Lessons Learned from Construction Contractors Large Claims for Professional Liability Coverage

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North American Commercial Insurance
Overview

- Study parameters
- Rectification case study
- Protective indemnity case study
- Rectification and protective indemnity comparison
- I’m not a design-builder
- Differences in risk for different project-delivery systems
- You-can’t-make-this-up case study
- Construction management case study
- Losses by project types for contractors versus designers

- Professional services
- Concurrent-causation case study
- Other lines of coverage
- Reporting under different professional liability (PL) coverage parts
- Reporting under multiple lines of coverage
- Project-specific polices
- Do I have to report *everything*?
- What increases risk? How do you avoid disasters?
Study parameters

- Large losses
  - $500,000 or more incurred by the policy
- Construction contractors
  - Not designers
  - Not environmental service firms
- What *really* happened?
Root causes of loss ...

... may or may not be the same as the covered professional services, or ...
What is addressed by one insurance contract may or may not be the driving cause of loss on the project as a whole.
Subcontracted design exposure

RECTIFICATION CLAIM EXAMPLE
Now what?

- 11-story dormitory
- Insured was at-risk construction manager via joint venture (JV)
- Deep foundation package was a design-build subcontract
Tunnel-formed, cast-in-place
How about a shot from the top?
Hello, value engineering

Rammed Aggregate Pier Construction Process

1. Auger pier shaft
2. Place crushed stone at bottom of shaft
3. Tamp bottom bulb - prestress & prestrain soil beneath bulb
4. Tamp successive lifts to increase lateral pressures in the matrix soil

Diagram courtesy of Mark Bergman, The Zurich Services Corporation
University housing case study

- Used owner’s geotechnical study
  - Differential settlement should be no more than $\frac{1}{2}$”
- Construction of the rammed-aggregate pier system completed with no apparent issues
- Installation of the building cast-in-place concrete framing proceeded once foundation completed
University housing case study

Tunnel-Formed Cast-in-Place Concrete System

Photo courtesy of The Zurich Services Corporation
University housing case study

- While constructing the eighth floor, the contractors noticed settlement
- Surveys revealed excessive differential settlement throughout the tower
  - Some areas of the tower had settled as much as 5 inches
- Construction of the tower was stopped
University housing case study

Tunnel-Formed Cast-in-Place Concrete Column

Wall formed on top of 'stem'

Bottom of wall form overlaps 'stem'. Overlap should be consistent from floor to floor

'Stem' {below yellow line}
• The rammed-aggregate-pier subcontractor discovered and acknowledged that they had made a design-calculation error that accounted for half of the settlement being experienced.

• However, they firmly stated that not all of the settlement was caused by their design error.
University housing case study

Micro pile installation in partially completed structure

Photo courtesy of The Zurich Services Corporation
University housing case study

Micro pile installation

Diagram courtesy of Mark Bergman, The Zurich Services Corporation

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What’s my point?

- The rectification claim was expensive
  - Damages were still incurred, but mitigated

- The overall project delivery method was not design-build
  - It was a construction management- at-risk (CMAR) joint venture
  - The subcontract was design-build
Who sued contractors for large PL claims?

- 76% Owner
- 9% GC/CM
- 4% Multiple Third-Parties
- 1% Third-Party
- 1% Subcontractor
- 1% Architect

At least one in four large claims are on projects with new clients

Data Source: 2014 Study of Zurich CPPI large losses from 1994-2013
Deadlines

PROTECTIVE INDEMNITY CASE STUDY
Protective indemnity case study

Design-builder entered a negotiated, fixed-price contract to deliver a new gas-fired power plant

- Engineer and owner had a long-term relationship
  - Both were new relationships for the contractor

- The project was in a locale outside of the contractor’s normal operations
Protective indemnity case study

- The site was constrained in size in order to locate the new plant next to an existing gas refinery that would feed gas to the new plant
- The team chose a design utilizing underground piping in order to conserve space
Owner-provided geotechnical report indicated organic, compressible soils expected to exhibit secondary consolidation over time

- Owner’s geotechnical engineer recommended concrete-filled steel piles for the heavy turbines and timber piles for the pipes
- Design-builder’s engineer designed a foundation supporting the heavy turbines with piles, but no deep foundations for the pipelines
Protective indemnity case study

Contract deadlines matter

- Design-builder had several months – from contract inception to final design – to revise the fixed price
- Designer planned for the pipes to sit unsupported on the soils
- Work began one week after final design
- The piles driven for the heavy structures immediately began to sink
Protective indemnity case study

Oh, now you listen!

- Designer immediately revised their decision and concluded that the pipelines needed to be on piles
- Design-builder concluded that the designer’s negligence impacted the cost of the project by $30 million ...  
  ... after the date for fixed-price revision had passed
Protective indemnity case study

Will this be expensive?

