Infrastructure and Services Committee

Notice of Meeting
A meeting of the Infrastructure and Services Committee will be held in the Council Chamber, Forum North, Whangarei on:

Wednesday
14 December 2011
9.00 am

Committee
Cr G M Martin (Chairperson)
His Worship the Mayor
Cr C B Christie
Cr S J Deeming
Cr A J Edwards
Cr S M Glen
Cr P R Halse
Cr J S Jongejans
Cr B L McLachlan
Cr S L Morgan
Cr K J Sutherland
Cr W L Syers
Cr M R Williams
Cr J D T Williamson
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Recommendations contained in this agenda are NOT final decisions.
Please refer to the minutes for resolutions.
1. Minutes: Infrastructure and Services Committee
Wednesday, 9 November 2011

Minutes of a meeting of the Infrastructure and Services Committee of the Whangarei District Council held in the Council Chamber Forum North on Wednesday 9 November 2011 at 9.00 am.

Present:
G M Martin (Chairperson)

Apologies:
His Worship the Mayor M C A Cutforth and Cr M R Williams

Moved: Cr Edwards
Seconded: Cr Halse

“That the apologies be sustained.”

CARRIED

In Attendance:
Chief Executive Officer (M P Simpson), Roading Manager (G Devine), Governance Manager (D Kula), Parks and Recreation Manager (P McDonald), Legal Counsel (K Candy), Solid Waste Engineer (J Langsford), Team Leader District Plan (N Williamson), Group Planner (D Snowdon), Media Relations Adviser (A Midson) and Senior Meeting Co-ordinator (C Brindle)

1. Confirmation of Minutes of a Meeting of the Infrastructure and Services Committee held on 12 October 2011

Moved: Cr Jongejans
Seconded: Cr Deeming

“That the minutes of the meeting of the Infrastructure and Services Committee held on 14 September 2011, including the confidential section, having been circulated, be taken as read and now confirmed and adopted as a true and correct record of proceedings of that meeting.”

CARRIED

2. Walking and Cycling Strategy Review 2011

Moved: Cr Edwards
Seconded: Cr Jongejans

1. That the draft Strategy and background report be received.

2. That public feedback is sought on the draft Walking and Cycling Strategy 2011.

3. That Council considers the inclusion of funding each year for walking and cycling projects in the Long Term Plan 2012-22.

4. That Council considers the inclusion of a Community Grant fund for walking and cycling activities in the Long Term Plan 2012-22.”

CARRIED
3. Coastal Protection Works Long Term Plan

Moved: Cr Halse  
Seconded: Cr Deeming

“1. That the information be received.

2. That Council approve the implementation of the Long Term Plan for coastal protection works as set out in the report from Opus, titled “Whangarei District Council – Coastal Protection Works Long Term Plan” and dated 23 September 2011.

3. That Council staff review current Coastal Protection policy and develop a comprehensive prioritised protection work programme together with proposed funding mechanisms for consideration by the Infrastructure and Services Committee.”

CARRIED

4. Solid Waste Management and Minimisation Plan

Moved: Cr McLachlan  
Seconded: Cr Edwards

“That the Draft Waste Management and Minimisation Plan with any amendments required by this Committee, be recommended to the Meeting of Council on Wednesday 21 December 2011 for adoption, and release for public consultation with the consultation on the draft Long Term Plan 2012-2022, in accordance with the Special Consultative Procedure of the Local Government Act 2002.”

CARRIED

5. Temporary Road Closure – Kamo Christmas Parade 2011

Moved: Cr Christie  
Seconded: Cr Williamson

“1. That, pursuant to the Tenth Schedule of the Local Government Act 1974, the following road be closed to ordinary vehicular traffic for the 2011 Kamo Christmas Parade:

   Date: 10 December 2011

   Kamo Road, from the Kamo Road and Three Mile Bush Road intersection to the Kamo Road and Griffin Road intersection.

   Period of closure: 11:30am to 1:30pm

   and;

   Kamo Road, from the Kamo Road and Meldrum Street intersection to the Kamo Road and Three Mile Bush Road intersection.

   Period of closure: 12:00pm to 12:30pm.

2. That the Chair of the Infrastructure and Services Committee and the Infrastructure and Services Group Manager be delegated to consider objections, and to cancel or amend the road closure if appropriate.”

CARRIED
The meeting closed at 9.19am

Confirmed this 14th day of December 2011

G M Martin (Chairperson)
2. Contracts Authorised Under Delegated Authority

Reporting officer  Simon Weston
Date  28 November 2011

The following contracts were authorised under the delegated authority of the Chief Executive Officer and the Infrastructure and Services Manager:

<table>
<thead>
<tr>
<th>Contract</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10081</td>
<td>Clark Road Watermain Renewal</td>
</tr>
<tr>
<td>11014</td>
<td>Tracks and Walkway Maintenance</td>
</tr>
<tr>
<td>11021</td>
<td>Abbey Caves Dropout Repairs</td>
</tr>
<tr>
<td>11022</td>
<td>Snooks Road Dropout Repairs</td>
</tr>
<tr>
<td>11038</td>
<td>Design &amp; Construct Package 1 Pavement Rehabilitation - Cove Road</td>
</tr>
<tr>
<td>11039</td>
<td>Design &amp; Construct Package 2 - Pavement Rehabilitation - Ngunguru Road</td>
</tr>
<tr>
<td>11046</td>
<td>Minor Stormwater Improvements 2011/12</td>
</tr>
<tr>
<td>11050</td>
<td>Minor Road Safety Works Construction 2011/12 – Traffic Calming</td>
</tr>
<tr>
<td>11053</td>
<td>Ngunguru WWTP Ultraviolet Disinfection Upgrade – Civil &amp; Electrical Works</td>
</tr>
<tr>
<td>11056</td>
<td>Kamo Road, Park Ave, Moody Ave Intersection</td>
</tr>
</tbody>
</table>

**Water**

**Contract 10081
Clark Road Watermain Renewal**

Contract 10081 is for the replacement of an old asbestos cement water main in Clark Road. The main has been prone to breakages and is undersized. Upgrading of this main will allow the Whau Valley Water Supply area to be effectively fed from the Magnolia Pressure Release Valve. The project has been on the works programme for a number of years and has been deferred twice.

The tender was publically advertised and closed on 14 October 2011. Two tenders were received:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Tender Value (excl. GST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Watertight Co Ltd</td>
<td>$197,760.09</td>
</tr>
<tr>
<td>Downer NZ Ltd</td>
<td>$260,075.97</td>
</tr>
</tbody>
</table>

The tender evaluation method is Lowest Price Conforming, and the lowest tender was submitted by The Watertight Co Ltd. The tender was conforming and the contractor is a Licensed Contractor for water supply.

**Financial**

The tender of The Watertight Co Ltd for $197,760.09 is $9,760.09 (4.9%) above the Engineer’s Estimate. The available budget for the works is $188,525.00. The additional cost can be met from monies saved in the Hatea Bulk Water Main Project.

