

Meeting: Infrastructure Committee 09 September 2020

Name of item: Otaua Bridge N28 Replacement – Increase of Project Value

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Date of report: 04 August 2020

Purpose of the report

To seek Council approval to increase the value of Contract 7/18/200 Otaua Road Bridge.

Executive summary

Contract 7/18/200 Otaua Road Bridge was awarded to United Civil Construction Ltd for the sum of \$805,092.88 (excluding GST) following Council approval on 3rd March 2020, being part of the total approved project cost of \$998,592.88

The project has encountered unforeseen cost due to

- Covid-19 pandemic
- Unsuitable ground conditions.

The total contract value has now increased by \$225,378.81(excluding GST) to \$1,223,971.69 (excluding GST).

Recommendation

That the Infrastructure Committee:

- a) Approve additional funding of \$225,378.81 plus GST above the original total Project Cost**
- b) Approves the increase in contract value from \$805,092.88 to \$1,030,471.00**
- c) Notes that as a result of items a and b, the total project cost increases from \$998,592.88 to \$1,223,971.61**

1) Background

During the course of annual bridge inspections, the Otaua Bridge N28 was found to be failing and unable to continue bearing the load of heavy vehicle movements.

The bridge was put under a weight restriction due to failing structural members that resulted in a detour route for heavy vehicles exceeding the weight restriction to Ninihi Road an unsealed road that runs past several residencies, that caused a dust nuisance for the residents

The contract for bridge replacement was awarded to United Civil Construction Ltd following Council approval on 3rd March 2020 for the sum of \$805,092.88. This formed part of the total approved project cost of \$998,592.88

2) Discussion and options

Following the award of Contract 7/18/200 Otua Road Bridge. The contractor has encountered unforeseen circumstances outside of their control.

Covid 19

On 23 March the New Zealand Government announced that, effective from 11:59pm Wednesday 25 March that New Zealand would move into alert level 4. This required all non-essential work to stop and for non-essential staff to remain at home.

The alert level was reduced to level 3 on 27 April and then to Level 2 on 13 May 2020.

The result of these restriction has seen the contractor incur costs that they are now entitled to claim from the principle under the 3910 Contract framework.

On 27 May 2020, United Civil claimed a Covid-19 cost amounting to \$104,721.56.

This variation is still under negotiation with the Contractor and the cost at this stage is an estimate.

Unforeseen Ground Conditions

As part of the original design the design consultant had undertaken a geotechnical investigation. However, this did not pick up the construction material that sat behind the existing abutment walls and formed the bridge approach and the material that sat under the existing abutment retaining wall. This was only discovered when the old bridge and existing abutments were removed.

The assumption was made during the design that the existing material would be a reasonable existing soil that would be able to sustain and transfer the live load and that a standard gabion basket retaining structure would be sufficient. This proposed structure was a design and build item in the contract.

On removal of the existing bridge and abutments it was found the material was actually made up of rubble not capable supporting itself and the lateral loads that would arise and that the proposed gabion retaining structure would not be sufficient to retain this material and the loading generated. In addition the ground the gabions were to be located on was also deemed insufficient to construct on.

Alternative designs were then investigated that included removal of unsuitable material, tie backs and micro piles. The most cost effective was redi rock retaining structure with micro piles that allowed ease of construction and the required retaining capability.

The cost difference of the alternative design is \$120,657.25 which has been assessed and agreed by the Engineer.

Reason for the recommendation

The submitted variation cost from the contractor has been a significant increase on the total project cost due to these unforeseen circumstances.

The alternative design and its estimated price have been reviewed and is deemed reasonable and fit for purpose.

3) Financial implications and budgetary provision

The bridge contract was awarded on 3rd March 2020 after Council approval. At that stage the details of costs were as follows:

Total Tendered Project Cost	
Contract value (physical works) (including \$46,000 Contingency)	\$805,092.88
Beam construction	\$110,000.00
Consultant documentation and MSQA	\$46,000.00
FNDC – NTA management	\$37,500.00
Total Project Cost	\$998,592.88

Variation costs from the Covid 19 delays and unsuitable ground condition claim:

Variation description	Amount
Covid-19 claim	\$ 104,721.56
Update to the design of the retaining wall	\$ 120,657.25
Total	\$225,378.81

With the above additional cost, we are expecting a total project cost to be \$1,223,971.69. A cost increase of \$225,378.81.

Updated Total Project Cost	
Contract value (physical works) (including \$46,000 Contingency)	\$1,030,471.69
Beam construction	\$110,000.00
Consultant documentation and MSQA	\$46,000.00
FNDC – NTA management	\$37,500.00
Total Project Cost	\$1,223,971.69

The project is funded from the Low-Cost Low risk work category and it is proposed to use this year's funding from the same work category to make up for the shortfall. The Low Cost Low Risk funding being utilised to cover the increase in cost had not been allocated to a specific project but was intended to cover future designs. This will not have any significant impact to the current year's programme.

Approval from NZTA has been attained for the cost increase as well as maintaining the project under Low Cost Low Risk despite the costs exceeding the \$1m threshold.

4) Report Approval

Approved by



Greg Monteith – Capital and Procurement Manager
14th August 2020

Compliance schedule:

Full consideration has been given to the provisions of the Local Government Act 2002 S77 in relation to decision making, in particular:

1. A Local authority must, in the course of the decision-making process,
 - a) Seek to identify all reasonably practicable options for the achievement of the objective of a decision; and
 - b) Assess the options in terms of their advantages and disadvantages; and
 - c) If any of the options identified under paragraph (a) involves a significant decision in relation to land or a body of water, take into account the relationship of Māori and their culture and traditions with their ancestral land, water sites, waahi tapu, valued flora and fauna and other taonga.
2. This section is subject to Section 79 - Compliance with procedures in relation to decisions.

Compliance requirement	Staff assessment
State the level of significance (high or low) of the issue or proposal as determined by the Council's Significance and Engagement Policy	High Level. Inability to use this bridge for HCV impacts both the Forestry industry, and residents in terms of dust nuisance.
State the relevant Council policies (external or internal), legislation, and/or community outcomes (as stated in the LTP) that relate to this decision.	
State whether this issue or proposal has a District wide relevance and, if not, the ways in which the appropriate Community Board's views have been sought.	Local relevance only. As this is an existing council asset, it does not require significant community board input.
State the possible implications for Māori and how Māori have been provided with an opportunity to contribute to decision making if this decision is significant and relates to land and/or any body of water.	As this is an existing council asset, it does not require significant Iwi input, beyond appealing local Iwi residents.
Identify persons likely to be affected by or have an interest in the matter, and how you have given consideration to their views or preferences.	At the time of undertaking works we will advise residents and stakeholders – but there will be no other consultation undertaken.
State the financial implications and where budgetary provisions have been made to support this decision.	While talking to forestry companies, and local residents about dust issues this bridge was raised, and all affected parties are keen for works to proceed and finish this year.
Chief Financial Officer review.	Submit to CFO for signoff using the Objective review function.