



PROJECTS GO WRONG BECAUSE....

- A brief description of the things that we at Golder find get's us and our industry in trouble most often.
- Certainly not an exhaustive list – and the causes of the most expensive problems aren't even included!!
- We are in the business of quantifying uncertain systems and often in a construction environment – it is inevitable that projects will go off the rails occasionally.
- So – first a few general comments on things that cause projects to go wild and then a couple of cases.



PROJECTS GO WRONG BECAUSE....

- We commit to unfair contracts – ones that do not share risk (and reward) in a reasonable way between the parties...we are too eager to get work!!
- An example of some ugly terms requested by clients:
 - “Consultant indemnifies Owner against, and from, Claims made against Owner by other Persons for, injury to or death of any person, or damage to Owner property, where that injury, death or damage relates to any matter arising out of this Agreement up to the maximum amount of US\$1,000,000 per occurrence regardless of cause. In addition, Consultant shall indemnify Owner against any defence costs and legal fees incurred by Owner.”
- Clients want to be indemnified for their negligence!!



PROJECTS GO WRONG BECAUSE....

- The “highest & best” standard of care
 - “Consultant warrants that Consultant’s experience, knowledge, and expertise, qualify the Consultant, and the Consultant shall, implement the Scope of Services in accordance with the highest and best professional standard.”
 - If you agree to be held to the "highest and best standard of care" instead of the "generally accepted standard" you may have agreed to a hidden warranty that your services will be the best and will produce a perfect result. If you are sued for a "defective design," the insurance company will hire an expert witness to prove that you honored the generally practiced standard of care. Even if this is proved, you may still be found to be liable for breach of your contract to meet the "highest" or “best” standard. If this happens, you may incur uninsurable loss from a breach of contract.
 - This term defies definition and is uninsurable



PROJECTS GO WRONG BECAUSE...

- Inappropriate level of “talent” involved in field review and supervision.
 - Cost issues
 - Right staff not available
- Many claims could be avoided by providing the appropriate level of staff to carry out the required level of inspection during any construction activity.
- Interesting – in the eastern area of the country, developers expect to pay for full time geotechnical inspection work; in the west, part-time is the norm. The frequency of claims in BC is higher than in Ontario – but generally not as large in \$ terms.



PROJECTS GO WRONG BECAUSE.....

- The Pavlovian response that all engineers exhibit trying to please their clients during design/construction without regard to contractual issues:
 - Change orders
 - Assumption of greater responsibility
 - Lack of clarity of expectations as matters arise
- Difference in expectations remains the key problem for geotech consultants
- Reports and drawings should be clearly marked for their purpose
 - Preliminary, Final, For Review Only, Not for Construction
- Clients are NOT aware of the limits of our investigations and reports unless we specify it in the report or on the drawing.



PROJECTS GO WRONG BECAUSE....

- Consultants doesn't raise the "red flag" early enough or to the right party.
 - If our client is a contractor, the ultimate client is still owed a duty of care. If contractor fails to act, get the ultimate client involved
 - Need to make sure "red flag" consequences are clear (costs, timing)
- Previous site investigation reports are not reviewed
 - Does your company or the client have any pertinent reports?
- Consultants are not co-ordinated
 - Client "divide and conquer" consultants to get cheapest price
 - All consultants think someone else will look after the big picture
 - Think: Do you have all of the information you need to complete your task? If another consultant's documents are marked "preliminary" should you rely on them?



PROJECTS GO WRONG BECAUSE....

- Often we don't understand the client's perspective – what is important to them.
 - What drives their business?
 - What are their “ouch” points?
- If we don't know what our clients are most concerned about, we won't make sure it doesn't happen.



CASE STUDY

- The Townhouse Condominium
 - Differential settlement throughout the townhouse complex, including structural distress in some areas
 - Problem was that Leda clay underlying the site had limited capacity to support loads and was consolidating.
 - Project constructed 17 years before the claim was commenced
 - Golder was only retained to conduct inspections of subgrade materials exposed during footing excavations



CASE STUDY

- The Townhouse Condominium – The Defence Goes Wrong!
 - Golder had destroyed it's file (remember, project was 17 years old)
 - 3 consultants, none had sufficient scope (each had very limited involvement in the development)
 - Condominium plaintiff had a bare-bones case, until the consultants started turning on themselves just weeks before trial
 - Instead of making the plaintiff prove its case, the consultants hired experts that created fanciful theories of liability for the their co-defendants
 - The plaintiff used these theories and forced a monetary settlement



CASE STUDY

- “Believe it – or - Not!!”
 - Golder working on an existing mine, waste dump expansion
 - Golder did some field review, four months later there was some movement at the mill (745 acre area)
 - Golder had no involvement in the mine operations and had only submitted a DRAFT report regarding the waste dump expansion
 - Insurance company for the mine commenced a USD\$27,000,000 claim against Golder alleging Golder:
 - Negligently designed or approved the design of the mine;
 - Negligently designed or approved the location of the ore dumps;
 - Failed to advise that dumping ore at the proposed ore dump location would result in earth movement.



CASE STUDY

- Golder’s “Believe it – or - Not!!” - The Claim
 - None of this was in Golder’s scope of work, the mine was relying on some gratuitous statement in Golder’s draft report.
 - The mining company writes a letter to the insurance company clearly stating that Golder had no involvement in the mining activities
 - Insurance company ignored the letter
 - Insurance company had paid a large amount to the mining company and wanted to chase someone for the money
 - Golder’s insurance company (an international, publicly traded financial institution) files for bankruptcy.
 - Golder was left to fund the defence to this frivolous claim.