**Infrastructure and Services Group Managers Approval**

That The Watertight Co Ltd be awarded Contract 10081 – Clark Road Water Main Renewal, for the sum of one hundred and ninety seven thousand, seven hundred and sixty dollars and nine cents $197,760.09 (excl. GST).
Waste and Drainage

Contract 11046
Minor Stormwater Improvements 2011/12

All tenders have been evaluated in accordance with the Conditions of Tendering stated in the tender documents. Refer to the attached evaluation sheet. The tender evaluation method is “Physical Works – Lowest Price conforming”, in accordance with the WDC Contracts Procedures Manual. Madden Enterprises conform to this evaluation and are also currently Health and Safety approved.

<table>
<thead>
<tr>
<th>Tenders</th>
<th>Price ((excl GST))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robinson Asphalts</td>
<td>$157,068.00</td>
</tr>
<tr>
<td>Madden Enterprises Ltd</td>
<td>$139,358.00</td>
</tr>
<tr>
<td>Halls Brown Contracting</td>
<td>$149,995.00</td>
</tr>
<tr>
<td>Steve Bowling Contractors</td>
<td>$164,453.00</td>
</tr>
<tr>
<td><strong>Engineers Estimate</strong></td>
<td><strong>$152,900.00</strong></td>
</tr>
</tbody>
</table>

Taking into account the Tenderers’ submission and the above, the evaluation of the tender against the specified non-price attributes is:
- Relevant Experience: Pass
- Track Record: Pass
- Technical Skills: Pass
- Management Skills: Pass

Financial
The tender of $139,358.00 (GST exclusive) is 94% of the engineers estimate. Funding is available from 2011/12 Annual Plan budget for Stormwater Capital Projects.

Infrastructure and Services Group Managers Approval
That Madden Enterprises Limited be awarded Contract 11046 Minor Stormwater Improvements, for the tendered sum of one hundred and thirty nine thousand, three hundred and fifty eight dollars and zero cents ($139,358.00) (excluding GST).

Contract 11053
Ngunguru WWTP Ultraviolet Disinfection Upgrade – Civil & Electrical Works

Introduction
This contract is for the supply and installation of the civil and electrical works at the Ngunguru Wastewater Treatment Plant to accommodate the commissioning of a new UV disinfection system supplied and commissioned under Contract 09039.

These works are required as a condition of Council’s resource consent.

Evaluation Method
Tenders have been evaluated in accordance with the Conditions of Tendering stated in the tender documents. The tender evaluation method is “Physical Works – Lowest Price Conforming”, in accordance with Clause 2.6 of the NZTA Manual of Competitive Pricing Procedures (June 1998).

All tenders ranked in ascending order are as follows:

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Amount of Tender</th>
<th>Tender Evaluation</th>
<th>Remarks</th>
</tr>
</thead>
</table>
1. **Evaluation of Non-Alternative Tenders**

1.1 **Stage 1**

The non-alternative tenders were ranked in ascending order based on price.

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Amount of Tender (excl. GST)</th>
<th>Tender Evaluation Sum (excl. GST)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Civil Construction Ltd</td>
<td>$98,717.98</td>
<td>$98,717.98</td>
<td></td>
</tr>
<tr>
<td>Steve Bowling Contractors Ltd</td>
<td>$99,914.20</td>
<td>$99,914.20</td>
<td></td>
</tr>
<tr>
<td>Fulton Hogan Ltd</td>
<td>$133,492.00</td>
<td>$133,492.00</td>
<td></td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$119,050.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2 **Stage 2**

2.2.1 **United Civil Construction Ltd**

The lowest priced non-alternative tender is from United Civil Construction Ltd.

The lowest priced tender at $98,717.98 (excluding GST) is approximately 83% of the Engineer’s estimate at $119,050.00 (excluding GST). A review of the Tenderer’s schedule compared to the Engineer’s Estimate shows that the Tenderer has priced consistently low across most items which is indicative of the highly competitive nature of the market. The Tenderer was asked to confirm its Tender Sum which it has done.

This Tenderer is deemed to have good management skills and has satisfactorily completed similar works for Council in recent years, including wastewater projects for WDC at the Okara sewage pump station and is also performing well on the Hatea Sewage Pump Station and Emergency Storage Tank project. United Civil and subcontractor Paneltech have experience with complex concrete structures and are expected to have sufficient technical skills to complete this project. The Tenderer has also confirmed that its methodology to cast in-situ the chamber modification will achieve the specified concrete tolerances.

The Tenderer is deemed to have sufficient resources to carry out this project alongside the other commitments identified in its tender submission.

Tags included in the tender submission from United Civil included references to the detail of the Principal supplied equipment which are deemed insignificant, as well as a working day rate of $1,566.14 which is deemed high for this contract value and contract period. Given that a working day rate was not asked for in the tender, and thus has not been priced competitively, we suggest that if the tender from United Civil Construction is accepted, then the letter of acceptance should outline that time related costs for an extension of time be evaluated on a “cost basis” rather than using this working day rate. The Tenderer also indicated that should its tender be accepted, then it could supply and install a new concrete precast chamber at equivalent cost to the chamber modification. This option could be discussed with United Civil after tender award.

Taking into account the Tenderer’s submission and the above, the evaluation of the tender against the specified non-price attributes is:

- Relevant Experience: Pass
- Track Record: Pass
- Technical Skills: Pass
- Resources: Pass
2. Evaluation of Alternative Tenders
One alternative solution has been submitted as follows:

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Amount of Tender ($) (excl. GST)</th>
<th>Tender Evaluation Sum ($) (excl. GST)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulton Hogan Ltd</td>
<td>$97,391.00</td>
<td>$97,391.00</td>
<td>Form complete new chamber using six precast concrete sections installed between two 1.5m dia manholes</td>
</tr>
</tbody>
</table>

3.1 Stage 1
3.1.1 Fulton Hogan Ltd
The lowest priced alternative tender is from Fulton Hogan Ltd at $97,391.00 and is equivalent to its non-alternative tender except the concrete chamber is formed alongside the existing structure from six small precast concrete sections installed between two 1.5m diameter manholes.

A concept plan and methodology statement of the alternative proposal was provided, indicating that the precast concrete units would be assembled with stainless steel rods and sealed with a Sikaflex system. However, no detailed design information was provided.

This solution was assessed as not being technically sound. Reasons for this were that the stainless steel rods, acting in compression to resist overturning of the precast units due to ground pressures, would conflict with the UV system. Positioning of the rods at ground level and at the top of the UV channel slot as required would limit access to the UV modules for removal and reinstatement, which is not deemed acceptable.

Taking into account the Tenderer’s submission and the above, the evaluation of the alternative tender against the specified non-price attributes is:

- Relevant Experience: Pass
- Technical Skills: Pass
- Management Skills: Pass
- Track Record: Pass
- Resources: Pass
- Methodology: Fail

The price difference between this alternative tender and the lowest conforming tender is also considered negligible. The alternative tender was therefore not considered further.

Financial
The budget available for this project is $341,177.

Infrastructure and Services Group Managers Approval
That the contract for Ngunguru WWTP Ultraviolet Disinfection Upgrade – Civil & Electrical Works (CON11053) be awarded to United Civil Construction Ltd. for the tendered sum of $98,717.98 (ninety eight thousand, seven hundred and seventeen dollars and ninety eight cents) excluding GST.
Evaluation Method
Tenders have been evaluated in accordance with the Conditions of Tendering stated in the tender documents. The tender evaluation method is “Physical Works - Lowest Price Conforming”, in accordance with Clause 2.6 of the NZTA Manual of Competitive Pricing Procedures (June 1998).

