Whose Problem Is It Anyway?

Grant Binns
General Manager
Blackley Construction Ltd
Palmerston North, New Zealand
What will I Talk About?

- A Bit About Me
- Beat You Up A Bit.
- Sob Story
- Being Realistic
- Putting It All Together
- Q & C (You Can Beat Me Up)
Grant Binns

- NZCE (Civil), REA
- BCL for nearly 20 years
  - Within the Group
    - Blackley Equipment Ltd
    - Pathfinder Services Ltd
    - KMS Holdings Ltd
    - East Coast Utilities Ltd
    - Blackley Equipment (HB) Ltd
  - Past NZ Councillor on the ASTT
  - Past Infratrain Civil TAG committee member
Overseas Attendance

- 1995 - Utility Equipment Exhibition - Louisville, USA.
- 1996 - Trenchless Technology Conference - Perth, Australia.
- 1997 - Underground Construction Technology - Houston, USA.
- 1998 - Construction Equipment Show - Bauma, Germany.
- 1998 - Trenchless Technology Conference - Brisbane, Australia.
- 1999 - Tracto Technik Asia - Grundomat & Drilling seminar - Brisbane, Australia.
- 1999 - Utility Equipment Exhibition - Louisville, USA.
- 2002 - Underground Construction Technology - Houston, USA.
- 2002 - Trenchless Technology Conference - Sydney, Australia.
- 2003 - North American No Dig Convention - Las Vegas, USA.
- 2004 - Trenchless Technology Conference - Melbourne, Australia.
- 2005 - North American No Dig Convention - Orlando, USA.
- 2006 - International No-Dig, Trenchless Conference - Brisbane, Australia.
- 2007 - Bauma Construction Equipment Exhibition - Munich, Germany.
- 2008 - Tesmec Factory Training - Houston, USA.
- 2008 - Trenchless Technology Conference - Sydney, Australia.
- 2009 - American Wind Energy Conference - Chicago, USA.
- 2009 - Wind Farm Site Visit - Texas, USA.
Some Situations
Changing Their Mind

- Original Contract did not require a change in our contract works insurance.
- An NTC required a $2,000,000 cover.
- Insurance company would not give $2m cover on $35K of cable.
- Client said it was to cover loss of generation and delays to other contractors.
Changing Their Mind

- Insurance company provided cover at $5k plus a $50k excess.
- We offered it to the Client on this basis or if we carry the risk, $55k up front.
- Client Response:
  - This was a typo, should have been $200k
  - Excess was reduced by client providing security guard for 4 nights

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And Another One

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“The Green Line”
Green Line Process

- The client has probably been working on the project for 6 months or more, in some cases years.
- The document will state that
  - Underground services are the responsibility of the Contractor.
  - The contractor will have 1 of if lucky 2 weeks to price the work.
There is nothing much in the way!

Yeah Right !!!!
The effect

- Existing service position is a key factor in being able to construct the new utility
- Existing service location is the major risk in the construction process.
- It therefore has a major impact on price
- It has to be a key factor in the design, not just a green line on a piece of paper.
My Perception

It means that the Client / Consultant:

- Have not done their job properly
- They are not prepared to stand behind their work.
- They are looking to get something for nothing (perhaps shaft whoever gets the work)
The Response

- Get Stuffed!

- It is time for a reality check for all; why should the contractor be expected to take the risk in the first place?

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The Response

- We have priced the green line & assume it has been investigated, designed and is constructable.
- If this isn’t the case, we will carry out the above and provide a constructable route as a variation to the contract. Firm pricing will follow the design.
# Route Table for: Roberts Line 33kV undergrounding