• The next few months involved significant:
  – Redesign ($)
  – Pipeline and duct reinforcement ($$)
  – Project-scheduling impact ($$$)

• Delay of 111 days => acceleration costs to mitigate liquidated damages

• Limitation of liability = fees ($9 million)
Protective indemnity case study

Damages and results

- $30 million in damages:
  - $12 million   Hard costs
  - $10 million   Acceleration
  - $2 million    Extended general conditions
  - $2 million    Lost productivity
  - $4 million    Overhead and profit

- Arbitrated with contribution from designer
Protective indemnity case study
Risk management principles violated

- Inadequate contractor review of design in advance of contract deadlines
- Failure to manage to critical contract deadlines
- Inadequate management of new owner and designer relationships
Protective indemnity case study
What did you learn?

• Be aware of value-engineering decisions
• Contract terms matter
• Relationships matter
### Contractor’s protective indemnity vs. rectification

<table>
<thead>
<tr>
<th>Contractor’s protective indemnity</th>
<th>Rectification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only applicable to design builders</td>
<td>Created for design builders</td>
</tr>
<tr>
<td>Can be pre- or post-completion</td>
<td>Only pre-completion</td>
</tr>
<tr>
<td>Excess/difference in conditions (DIC) designer’s PL</td>
<td>Self-insured retention (SIR) applies</td>
</tr>
<tr>
<td>Insured can sue designer for damages to insured, including lost profits and additional costs incurred by insured</td>
<td>Pay Insured costs – not profit – to avoid claim from Owner for damages to Owner</td>
</tr>
<tr>
<td>Insured sues their designer, then tenders protective indemnity claim to Insured’s own PL carrier</td>
<td>Insured tenders rectification claim to their own PL carrier</td>
</tr>
</tbody>
</table>
Who sued contractors for large PL claims?

- Design/Builder
- General Contractor
- CM At-risk
- Agency CM
- Program Manager
- Mechanical Subcontractor
- Concrete Subcontractor
Differences in risk for different project delivery systems

- Design-bid-build
- Design-build

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INCIDENTAL PROFESSIONAL EXPOSURE CLAIM
Insured general contractor

Superintendent liked to do his own surveying
  – Incorrectly transposed a control point across multiple structural steel components

Subcontractors began to notice

A professional surveyor was available on the project
The cover up is always worse

- Superintendent concealed the error for some period of time, resulting in a significant increase in what would have otherwise been a relatively minor claim

- Security camera footage showed the PM attempting corrections
CONSTRUCTION MANAGEMENT SERVICES FAILURE
What kind of construction management?

Construction of several new buildings at a college campus

- Insured was JV partner
- JV was contracted as an Agency Construction Manager “not at risk” overseeing several multi-prime trade (sub)contractors
- Individual trade contracts held by the owner
What did they say they would do?

The JV was to provide construction management services that included constructability reviews, peer review, value engineering, project schedule development & coordination and supervisory/advisory responsibilities from preconstruction through closeout.
• Project was hundreds of days behind schedule.

• Owner claimed that the majority of those days were caused by lack of coordination among:
  – Trade (sub)contractors,
  – Trade (sub)contractor errors
  – Architectural design errors/omissions
Significant Value Engineering suggestions made by the designer and CM teams that affected construction and final building

- Building heights lowered – mechanical equipment no longer fit within building and had to be relocated to the roof
- Exterior grade air handling units (AHU) used in studio spaces – Noise levels now above code-required levels
CPPI claim – case study #22

- Several allegations of errors and omissions in the project design resulting in numerous change orders
- Owner not happy with the resultant look or function of some of the buildings
Owner claims against insured

- Value engineering recommendations resulted in deficiencies, added costs and delays

- Insured’s performance as a peer reviewer fell below the minimum standard of care in failing to detect obvious design errors and lack of coordination between the architectural, structural and mechanical drawings
Owner’s claims against insured

- The CM did not produce a project schedule for well over a year
- The CM failed to obtain recovery schedules from the trade contractors
- The CM failed to schedule and coordinate the trade contractors on site and re-sequenced work which ended up impacting the project
Claim components

- Cost of re-routing mechanical equipment and piping during construction, from mechanical penthouse areas to roof
- Cost to provide privacy screens to hide equipment exposed on roof
- Cost to modify the HVAC systems in buildings that exceed code-required sound levels
CPPI claim – case study #22

- Delay costs (trade-contractor claims)
- Return of fees paid to the CM for the delay period
- Compensation for consultant and inspector fees for the delay period
CPPI claim – case study #22

- Initial findings: The architect was primarily responsible for the majority of the claim damages; however, CM assumed partial liability in their role as peer reviewer.