All Tenders ranked in ascending order are as follows:

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Amount of Tender ($) (excl. GST)</th>
<th>Tender Evaluation Sum ($) (excl. GST)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHK Piling 2000 Ltd</td>
<td>$65,985.00</td>
<td>$65,985.00</td>
<td>Alternative</td>
</tr>
<tr>
<td>GHK Piling 2000 Ltd</td>
<td>$81,006.00</td>
<td>$81,006.00</td>
<td></td>
</tr>
<tr>
<td>Rintoul Civil Ltd</td>
<td>$81,044.60</td>
<td>$81,044.60</td>
<td></td>
</tr>
<tr>
<td>Hiway Geotechnical Ltd</td>
<td>$92,429.50</td>
<td>$92,429.50</td>
<td>Alternative</td>
</tr>
<tr>
<td>Clements Contractors Ltd</td>
<td>$100,933.80</td>
<td>$100,933.80</td>
<td></td>
</tr>
<tr>
<td>Hiway Geotechnical Ltd</td>
<td>$113,205.00</td>
<td>$113,205.00</td>
<td></td>
</tr>
<tr>
<td>Estimate</td>
<td>$101,840.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The lowest priced alternative tender is from GHK Piling 2000 Ltd at $65,985.00 and is for a cantilever steel pile wall. The submitted solution of a Cantilever Steel Pile Wall was assessed as not being technically sound.

GHK Piling (2000) Ltd
The next lowest priced tender at $81,006.00 (excluding GST) is approximately 80% of the Engineer’s estimate at $101,840.00 (excluding GST). A review of the tenderers schedule compared to the Engineers Estimates shows that the Tenderer has priced consistently low across most items and is indicative of the highly competitive nature of the market. The Tenderer was asked to confirm their Tender Sum. The Tenderer confirmed this. This Tenderer has satisfactorily completed similar slip repair works for Council in recent years.

Financial
Funding for these works has been allocated with the approved NZTA flood damage repair programme for 2011/12.

Infrastructure and Services Group Managers Approval
That the conforming tender of GHK Piling Ltd (Contract 11021) for the sum of eighty one thousand and six dollars ($81,006.00) (excluding GST) be accepted as it is the lowest price conforming tender.
Evaluation Method

Tenders have been evaluated in accordance with the Conditions of Tendering stated in the tender documents. The tender evaluation method is "Physical Works - Lowest Price Conforming", in accordance with Clause 2.6 of the NZTA Manual of Competitive Pricing Procedures (June 1998).

All Tenders ranked in ascending order are as follows:

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Amount of Tender ($) (excl. GST)</th>
<th>Tender Evaluation Sum ($) (excl. GST)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHK Piling 2000 Ltd</td>
<td>$142,365.00</td>
<td>$142,365.00</td>
<td>Alternative</td>
</tr>
<tr>
<td>Rintoul Civil Ltd</td>
<td>$177,930.50</td>
<td>$177,930.50</td>
<td></td>
</tr>
<tr>
<td>GHK Piling 2000 Ltd</td>
<td>$187,252.00</td>
<td>$187,252.00</td>
<td></td>
</tr>
<tr>
<td>Clements Contractors Ltd</td>
<td>$213,062.46</td>
<td>$213,062.46</td>
<td></td>
</tr>
<tr>
<td>Hiway Geotechnical Ltd</td>
<td>$200,046.90</td>
<td>$200,046.90</td>
<td>Alternative</td>
</tr>
<tr>
<td>Hiway Geotechnical Ltd</td>
<td>$274,795.00</td>
<td>$274,795.00</td>
<td></td>
</tr>
<tr>
<td>Estimate</td>
<td>$229,895.00</td>
<td>$229,895.00</td>
<td></td>
</tr>
</tbody>
</table>

Rintoul Civil Ltd

The lowest priced tender is from Rintoul Civil Ltd.

The lowest priced tender at $177,930.50 (excluding GST) is approximately 77% of the Engineer’s estimate at $229,895.00 (excluding GST). A review of the Tenderers schedule compared to the Engineers Estimates shows that the Tenderer has priced consistently low across most items which is regular practice for this Tenderer. It is also indicative of the highly competitive nature of the market. The Tenderer was asked to confirm their Tender Sum. The Tenderer confirmed this.

This Tenderer has satisfactorily completed similar slip repair works for Council in recent years.

This Tenderer’s site management skills are only just adequate and it is possible that the Tenderer deliberately relies on contract supervision input from the project Consultant to provide some quality assurance, supervision and management inputs. This has been the case on many recent contracts completed by this Tenderer. It is considered certain that they will require significant additional supervision to ensure completion to an acceptable quality standard on this project. There are a number of critical technical aspects to this project that will require a high degree of supervision input.

Evaluation of Alternative Tenders

Two alternative solutions have been submitted as follows:

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Amount of Tender ($) (excl. GST)</th>
<th>Tender Evaluation Sum ($) (excl. GST)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHK Piling 2000 Ltd</td>
<td>$142,365.00</td>
<td>$142,365.00</td>
<td>Cantilever Steel Pile Wall deemed not technically sound.</td>
</tr>
<tr>
<td>Hiway Geotechnical Ltd</td>
<td>$200,046.90</td>
<td>$200,046.90</td>
<td>Evaluation sum is the same as tender amount and is therefore not considered further.</td>
</tr>
</tbody>
</table>
Stage 1
GHK Piling (2000) Ltd

The lowest priced alternative tender is from GHK Piling 2000 Ltd at $142,365.00 and is for a cantilever steel pile wall.

The Tenderer was asked to provide a detailed schedule of items for the alternative design. The Tenderer provided this.

The Tenderer was asked to confirm their methodology and that their design fully complied with the conditions specified in the Tender documents. The Tenderer provided a concept design showing some preliminary analysis.

The submitted solution of a Cantilever Steel Pile Wall was assessed as not being technically sound. Reasons for this were that the maximum resistance that steel piles can normally be driven through is 15MPa. To reach the embedment depth shown on the conceptual design and sufficient for the cantilever option the piles would need to be driven through >15MPa soils. This proposed design was therefore deemed not to appropriately address the ground conditions determined from the intrusive ground investigation.

In addition, the assumptions made in the concept design in regards to the resisting materials in front of the wall are incorrect.

Taking into account the Tenderer’s submission and the above, the evaluation of the tender against the specified non-price attributes is:

- Relevant Experience: Pass
- Track Record: Pass
- Technical Skills: Pass
- Resources: Pass
- Management Skills: Pass
- Methodology: Fail.

Financial
Funding for these works has been allocated with the approved NZTA flood damage repair programme for 2011/12.

Infrastructure and Services Group Managers Approval
That the tender of Rintoul Civil Ltd for the sum of one hundred and seventy seven thousand, nine hundred and thirty dollars and fifty cents ($177,930.50) (excluding GST) be accepted as it is the lowest price conforming tender.

