secure a consent via a non-notified Council led process.

This would require further analysis of the District Plan to thoroughly check for consent triggers, engagement with a suitably qualified acoustician, with the Consent Authority, and possibly with identified affected parties to determine the likelihood of securing consent non-notified.

[3] The Oruku site is also zoned Mixed Use and for the Fast-Track application WDC planners have agreed the activity status is permitted. Based on a conversation with the District Plan Manager, it is reasonable to assume that the activity would also be permitted on the Forum North site.

6.3.2 Site Constraints

The site area is fixed and has no room for further expansion however it is much larger than Oruku Landing or James/John Precinct. Most of the proposed site is currently car parking but with a significant portion occupied by the existing Forum North building. We understand this building is to be partially vacated in September 2022 at which point it will be partially demolished as indicated on the above plan.

The site with good design, could have suitable space for outdoor exhibitions to take place. There is a large Tree and a Substation which require further analysis to determine if they are fixed constraints. A number of underground utilities traverse the site and also need further analysis to determine cost impacts if relocation is necessary.

The site is currently owned by WDC so no land purchase is necessary. The site has easy access to the CBD, ample on and off-street parking close by. It is slightly disconnected from the CBD and other tourist destinations by distance and the railway line.

6.3.3 Programme

The site is already clear except for Forum North building, large Pohutukawa, car park and a Northpower substation. The following assumptions would need to be confirmed should a start on site be required by September 2022 to secure CIP funding:

- The construction will be staged.
- The car park can be closed as soon as required to enable construction of the first stage to commence.
- The design can accommodate the existing substation (and associated underground services).
- The tree is not required to be retained or is not a design constraint.
- The existing buildings are vacated on time in September 2022 to enable the second stage to commence.

If the above is confirmed, then the programme will be driven by the resource consent process.

In order to meet the piling deadline of September 2022 a non-notified consent would have to be obtained. A notified (limited or publicly) consent or use of the EPA fast track process would push out the piling start date beyond the CIP dictated deadline.

6.3.4 Cost

It is assumed this site requires no changes to the cost of the building other than to remove the allowance for the site stabilisation/seawall improvements necessary to the Oruku development.

The improvement works associated with the Oruku development, bridge, traffic upgrades, boardwalk and utility upgrades are assumed to not be necessary to enable the CEC on this site. Further savings could possibly be made on this site by removing the basement and providing the kitchen and storage areas at ground level. At a very high level an indicative saving could be $5-10M.

An allowance of at least $5M would be needed for demolition and site clearance as well as some minor traffic and utility changes. This assumes no major utility works and would need more detailed analysis. On this basis, approximate savings compared to Oruku could be in the order of $25-30M.

Allowance for replacement carparking may have to be made if allocation of existing carparking is insufficient and or cannot be prioritised for event use.

6.3.5 Opportunity cost

There will be a potential commercial value for the site which is higher than its use as a CEC. This however is assumed not to be as great as the James/John Precinct site, given the Civic nature of this precinct / area. It is understood NorthTec is investigating the potential to relocate to a more central city location. While no sites are formally identified, the land to the North of Rust Avenue is identified as an Education Precinct.

7 Assumptions

7.1 Programme

In order to achieve the required start date (Sept 2022) for the Forum North site the following timescales have been assumed:

Programme (Non-notified)

- Concept Design and Technical Investigations – 4 months
- Technical Assessments / Consent Preparation for Lodgement – 1 month
- Consent Processing – 3.5 months

Similar design and construction periods have been assumed as for the Oruku site.

7.2 Resource consenting

It is assumed that the ability to access the Fast-Track COVID Legislation for the project applies to the building not the site.

Based on discussion with an EPA representative, the timeframes under the Fast-track legislation are understood to be approximately 2.5 months for administrative processes from receipt to commencement of processing. The statutory timeframe under this legislation is then generally being met once EPA referral occurs, which is approximately 4 months[4] for the consideration of the proposal and issuance of a decision.

Appeal rights (3 weeks from issue of a decision) on a fast-track decision are limited to a few listed entities and only those parties invited to make comment. Appeals can only be on a point of law.

7.3 Technical / Design

Ground conditions are similar across the 3 sites, with the Oruku site being expected to require less pile depth that the other two, based on knowledge of the Hundertwasser and Civic Building sites.

Exhibition space around the CEC is important to its long-term functionality and utilisation. Based on feedback from operators of the Christchurch Exhibition Centre.

Designers and Technical Experts to support a consent application are available in the market to commence work on the alternate site immediately, or the IP and experts from the Oruku Landing project can be utilised on an alternative site.

[4] https://www.epa.govt.nz/fast-track-consenting/about/

7.4 Cost assumptions

Allowances have been made for demolition and site clearance at both sites however these are placeholder sums without any detailed estimation being carried out and will be subject to change, especially if major works are necessary.

It has also been assumed that the cost of the infrastructure projects associated with the overall Oruku Landing development can be cancelled or deferred. This means that these costs will not be incurred if the CEC is constructed on an alternative site.

A placeholder allowance has been made for minor infrastructure amendments and upgrades at the alternative sites as follows, and are not based on any design:

- James/John Precinct $3M
- Forum North $5M

The potential cost savings noted in the report assume that the following elements are **not** required for the alternative site:

- Bridge
- Boardwalk
- Drainage upgrade
- Seawall upgrade
- Ferry Terminal
- Punga Grove Avenue intersection
- Footpath upgrade.

Glenn Forber
Principal – Project Management
Beca

Blair Masefield

Principal / Northland Branch Manager
Beca

RESOLUTION TO EXCLUDE THE PUBLIC

That the public be excluded from the following parts of proceedings of this meeting.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under Section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

1.	The making available of information would be likely to unreasonably prejudice the commercial position of persons who are the subject of the information. {Section 7(2)(c)}
2.	To enable the council (the committee) to carry on without prejudice or disadvantage commercial negotiations. {(Section 7(2)(i)}.
3.	To protect the privacy of natural persons. {Section 7(2)(a)}.
4.	Publicity prior to successful prosecution of the individuals named would be contrary to the laws of natural justice and may constitute contempt of court. {Section 48(1)(b)}.
5.	To protect information which is the subject to an obligation of confidence, the publication of such information would be likely to prejudice the supply of information from the same source and it is in the public interest that such information should continue to be supplied. {Section7(2)(c)(i)}.
6.	In order to maintain legal professional privilege. {Section 2(g)}.
7.	To enable the council to carry on without prejudice or disadvantage, negotiations {Section 7(2)(i)}.

Resolution to allow members of the public to remain

If the council/committee wishes members of the public to remain during discussion of confidential items the following additional recommendation will need to be passed:

Move/Second

"That _____ be permitted to remain at this meeting, after the public has been excluded, because of his/her/their knowledge of Item _____.

This knowledge, which will be of assistance in relation to the matter to be discussed, is relevant to that matter because _____.

Note:

Every resolution to exclude the public shall be put at a time when the meeting is open to the public.