<table>
<thead>
<tr>
<th>Item</th>
<th>Dist. Mtr</th>
<th>Comments (FNCO Laterals not linked)</th>
<th>Route Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>0m</td>
<td>START at existing two-pole structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1     2m</td>
<td>Stormwater Crossing along Berm</td>
<td>Berm</td>
<td>0.8km to Berm</td>
</tr>
<tr>
<td>4m</td>
<td>Trench from north end pole to avoid all water in road</td>
<td>0.8km to Berm</td>
<td></td>
</tr>
<tr>
<td>2     5m</td>
<td>Watermain Crossing along roadway</td>
<td>Road</td>
<td>X-ing</td>
</tr>
<tr>
<td>3     9.5m</td>
<td>Sewer Crossing along roadway</td>
<td>Road</td>
<td>X-ing</td>
</tr>
<tr>
<td>15m</td>
<td>Trenching steps short of back (North side of road)</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>4     33m</td>
<td>Gas main Crossing road</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>51m</td>
<td>Ferreira Ave 1st BL</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>5     54m</td>
<td>Stormwater Crossing road into Ferreira</td>
<td>Road</td>
<td>X-ing</td>
</tr>
<tr>
<td>6     61m</td>
<td>Watermain Crossing road into Ferreira</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>7     64m</td>
<td>Watermain Crossing road into Ferreira</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>71m</td>
<td>Ferreira Ave 2nd BL</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>8     75m</td>
<td>Sewermain Crossing road into Ferreira</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>9     82m</td>
<td>Stormwater Lateral to Sump</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>10    93m</td>
<td>Stormwater Crossing road</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>11    153m</td>
<td>Pumping Station 1st BL, opposite</td>
<td>Road</td>
<td>X-ing</td>
</tr>
<tr>
<td>11    157m</td>
<td>Watermain Crossing road from Pumping Station</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>12    173m</td>
<td>Pumping Station 2nd BL, opposite</td>
<td>Road</td>
<td>X-ing</td>
</tr>
<tr>
<td>14    186m</td>
<td>New roadway 1st BL</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>14    188m</td>
<td>Stormwater Crossing for new road</td>
<td>Road</td>
<td>X-ing</td>
</tr>
<tr>
<td>13    191m</td>
<td>Stormwater Lateral to Sump (on angle from #72/#73)</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>206m</td>
<td>New roadway 2nd BL</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>14    214m</td>
<td>Stormwater Crossing road</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>15    210m</td>
<td>Sewermain Diverting into Berm</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>16    228m</td>
<td>Power Cable Crossing road from box on this side</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>15    248m</td>
<td>#92 1st BL (check point)</td>
<td>Road</td>
<td>X-ing</td>
</tr>
<tr>
<td>265m</td>
<td>#92/91/94 BL</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>17    305m</td>
<td>Stormwater Lateral to Sump</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>18    370m</td>
<td>Stormwater Crossing road</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>19    384m</td>
<td>Telephone Cable Main Crossing road</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
<tr>
<td>20    394m</td>
<td>Gasmain Crossing road</td>
<td>0.8km</td>
<td>X-ing</td>
</tr>
</tbody>
</table>
And Another One
Contractual, Political

- Design Build
- 8 Week tender period
- 200 properties to service
- 6km of reticulation pipeline
- Aerial photo with some contours supplied
- Been under consideration for more than two years
- Lump Sum
Contractual, Political

- The Principals Objectives in the same document ask for
  - Minimisation of design and construction cost
  - Optimal risk allocation for provision of best value for the project cost
  - Sound design and quality construction for long term operational reliability
Contractual, Political

- The Issues
  - Lump Sum and optimal risk allocation don’t fit in the same document.
  - Health department subsidy issues will impact on the design and final operational costs
  - Does the Council want to arrange easements to reduce construction costs
  - Why do I want to spend $70,000 plus investigating & designing a project that I haven’t got.
And Another One
The potential income

- Establishment $ 5000.00
- Foot path drilling rate $ 12,000.00
- Additional costs for river $ 12,000.00

- Total $ 29,000.00

240m total length
Potential Loss

- Drill head $3,000.00
- Sonde Housing $6,000.00
- Sonde $5,000.00
- 150m drill rod $50,000.00
- 1 days work minimum $3,500.00
- Total $67,000.00
$67,000 vs $29,000

- If there is no reward for trying, then why take the risk?
- This is especially so if success will save the client money or make the job possible or keep the public or Local Authorities happy.
So what is the job worth?
Who Bets on the Horses?