Contract 11038
Design & Construct Package 1 Pavement Rehabilitation - Cove Road

This contract is for the Pavement Rehabilitation of Cove Rd (1.65km) - Design & Construct Package 1.

Tenders have been evaluated in accordance with the Conditions of Tendering stated in the tender documents. The tender evaluation method is ‘Price Quality Method’ as set out in Land Transport New Zealand’s CPP Manual.

Each tender was prepared on a Design & Construct basis. This means that the contractor is responsible for carrying out both the design of the works as well as the construction. The tender designs were evaluated by an independent expert. Prices were obtained from each of the contractors on a Lump Sum basis.

Tender prices were opened in the offices of Whangarei District Council on Wednesday 21 September 2011. Tenderers were invited to attend the opening. The following tender prices were received:

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Tender Sum (excl. GST)</th>
<th>Tender Premium (excl. GST)</th>
<th>Tender Sum less Tender Premium (excl. GST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfield Services Ltd</td>
<td>$879,066.21</td>
<td>$10,151.07</td>
<td>$868,915.14</td>
</tr>
<tr>
<td>United Civil Construction Ltd</td>
<td>$1,047,599.08</td>
<td>$0.00</td>
<td>$1,047,599.08</td>
</tr>
<tr>
<td>Fulton Hogan Northland Ltd</td>
<td>Tender withdrawn</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$880,000.00</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
The Tenderer with the lowest adjusted price was Transfield Services Ltd with an adjusted price of $868,915.14. The Fulton Hogan tender was withdrawn prior to the opening of tender prices, due to a number of errors and omissions with their tender.

The tender with the highest overall index (Transfield Services Ltd) was checked for arithmetic errors. Two items were not priced in the Transfield LS schedule. A tender clarification was sent to Transfield asking them to confirm their Total Tender Sum and that it allows to carrying out all of the works strictly in accordance with the tender documents. This confirmation has been received.

The tender with the highest overall index with a tender price of $879,066.21 (excluding GST) is 100% of the Engineer’s Estimate and is considered to be competitive and appropriate.

Financial
The total budget available for the pavement rehabilitation programme for 2011/12 is $2,347,000. A budget of $730,000 has been allocated for the Cove Rd pavement works; $100,000 for the slip remediation work and $25,000 for the upgrade of bridge guardrails at Cove Rd.

The Transfield tender sum of $879,066.21 is made up of:

<table>
<thead>
<tr>
<th></th>
<th>Tender Sum (excl. GST)</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement works</td>
<td>$730,000.00</td>
<td>$730,000.00</td>
</tr>
<tr>
<td>Slip remediation works (provisional)</td>
<td>$75,000.00</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>Contingency (provisional)</td>
<td>$50,000.00</td>
<td></td>
</tr>
<tr>
<td>Guardrail</td>
<td>$24,066.21</td>
<td>$25,000.00</td>
</tr>
</tbody>
</table>

The Transfield Tender Sum to complete pavement works can be funded from the pavement rehabilitation programme for 2011/12.

Chief Executive Officers Approval
That the Pavement Rehabilitation of Cove Road - Design & Construct Package 1 (Contract 11038) be awarded to Transfield Services Ltd for the tendered sum of $879,066.21 (GST exclusive).

Contract 11039
Design & Construct Package 2 - Pavement Rehabilitation - Ngunguru Road

This contract is for the Pavement Rehabilitation of Ngunguru Rd (2.65km)-Design & Construct Package 2.

Tenders have been evaluated in accordance with the Conditions of Tendering stated in the tender documents. The tender evaluation method is ‘Price Quality Method’ as set out in Land Transport New Zealand’s CPP Manual.

Each tender was prepared on a Design & Construct basis. This means that the contractor is responsible for carrying out both the design of the works as well as the construction. The tender designs were evaluated by an independent expert. Prices were obtained from each of the contractors on a Lump Sum basis.

Tender prices were opened in the offices of Whangarei District Council on Thursday 20 October 2011. Tenderers were invited to attend the opening. The following tender prices were received:

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Tender Sum (excl. GST)</th>
<th>Tender Premium (excl. GST)</th>
<th>Tender Sum less Tender Premium (excl. GST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfield Services Ltd</td>
<td>$995,537.39</td>
<td>$31,184.60</td>
<td>$964,352.79</td>
</tr>
<tr>
<td>Fulton Hogan Northland Ltd</td>
<td>$1,026,908.22</td>
<td>$15,647.01</td>
<td>$1,011,261.21</td>
</tr>
<tr>
<td>United Civil Construction Ltd</td>
<td>$1,053,545.67</td>
<td>$33,154.15</td>
<td>$1,020,391.52</td>
</tr>
<tr>
<td>Downer EDI Works Ltd</td>
<td>$1,338,425.61</td>
<td>$0.00</td>
<td>$1,338,425.61</td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$1,051,250.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Tenderer with the lowest adjusted price was Transfield Services Ltd with an adjusted price of $964,352.79.

The tender with the highest overall index (Transfield Services Ltd) was checked for arithmetic errors. No errors were found.

The Transfield Services Ltd tender price of $995,537.39 (excluding GST) is 95% of the Engineer’s Estimate and is considered to be competitive and appropriate.

Financial
The total budget available for the pavement rehabilitation programme for 2011/12 is $2,347,000.

A budget of $875,000 has been allocated for the Ngunguru Rd pavement works and $150,000 for the guard rail installation.

The Transfield tender sum of $995,537.39 is made up of:

<table>
<thead>
<tr>
<th>Tender Sum (excl. GST)</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement works</td>
<td>$890,537.39</td>
</tr>
<tr>
<td>Guard rail installation</td>
<td>$75,000.00</td>
</tr>
<tr>
<td>Contingency (provisional)</td>
<td>$30,000.00</td>
</tr>
</tbody>
</table>

The Transfield Tender Sum to complete pavement works can be funded from the pavement rehabilitation programme for 2011/12.

Chief Executive Officers Approval
That the Pavement Rehabilitation of Ngunguru Road - Design & Construct Package 2 (Contract 11039) be awarded to Transfield Services Ltd for the tendered sum of nine hundred and ninety five thousand, five hundred and thirty seven dollars and thirty nine cents $995,537.39 (GST exclusive).

Contract 11050
Minor Road Safety Works Construction 2011/12 – Traffic Calming

This contract is for the construction of speed tables and traffic calming measures to create slow street environments on Boundary Road, Korau Road, Cartwright Road and Cairnfield Road.

The Tender evaluation was undertaken by GHD in accordance with the Conditions of Tendering stated in the tender documents. The tender evaluation method is “Physical Works - Lowest Price Conforming”, in accordance with Clause 2.6 of the Transfund New Zealand Manual of Competitive Pricing Procedures (June 1998).

The tenders were ranked in ascending order based on price.

