

23 July 2012

Daniel Buckens  
Water and Wastewater Manager,  
Operation Department  
Lithgow City Council  
PO Box 19  
Lithgow NSW 2790

Our ref: 21/20519/182418  
Your ref:

Dear Daniel

## **CWTS Revised Request for Variation**

As discussed in yesterday's meeting attended by you, Council's Iain Stewart, and GHD's David Hickie and the undersigned, GHD have revisited the original request for variation dated 04 July 2012.

In accordance with Clause 13 of the Contract, GHD provides the following revised fee estimate for the additional works as outlined below.

A new Colliery Dam Pumping Station is to be provided to service both Council's CWTS and Centennial Colliery's reticulation. In addition, a new (second) DN 225 Council owned Rising Main, is to be provided connecting the new Colliery Dam Pumping Station to Council's existing Storage Tank. It is understood that the alignment of the new Rising Main will generally follow the alignment of the existing Centennial Colliery DN 225 rising main.

Together, the Colliery Dam Pumping Station and the two Rising Mains will have an ultimate capacity of 14 ML/d. The pumps are to be fitted with VSDs; the Colliery Dam Pumping Station may initially operate at only 10 ML/d, to match the initial capacity of the upgraded Council Pumping Station; however, the provision of VSDs will allow the Pumping Station to operate at 14 ML/d, when required.

The following services are proposed.

### **1 Technical Components**

#### **1.1 Preliminary Colliery Dam Pumping Station Design**

GHD will prepare a draft sketch of the Pumping Station and a corresponding memorandum outlining key information to be sought from Centennial Colliery.

The purpose of these documents is to facilitate discussion between Council and Centennial Colliery and to facilitate both parties reaching consensus on the new infrastructure to be built on Centennial's lease area.



## **1.2 Detail Colliery Dam Pumping Station Design**

Development of civil, mechanical and electrical design for the new Pumping Station, including amendment of existing technical specification to allow incorporation into overall tender documentation.

The level of detail will generally follow the current level of detail as prepared by GHD for the existing Council pumping station, (Refer to "100% Design for Review" submissions, dated 24 May and 19 June 2012).

Typically, the following documents will be provided / amended:

- Amendments of existing mechanical / civil specification (GHD Document No. 21/20519/180062);
- Amendment of existing electrical specification (GHD Document No. 21/20519/141412);
- Amendment of Overall Layout Plan (21-20519-C001) to show above additional work;
- 1 new Pumping Station P&ID;
- 2 new Pumping Station GA drawings (Plan and section);
- 1 new Single Line Diagram;
- 2 new Pumping Station Starter Circuit drawings; and
- 1 new Electrical Services Layout drawing.

## **1.3 Concept Design of Rising Main**

Development of civil and mechanical conceptual design for the new Rising Main, including amendment of existing technical specification to allow incorporation into overall tender documentation.

The design will be developed to a level that allows Council advertising this component as a Design & Construct element within the overall Tender Document, and subsequently to award this element to a competent contractor.

Typically, the following documents will be provided / amended:

- Amendments of existing mechanical / civil specification (GHD Document No. 21/20519/180062);
- Amendment of existing electrical specification (GHD Document No. 21/20519/141412);
- Amendment of Overall Layout Plan (21-20519-C001) to show approximately pipe route as agreed between Council and Centennial Colliery;
- 1 Plan / Longitudinal Section drawings for new Rising Main;
- 1 new GA drawings showing system details, such as connection details to existing infrastructure;

## **1.4 Assumptions**

In addition to the relevant assumptions and exclusions as outlined in our original proposal, the following assumptions have been made:



- The electrical and I&C design interface will be the new Pumping Station switchboard, similar to the interface currently proposed for the existing LCC pumping station (Refer to "100% Design for Review" submissions, dated 24 May 2012 and 19 June 2012).

We have assumed that Centennial Colliery will design and provide suitable power supply for the new switchboard. As such, no allowance has been made for liaising with energy providers / authorities or any level 3 design.

- The fee estimate below is dependent on a prompt response to the information memorandum requesting confirmation of Centennial Colliery's requirements. Upon receipt of Centennial Colliery's requirements, we reserve the right to revisit or confirm the fee estimate, should the work scope change.
- Geo-technical investigations and detailed survey (3D CAD file), including location of services, of the "Northern Compound" to be provided by Centennial Colliery.
- We have only allowed for a single day to meet with Council and Centennial Colliery in Lithgow, and if required conduct any (technical) site visits.
- It is anticipated that the above scope will be delivered within 8 weeks from receiving Council's approval.

If the project extends over the anticipated duration for reasons outside GHD's control, we will reserve the right to claim additional funding to cover increased project management costs.

## **2 Environmental Assessment Components**

In addition to the above technical scope, we note that a number of environmental studies and reports are relevant to the construction of the Colliery Pumping Station and Rising Main.

- Ecology Study for the "Northern Compound" (i.e. the footprint of the Pumping Station and Rising Main).
- Amendments to the existing draft REF Report to include the "Northern Compound".

As such, we have included these two environmental assessment components in our fee estimate.

Please refer to attached document (120704 / 59814) for our detailed proposal for the above two environmental assessment components.

Please also refer to the attached proposal for assumptions related to the environmental assessment components.

## **3 Tender Package Documentation Components**

We also have included in our scope for the additional works the development of the Tender Package Documentation.

For details, please refer to attached letter proposal (120703 / 2043).



Please also refer to the attached proposal for assumptions related to the development of the Tender Package Documentation.

#### 4 Summary

We formally seek a variation in the contract price to carry out the above work, in the sum of \$104,500 as detailed below.

<i>Item</i>	<i>Description</i>	<i>Fee (excl. GST)</i>
1	Pumping Station Design (Detail)	\$44,500
	Rising Main Design (Concept)	
2	Ecology Study	\$19,120
	Amending existing draft REF	\$22,080
3	Tender Package Documentation	\$18,800
<i>Total</i>		<i>\$104,500</i>

The fee estimate is based on the assumption that all of the above components (i.e. Pumping Station and Rising Main design, REF and Tender Package) will be awarded to GHD at the same time.

Yours sincerely  
GHD Pty Ltd

**Andreas Broeckmann**

Process Engineer  
02 4424 4961

**Attachments:**

1. Proposal for CWTS – REF for additional works
2. Proposal for CWTS – Development of Tender Package Documentation
3. Request for Variation Form