- Who would put a $67,000 bet on the red hot favorite knowing his return would be $29,000 if he wins?

- You ask me to do that everyday
And Another One
And Another One
The Sob Story

Blackley Construction Ltd
My Problems

■ That Clients & Consultants understand what they are asking for.
■ The Quality of the homework.
■ That my staff can identify the risks and price accordingly.
My Problems

- Mechanical failure
- Performance of my staff – We can just get it wrong.
- Weather
- Getting Paid
- Keep 40 plus staff gainfully and profitably employed
- Balance workload with risk assessment (one can effect the other)
Back To Reality
The Facts

- Not all contractors are rogues, vagabonds or close relations to Blackbeard the pirate
The Facts

- Not all consultants know which way is up.
The Facts

- Not all principals know how to get what they need or want.
Benchmarks

- Contractors need to make a fair profit
- Consultants need to make a fair profit
- The Principal wants Value for Money
- Generally, contractors and consultants are good at what they do (core Skills)
- Problems occur when they move outside their core skill level unless they are innovative
- Fly-By-Night operators create problems at any level
The Best Deal

The lowest price from the partner capable of doing the work is the best price

If you have selected the right partners, you will get the job that you expect, you may, because of their skill and experience, get a better job
Risk Cost Money

- There are no free lunches

But we have a number of clients and consultants who expect the contractor to accept an ever increasing amount of risk for no acknowledged additional reward.
We have contractors who accept risk as a price for getting the work.

This can even include taking on risks that are generally outside their control.
basic risk impacts are still misunderstood

- **Open trenching**
  - When I have a problem, I can see it
  - If I can see it, I can deal with it.
  - The risk is reduced substantially for this reason.

- **Trenchless operations**
  - You know you have a problem but you can’t see it
  - It is very difficult to develop a solution
  - The risks are greater
Putting It All Together
How do you get the goods?

- You need an effective team
  - They need to be formed at the start if they are to add maximum value to the project
Early Involvement Makes the “Hard Yards” easier

- Get the right partners on board early
- Understand the specialist skills of the people you are dealing with
- Know the limitations of the people you are dealing with
- Look at different types of contracts to suite the outcome you require
- Be prepared to pay for all services
A Contractual Relationship Requires

- Trust
- Communication
- Fair Deals
- Agreed Expectations
A Traditional Relationship

Principal

Consultant

Contractor

Materials Supplier
The Best Relationship

Principal

Materials Supplier

Consultant  Contractor
The Contract Document

Is a document of distrust

The more you distrust the bastard, the bigger the document
Documents

- Should be written for competent partners
- Should not be an excuse for poor planning and design
- Need to say what is expected and what is required
- Need to contain all of the information necessary for pricing and building the work
Analyse Your Contracts

- Does it say what you need
- Does it allow for innovation
- Is it practical
- Are you being honest and fair with the information being supplied
- Interview the preferred partners
- Could you enter this contract with a handshake
Documents

- Must Say What you Need!
  That’s Value for money
- Not what you Want!
  That Costs You Money

Don’t Make It Harder Than It Has To Be!
Early Contractor Involvement, When ?

- When you are not sure of the RIGHT Solution.
- When it is difficult to design.
- When it is difficult to specify.

The Key ingredient

TRUST
To reduce Risk

- Do the homework
- Communicate
- Do the homework
- Communicate
- Do the homework
- Communicate
Procurement

- There Are Ways To Achieve Early Involvement
- It Can Be Quite Simple.
- It Is All About The Relationship

- If You Don’t Trust The Bastards, Don’t Employ Them!
Pearls of Wisdom

- We are in the same industry
  - That’s why we are here
- We all have common Goals
  - Successful Projects
  - Value for effort
    - Client value for money
    - Profit for effort
- If we get it right, we all get a bonus
  - The opportunity to do it all again
If your Partners, Consultants or Contractors
Don’t perform

You Got It Wrong

Because you picked them
Whose Problem Is It Anyway?

Grant Binns
Blackley Construction Ltd

Questions & Comments