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Amount of Tender ($) (excl. GST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Harbour Paving</td>
<td>$216,880.60</td>
</tr>
<tr>
<td>Fulton Hogan</td>
<td>$229,029.96</td>
</tr>
<tr>
<td>Steve Bowling Contracting Ltd</td>
<td>$231,561.89</td>
</tr>
<tr>
<td>Transfield Services</td>
<td>$273,935.74</td>
</tr>
<tr>
<td>Engineers Estimate</td>
<td>$195,000.00</td>
</tr>
</tbody>
</table>

Financial
Council budget for this work is $225,500.00 in the Minor Safety Works programme which is subsidised at 62%. Council has sufficient budget to complete these works.

Infrastructure and Services Group Managers Approval
That the tender for Minor Safety Works Construction 2011/12 – Traffic Calming (Contract 11050) be awarded to North Harbour Paving for the sum of Two Hundred and Sixteen thousand eight hundred and eighty dollars and sixty cents only excluding goods and services tax ($216,880.60)
This contract is for the construction of intersection safety improvements at the Park Ave, Kamo Rd, and Moody Ave intersection. Works will include separating Park Ave and Moody Ave intersections, providing a longer designated right turn lane to improve congestion and various splitter / refuge islands to aid pedestrians.

The Tender evaluation was undertaken by Opus in accordance with the Conditions of Tendering stated in the tender documents. The tender evaluation method is “Physical Works - Lowest Price Conforming”, in accordance with Clause 2.6 of the Transfund New Zealand Manual of Competitive Pricing Procedures (June 1998).

The tenders were ranked in ascending order based on price.

<table>
<thead>
<tr>
<th>Name of Tenderer</th>
<th>Amount of Tender ($) (excl. GST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve Bowling Contracting Ltd</td>
<td>$160,203.73</td>
</tr>
<tr>
<td>Transfield Services (NZ) Ltd</td>
<td>$162,329.53</td>
</tr>
<tr>
<td>Robinson Asphalts 1992 Ltd</td>
<td>$170,406.26</td>
</tr>
<tr>
<td>North Harbour Paving &amp; Construction Ltd</td>
<td>$170,406.26</td>
</tr>
<tr>
<td>Green Gables Landscape Ltd</td>
<td>$189,575.00</td>
</tr>
<tr>
<td>Engineers Estimate</td>
<td>$169,445.00</td>
</tr>
</tbody>
</table>

Financial
Steve Bowling Contracting Ltd has been assessed to have the lowest price and has met all non price attributes.

Council budget for this work is $100,000.00 in the Minor Safety Works programme which is subsidised at 62%. A number of provisional items were placed in the contract to test the market, which are listed below and will not be completed / awarded.

- Roundabout and splitter islands at the intersection of Moody / Weaver
- Traffic calming devices for Park Ave and Moody Ave.

The sum of provisional items is $25,499.93, taken off the tender sum results in a contract value of $134,703.80. The difference between the contract value and the Council budget value will be met from savings obtained in other minor safety work projects. The overall Council approved Minor Safety Works budget will not be exceeded.

Infrastructure and Services Group Managers Approval
That the tender for Kamo Road, Park Ave, Moody Ave Intersection Improvements (Contract 11056) be awarded to Steve Bowling Contracting Ltd for the sum of One hundred and thirty four thousand seven hundred and three dollars and eighty cents only ($134,703.80) (exc GST).
This contract is for the regular maintenance of Council’s walking tracks in the City and throughout the district. These cover a total distance of 44.3 kilometres and are generally of day visitor grade. Councils aim to maintain these to a relatively high level of service commensurate with the grade.

The contract is for 1 plus 3 plus 1 years commencing on 1 February 2012, subject to satisfactory performance.

All tenders have been evaluated in accordance with the Conditions of Tendering stated in the tender documents. The tender evaluation method was “Physical Works – Weighted Attributes Method” (single envelope), generally in accordance with Clause 2.7 of the Transfund CPP manual (1998). Price carries a weight of 70%.

Four tenders were received. One of the tenderers did not submit attributes so could not be evaluated any further:

**Stage 1a – Evaluation of Attributes**

The attributes with a total weight of 30% were evaluated first. The results are as follows:

<table>
<thead>
<tr>
<th>Tenderer</th>
<th>Attribute Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northland Scenic Paths and Walkways</td>
<td>0</td>
</tr>
<tr>
<td>Greengables</td>
<td>15.1</td>
</tr>
<tr>
<td>Recreational Services Ltd</td>
<td>23.6</td>
</tr>
<tr>
<td>Northland Parkcare Ltd</td>
<td>26.0</td>
</tr>
</tbody>
</table>

**Stage 1b – Prices**

<table>
<thead>
<tr>
<th>Tenderer</th>
<th>Price (excl GST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northland Scenic Paths and Walkways</td>
<td>$167,569.29</td>
</tr>
<tr>
<td>Greengables</td>
<td>$86,594.44</td>
</tr>
<tr>
<td>Recreational Services Ltd</td>
<td>$113,804.44</td>
</tr>
<tr>
<td>Northland Parkcare Ltd</td>
<td>$98,601.00</td>
</tr>
<tr>
<td>Engineer’s estimate</td>
<td>$94,000.00</td>
</tr>
</tbody>
</table>

**Stage 2 – Overall Scores**

Combining the attribute scores with the price score results in the following overall score:

<table>
<thead>
<tr>
<th>Tenderer</th>
<th>Attribute Score</th>
<th>Price Score</th>
<th>Overall Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greengables</td>
<td>15.1</td>
<td>47.9</td>
<td>63.0</td>
</tr>
<tr>
<td>Recreational Services Ltd</td>
<td>23.6</td>
<td>30.0</td>
<td>53.6</td>
</tr>
<tr>
<td>Northland Parkcare Ltd</td>
<td>26.0</td>
<td>40.0</td>
<td>66.0</td>
</tr>
</tbody>
</table>

**Engineers Estimate:** $94,000.00 (excl. GST)

**Discussion**
Northland Parkcare Ltd. have maintained Council’s tracks and walkways for the past 17 years generally achieving satisfactory levels of service as reflected by an average performance audit of 94% over the past contract period of 5 years.

Financial
The price from the contractor with the highest combined score, Northland Parkcare Ltd., is 104.9% of the Engineers Estimate. There is $84,795 allowed for contract work in the 2011/12 operating budget for tracks and walkways maintenance plus $10,619 provided for non-contract work.

The contract makes provision for a normal annual price adjustment applying CPI as well as the addition of any sites by variation.

Infrastructure and Services Group Managers Approval
That the contract for Tracks and Walkways Maintenance (CON11014) be awarded to Northland Parkcare Ltd. for 1 plus 3 plus 1 year from 1 February 2012 for the tendered sum of $98,601.00 (Ninety-eight thousand, six hundred and one dollars zero cents) excluding GST for the first year.

Recommendation
That the information be received.
3. **Contract 08007 - Traffic and Pedestrian Signal Maintenance**

**Reporting officer**  Jeffrey Devine (Roading Manager)

**Date**  21 October 2011

**Vision, mission and values**

This item is in accord with Council’s vision, mission and values statement as:

Appropriate, sustainable maintenance and renewal of traffic management assets and equipment is in keeping with Council’s mission to create the ultimate living environment.

**Local Government Act 2002 – The four well-beings**

- **Cultural**  This item has no impact on cultural significance
- **Economic**  This item considers the appropriate use of public funds
- **Environmental**  This item has no effect on environmental issues
- **Social**  This item considers the needs of the individual against the need to be fair and equitable to the whole community

**Introduction**

This item is seeking approval to extend Contract 08007 Traffic and Pedestrian Signal Maintenance for an additional two year period, and to increase the contract value.

This contract is for the maintenance and renewal of Council’s traffic and pedestrian signals network. The School Zone signs are also included within the scope of this work. This contract is currently held by Currie Electrical Limited, who has been Council’s maintenance contractor in this area for a number of years.

**Contract Extension**

This contract was awarded in 2008 on a 1+2+2 year basis. On satisfactory completion of the one year term the contract may be extended for a further two year extension, followed by another two year extension, at the discretion of Council. The expiry date for the one year term was 1 September 2009 and the contractor has already had the first two year extension granted (Separable Portion 2) which expired on 1 September 2011.

Performance appraisals have been conducted through the contract. The Contractor, Currie Electrical Limited, has consistently performed well over the period they held this contract, and has indicated that they wish to continue with the contract and accept a further extension for a period of two years.

Currie Electrical has been proactive from the start with identifying opportunities for improving the value gained from Council’s investment, such as extending the time between lamp changes from three months to six months. This has saved Council $38,574.36 based on the original tendered rates.

Council issues a financial authority to spend up to the value of the tendered sum when awarding a contract. If that financial authority is exceeded, then staff members are required to return to Council for a new or additional financial authority to cover the remaining obligations of the contract.

The approved contract value for this contract is $1,536,960.59 (excl. GST). The final contract value at the end of Separable Portion 2 is $1,583,360. This final contract value is made up from general maintenance ($421,176), state highway maintenance under NZTA delegated authority ($237,872), Capital works/improvements ($924,312) and escalations ($0 to date).
Contract Value

The contract value has been exceeded due to additional capital works being carried out under this contract which are not maintenance items. Each capital project is relatively small in value, and as such production of a separate contract document and specification would not create value for Council.

The maintenance contract has competitive and attractive rates, and delivery of these works through the contract was considered to be most cost-effective.

If Council approval is given for the extension of the above contract to Currie Electrical Ltd for the third term of the contract (SP3), the predicted final value of the contract will increase by $900,000 to $2,436,960.59. Thus, approval is sought for an increase in the contract value to this amount.

This is a measure and value contract, and the actual payments to the contractor are based on the quantity of works completed and the tendered schedule of rates. Each contract allows for the tendered schedule of rates in the contact to be adjusted for cost increases annually after the first year, based on the previous year’s cost fluctuations, as determined by the published Construction Cost Indices, provided by the New Zealand Transport Agency.

All of these works are completed within Council’s approved budget in any given financial year.

Recommendation

1. That the extension of Contract 08007 Traffic and Pedestrian Signal Maintenance for the period of two years from 1 September 2011 to 1 September 2013 be authorised.

2. That the contract value is increased to the sum of two million four hundred and thirty six thousand nine hundred and sixty dollars and fifty nine cents $2,436,960.59 (excluding GST).
4. Ruakaka South Sewer Extension

**Reporting officer** Andrew Carvell (Waste and Drainage Manager)

**Date** 22 November 2011

**Vision, mission and values**

Extending wastewater reticulation network to Ruakaka South community is in keeping with the Council mission of creating the ultimate living environment.

**Local Government Act 2002 – The four well-beings**

- **Cultural** This item supports cultural values by providing public sewerage facilities.
- **Economic** This item considers the appropriate use of public funds.
- **Environmental** This item provides environmental benefits through providing public sewerage facilities.
- **Social** The proposal is equitable and fair for the community.

**Summary**

This item gives an update on the progress towards the implementation of the Ruakaka South Sewer Extension project. The focus of the discussion is on the Ruakaka South community consultation, pressure sewer policy documentation, selection of pumping unit’s supplier and the procurement method for the Design and Construct contract.

**Background**

As reported to the Infrastructure and Services Committee in its meeting on 12 October 2011 the Council has been working on a programme of actions to facilitate successful delivery of the contract.

To date these have included:

1) Preparation of background information for the consultation Ruakaka South residents.
2) Development of pressure sewer policy documentation that covers the management of the pressure sewer system.
3) Advertised for Registration of Interest (ROI) as first phase of the procurement process for the Design and Construct contract.
4) Tendering for the selection of pressure sewer pumping units preferred supplier.

**Community Consultation**

The Council’s Infrastructure and Services Committee resolved to consult with the Ruakaka South residents regarding the benefits, costs and general outline of the proposed extension. Fraser Campbell of Campbell Consulting Ltd has been appointed to manage the consultation process.

Two public meetings will be held.

These include:

(a) Public Open Day at the Ruakaka Surf Club Building, Bream Bay Drive on Saturday December 10th 2011 between 10.30 am and 2.00 pm.

(b) Public Meeting at the Ruakaka Surf Club Building, Bream Bay Drive on Saturday January 7th 2012 starting 2.00pm.
As part of the consultation process we will send an information package to all homeowners in the area. This will include:

1. Booklet providing a project overview
2. Question and Answer Sheet.

A draft copy of this information package is attached. A feedback form will be used at the public meeting to assess support for the scheme and help identify potential issues that homeowners may have.

Council staff will send a letter, including the feedback form, to all residents in mid December reminding them of the public meeting.

Discussions are also being held with the Ruakaka Reserve Motor Camp, Bream Bay Motel and Patuharakeke Te Iwi Trust Board.

The results of this consultation will be presented to Council for its consideration in February 2012.

**Pressure Sewer Policy**

Council has commissioned Hydrus Engineering Consultants (Hydrus) to review the existing pressure sewer policy and identify any policy gaps in relation to the implementation and operation of the pressure sewer system. Hydrus will subsequently develop a policy document that as far as practicable caters for most eventualities associated with implementation and management of pressure sewer systems in the district. The updated policy will be presented to Council’s Infrastructure and Services Committee in February 2012.

**Selection of Preferred Supplier**

Tenders for the selection of pressure sewer pumping units were advertised on the 27 October 2011 and closed on 18 November 2011. Tenders were received from the following companies:

1. Innoflow Technologies New Zealand Ltd
2. Mono Pumps New Zealand Company
3. Ecoflow Limited.

Evaluation of the tenders is underway, two engineers from Council and one engineer from Hydrus are involved in the evaluation.

The preferred supplier will be identified prior to the community consultation meetings which will allow the supplier to participate in the consultation meetings. Confirmation of award will be finalised after the consultation meetings.

**Registration of Interest**

Council will select a contractor to deliver the project by the Design and Construct contracting method using a two-phase procurement process. The first phase is Registration of Interest (ROI) that will enable Council to determine submitters who are most qualified to successfully deliver the Project. Council intends to short-list the three or four most qualified contractors who will then be eligible and invited to submit tenders in phase 2 of the procurement process. ROI were called for on 28 October 2011, with submissions closing on 25 November 2011.

Award of this contract is expected to occur in February 2012.

**Ministry of Health**

Council staff has provided the Ministry of Health with a progress report. The ministry has requested that Council provide them with three monthly updates to keep them abreast of the project progress.

**Recommendation**

That the information be received.

**Attachments:**

1. Ruakaka South Sewer Booklet
2. Question and Answer Sheet
Ruakaka South Sewer Extension

Public Information
This information booklet provides residents with an overview of Whangarei District Council’s plans to provide a public sewer system in Ruakaka South. We encourage you to read this information and come along to the Open Day or Public Meeting to find out more. These meetings provide you with the chance to ask questions, to find out more about the project and how it will affect you.

Council’s Plan for Ruakaka South

- Whangarei District Council will be providing a wastewater reticulation scheme in Ruakaka South, and will connect it to the Ruakaka wastewater treatment plant.
- A $6.79m Ministry of Health subsidy to fund the scheme was approved in June 2011, with construction of the project expected to start in July 2012 and take about a year to build. The project costs will be divided between the Ministry of Health, Whangarei District Council and property owners.

Benefits to the homeowner

- A cleaner, healthier environment
- Less maintenance required
- Frees up land currently utilised by the soakage fields
- Possible improvement to property value and saleability
- Overall cost is subsidised by Council and Government

Public Open Day

Ruakaka Surf Club
Bream Bay Drive
Saturday 10 December
10.30am – 2.00pm

Public Meeting

Ruakaka Surf Club Building
Bream Bay Drive
Saturday 7 January
starting at 2.00pm

Contact details

Fraser Campbell
Consultant Engineer
09 437 7905
fraserc@xtra.co.nz

Mark Shaw
WDC Infrastructure and Services Project Engineer
09 430 4230 Ext 8332
mshaw@wdc.govt.nz
The Reticulation system

- Council has carried out an assessment to find the most appropriate sewer system for Ruakaka South.
- We reviewed a number of options including a standard sewer network with pipes that carry sewage under gravity to a few pump stations and a pressure sewer system comprising of a small pump unit on each property and a pressure sewer pipe in the road.
- The investigations showed that the gravity system option would be costly, difficult to build and there would be a risk that it could leak during storms.
- A pressure sewer system is the selected option.

Area of benefit

The areas highlighted in yellow would be included in the reticulation system. This is presently around 470 properties, although the system will be designed to allow for growth as well.

Description of a pressure sewer system

- In pressure sewer systems, a small pumping unit is installed on each property to pump the household sewage into council’s sewerage network through a 40mm diameter pipe. Each pumping unit is provided with a 24-hour emergency storage tank (about 1m diameter by 2m deep) and is fitted with an alarm.
- The system is powered by the household power supply. The public pressure sewer pipework is located within the road reserve at shallow depths, similar to a water main.

Typical onsite arrangement
The pump unit

The layout of the new system
Estimated cost to connect to the scheme

- The cost of connecting to the scheme before any subsidies are applied is estimated to be $28,000 per Household Unit Equivalent (HUE). By taking advantage of the government and council subsidies, and connecting to the scheme now property owners can expect to pay approximately $10,200 per HUE (Inc GST).
- This cost includes supply and installation of the pressure pump units including connection of the private drain from the dwelling to the pump chamber, decommissioning of existing on-site systems and construction of sewer mains within roadside verges.

Rating options

Rate payers have the option to either pay a lump sum which is a one off payment or a 5 year targeted rate added to the annual rates. A 6% interest rate on the outstanding balance applies on the 5 year targeted rate option.

*Note that council funding is available to residential properties only.

Other costs to the homeowner

- Power cost associated with operating the pump unit. This is paid as part of homeowner’s domestic power bill. Power cost is estimated at between $25 and $35 per annum on an average family household.
- Annual user charges. A standard ‘pan charge’ is payable across the district for residential properties that are connected to the council sewerage systems. The pan charge is currently $547.00 (incl GST), this will be included in your rate demand.

Input by property owners

For each property an electrical and drainage check will be carried out and each property owner will have input into the location of the pump unit. There are some limits to the places units can be located because they need to be down hill from a house to allow wastewater to flow to the unit. The pump unit lid protrudes from the ground by about 100mm and usually has a green lid to blend in with gardens, lawn areas and native vegetation.

Installing the unit

- Some disruption will occur when the pressure sewer system is being constructed.
- The pump units are small and the installation on the property should take a few days to complete. The pressure sewer reticulation is typically installed using trenchless techniques and with smaller diameter pipes.
- The construction time frame for the scheme as a whole is significantly shorter than the typical gravity sewer.
- Access to your property will be maintained as much as possible, but because construction vehicles and equipment will be on site, in driveways and streets, you will be asked to avoid the construction site and keep a close eye on children and pets during the construction period.
Operation and maintenance of the pump units

A policy has been developed to cover the construction, maintenance and operation of the system:

- Council will be responsible for maintaining the pump units and pipe work from the pump to the property boundary.
- Property owners will be responsible for maintaining the gravity drainage pipe from their house to the pump unit.
- Property owners will be responsible for the construction cost as outlined previously.
- Property owners will pay for the power to run their unit through their domestic power bill.

What happens with old septic tanks?

Old septic tanks will be emptied and decommissioned as part of the project. This is normally achieved by breaking the top of the tank and filling with hard fill or sand.
Frequently Asked Questions

We have developed a list of common questions that you may ask in relation to the proposed pressure sewer system. These are arranged into headings or groups.

THE PROJECT

Costs

Q. Why now?
A. The Ministry of Health has recognised that there is a public health risk from aging septic tanks within the Ruakaka South area. To mitigate the health risk the Ministry of Health has awarded a grant (subsidy) to construct a new sewer network, the subsidy per household comes to about $11,450. This subsidy is only available from the Ministry of Health now. Due to the public health risk a sewer network will be required in the Ruakaka South area whether it is constructed now or deferred for a number of years, if we delay we will lose the Ministry of Health funding.

If constructed now the total subsidies per household from WDC and the Ministry of Health are about $15,800. Although we do appreciate that the cost of $10,200 per household is substantial the true cost of constructing and connecting to the new sewer network would be about $28,360 per household if no subsidies were available.

Q. Are there any other costs?
A. The cost of $10,200 is based on an average household setup. This cost covers the construction of the sewer pipes in the road, all works within your property boundary (buying and installing the pump unit, buying and installing the power control box and power cable, installing pipe work to your property boundary and decommissioning the old septic tank). Variations to the standard setup would incur extra costs to the home owner. Variables may include but are not limited to fitting of trafficable cover (pump unit located in driveway), long distances from house to boundary, extra large septic systems.

Q. What happens if we have two dwellings on one unit title and each dwelling has a separate septic tank?
A. This will be treated as two dwellings. Each will have a new pumping station and each will have its septic tank decommissioned. Each dwelling will be charged the wastewater targeted rate.

Consultation

Q. What input do owners have into the location of the pump station?
A. Each property owner will have input into the location of the pump stations which are usually installed in a location that the property owner agrees to. There is limitation in locating the units as it has to allow for a gravity connection of wastewater from the house. The preferred location is close to the house (2m away) to minimise conventional drainage cost. The pump station protrudes from the ground by only 100mm in height and has a typical green lid to suit gardens, lawn area’s and native vegetation.

Q. We are outside the proposed Area of Benefit but the sewer will go right past our property. Can we still connect?
A. You can apply to connect to the sewer scheme although the subsidies may not be applied to a property outside the area of benefit. Each application will be dealt with on case by case basis.

Disruption

Q. What level of disruption is expected when the pressure sewer system is being constructed?
A. Before construction: An initial pre construction site inspection will be undertaken by the contractor to establish where you would like the chamber located, the existing drainage and electrical system will also be checked.

During construction: On average construction on your property should take about 3 days. This would include a 2 meter deep by 1.5 meter diameter hole being drilled to fit the chamber, decommissioning the old septic tank, connecting the power supply and piping from the new pressure chamber to your property boundary.
Within the public roads the pressure sewer pipe work is typically installed via trenchless techniques, although some open trenches will be required depending on local conditions. Smaller diameter pipes are laid at shallower depths than normal gravity sewer systems resulting in the construction time frame being significantly shorter. Since there will be construction vehicles and equipment on site, in driveways and within public streets, residents will be required to stay out of the construction sites and closely monitor children and pets during the construction period. Resident’s access to their property will be maintained to the maximum extent possible.

Q. What about disruption to the roads while installation takes place?
A. There will be some interruption but this will be kept to a minimum as where ever possible trenchless techniques will be used. Pressure sewer pipes are smaller than conventional gravity sewer pipes and installed at a constant depth along the road, similar to a water main. If required any trenches cut will be thinner and shallower which will significantly reduce construction time, disruption and potential impact on the environment.

**Timing**

Q. How long will it take to build?
A. To enable us to receive the full Ministry of Health subsidy all construction must be completed by end of March 2013. The construction phase of the project will take place between February 2012 and March 2013, 14 months in total.

Prior to the construction phase of the project the contractor will meet with you at your house to confirm location of the pump chamber and to check the existing electrical system and drainage pipes.

**THE PRESSURE SEWER SYSTEM**

**Ownership**

Q. Who is responsible for the pump station?
A. The pump station, control panel and all associated pipe work from the pump station to the property boundary are the responsibility of Whangarei District Council. The property owner is responsible for the pipe work from the dwelling to the pump unit and for providing the power. In simple terms all gravity pipes are private and all pressure pipes and pump units are council maintained and owned.

**Operation**

Q. How does a pressure sewer system operate?
A. Wastewater generated from your house flows by gravity to a small pump chamber located within your section. When the volume within the pump chamber reaches a preset level, a switch starts the pump. The pump reduces the waste into smaller particles which can fit through small diameter pipes to council’s sewer pipes in the street. The pump operates until the level is reduced to a cut-off point. The amount of pump operation varies with the volume of wastewater generated from the property. Generally it is higher in the mornings and evenings than during mid day. Most pumps run for about 30 minutes per day in total.

Q. What is the likelihood of blockages in the smaller pipes?
A. As all the solids in the wastewater from the pump station will be ground up there is low risk of a blockage beyond the pump station. The likelihood of a blockage in the household plumbing upstream of the pump station will remain the same as in a conventional system.

Q. What level of odour/noise can be expected from the pump station?
A. Noise and odour levels associated with the pump stations are small. Odours will be less than a well performing septic tank. The ground surrounding the buried pump station absorbs the majority of the noise levels.

Q. What happens when the property is left unattended for long periods of time?
A. It is recommended that the power to the pump station be left on during times when the house is vacant as some leakage of water into the chamber may occur. It is also recommended to flush the chamber (such as with half a laundry tub of water) to reduce potential for odours when leaving a property unattended.
Q. What happens when the power goes off?
A. The pump station has some storage which would be used during a power outage. During a power outage, high wastewater generating appliances such as washing machines and dishwashers will not be able to operate. Under normal conditions with a power outage the tank will allow for about 12-24 hours storage of household use.

Q. What potential is there for overflows?
A. The unit is fully sealed against storm, ground or flood water ingress. The only potential for overflow is with uncontrolled wastewater generated by the occupants during periods of long power outages, if stormwater downpipes are illegally connected to the gravity line feeding into the pump unit or if wastewater is discharged when the pump has failed. The pump tank has approximately 24 hours storage at normal flows. In the event of a prolonged power cut it is likely that water consumption will also reduce as all electrical appliances such as washing machines, dishwashers, electric water heaters and water pumps will not be operating.

Q. What about discharges from swimming pools or spas?
A. Pumps from pools and spas are of much larger capacity than the pump in the pump station. A balance tank, careful pump control or flow restrictor will need to be installed by the property owner to limit discharge into the pump station.

Q. What happens to my old septic tank?
A. Your old septic tank will be decommissioned and pumped out then filled with sand or some other solid backfill material. The cost of decommissioning the septic tank is included in the overall price of the scheme.

**LONG TERM**

**Charges / Running costs**

Q. What is the average annual power cost to run the pump station?
A. Estimated annual cost to operate the pump station is between $25 and $35 for an average family household.

Q. What are the long term charges I will incur?
A. As well as the power charge mentioned above each property owner will be required to pay a charge added to their rates for the disposal and treatment of the wastewater they produce. This charge is referred to as the pan charge. Every property within the district that is connected to a council sewer line is required to pay a pan charge. Currently the pan charge is set at $547 excl GST.
5. Yvonne Stewart Track

Reporting officer  Paul McDonald (Parks and Recreation Manager)
Date  01 December 2011

Vision, mission and values
This item is in accord with Council’s vision, mission and values statement as it supports the development of recreational facilities in an iconic part of Whangarei.

Local Government Act 2002 – The four well-beings

Cultural  The Lake Waro area is of significant local historic importance.

Economic  Tourism associated with visiting Lake Waro, and the opportunities for visitors their enhances the opportunity for tourism income to the community.

Environmental  The lake tracks offer many opportunities for interpretation of the local environment.

Social  The development of the Lake Waro reserve has been led by the community since 2009. The track is being built largely by volunteer time and resources.

Yvonne Stewart Track

Lake Waro is a popular visitor destination and an iconic reserve for local residents. The land surrounding the lake is owned by both Whangarei District Council and Department of Conservation. The concept for a walk around the lake has been agreed with community for many years. An informal track has existed there and was marked, however it presented some challenges and an upgrade to the track was required. In 2009 a community meeting was held. It was agreed that the local community had the skills and resources to contribute to the development, and Council budgeted approximately $30,000 towards material costs. These efforts were spearheaded by Yvonne Stewart in her community role and this was fully supported by Council. Yvonne was the person everyone contacted in relation to the lake track development or with many other issues.

In the past few years staff, community and Department of Conservation have worked together to build about 80% of a track around the lake. The remainder of the track and a lookout is to be completed prior to the end of summer 2012.

To get the track to where it is today at little cost to Council is a direct result of Yvonne Stewart’s work in the community. Sadly Yvonne passed away this year and she will be missed.

In order to preserve the memory of Yvonne at a place she worked so hard to improve for the benefit of people in her community, it is proposed that the new track be named as the “Yvonne Stewart Memorial Track”.

Recommendation

That the loop track around Lake Waro be named the Yvonne Stewart Memorial Track.

Attachments

Map of the Lake Waro showing the Yvonne Stewart track.
Proposed Yvonne Stewart Track