- The CM assumed greater responsibility than they realized (i.e., peer review vs. constructability reviews).
What types of projects generated large PL claims against contractors?

- Condominiums
- Warehouses
- Hospitals/Healthcare
- Apartments
- Petro/Chemical
- Tunnels
- Museums
- Libraries
- Residential - Brick & Mortar/Steel
- Convention Centers
- Mines
- Laboratories
- Mass Transit
- Telecommunications
- Religious Facilities
- Office Buildings
- Airports
- Power Plants
- Schools/Colleges
- Water Systems
- Military Housing
- Jails/Detention Facilities
- Senior Housing/Nursing Home
- Shopping Centers/Retail
- Residential - Wood Frame
- Harbors/Piers/Ports
- Recreational
- Hotels/Motels
- Manufacturing/Industrial
- City Hall

Data Source: 2014 Study of Zurich CPPI large losses from 1994-2013
What were the signals?

Designers
1. Hospitals
2. Power plants
3. Tunnels
4. Manufacturing

Complexity

 Contractors
1. Condos
2. Office buildings
3. Warehouses

Complacency?
What is a professional service?

- Professional services are technical or unique functions performed by independent contractors or consultants whose occupation is the rendering of such services. Examples of some professional services: Architects, Attorneys, Accountants, Appraisers etc.

- Example of a Statute in Pennsylvania defining the term Professional services.
  - "PROFESSIONAL SERVICES." Any type of services that may be rendered by a member of a profession within the purview of his profession.
  - Profession is defined as follows: “Includes the performance of any type of personal service to the public that requires as a condition precedent to the performance of the service the obtaining of a license or admission to practice or other legal authorization from the Supreme Court of Pennsylvania or a licensing board or commission under the Bureau of Professional and Occupational Affairs in the Department of State. Except as otherwise expressly provided by law, this definition shall be applicable to this title only and shall not affect the interpretation of any other statute or any local zoning ordinance or other official document heretofore or hereafter enacted or promulgated. “

Source: https://definitions.uslegal.com/p/professional-services/
What is a professional service?

- In determining whether a particular act is of a professional nature or a “professional service” we must look not to the title or character of the party performing the act, but to the act itself. Source: Robertson v. Maher (La. App., 1965)

- The negligent act performed required no special training or professional skill and in no sense constituted the “rendering or failure to render professional services.” Source: Marx v. Hartford Accident and Indemnity Company (Nebraska Supreme Court, 1968)
Hospital Floor Deflections

CLAIM EXAMPLE
The project

• Multi-story hospital

• Design-bid-build delivery

• General contractor insured
  – Subcontracted floor construction
  – Concrete subcontractor hired a shoring subcontractor to design the formwork, shoring and procedures
Take a picture. It’ll last longer

Photo courtesy of The Zurich Services Corporation
Now what?

- Hospital completed and operations commence
- Owner quickly notices a multitude of floor deficiencies, most notably levelness issues
- Owner pursues millions in repair costs and consequential damages
Looks great
Technical review

- Looking good:
  - Structural design of slab
  - Formwork design

- Not looking so good:
  - Reshoring design
  - Formwork installation
  - Shoring removal and reshoring plan
  - Flooring and tile workmanship
Is there an ACI code for this?

- Code requires
  - Flatness checks
  - Tests slabs for owner evaluation
  - Monitoring of camber

- Limited evidence of such steps

- “Woefully inadequate QC process”
Stop being dramatic
What’s my point?

- The root cause of loss was poor workmanship
- PL does not cover that
- Design deficiencies contributed to the loss
- PL paid a lot (millions) for those
- Significantly more project costs and damages were not covered by PL
Multiple lines of coverage were involved in over half of contractors’ large PL claims

- General Liability: 75%
- Subguard: 13%
- Pollution: 6%
- Pollution: 6%
- Builder's Risk: 6%

Data Source: 2014 Study of Zurich CPPI large losses from 1994-2013

Lessons Learned from Construction Contractors Large Claims for Professional Liability Coverage
Reporting under different PL coverage parts
May be different SIRs, triggers, and covered loss

- **PL**
  - Claims-Made
  - A third party has to make a claim against you

- **Rectification**
  - A first-party trigger when expectation of a third-party claim

- **Protective indemnity**
  - Excess/DIC/DIL of a subcontracted design professional’s PL policy
  - You have to make a claim against them

- **Contractor’s pollution**
  - Can be occurrence or claims-made

- **Supplemental coverages**

Maybe not

So if you don’t know the cause of the problem, how do you know what policy to report under?

Real-world motivations are powerful

Risk question du jour:
How does the maximum possible downside of over-reporting compare to the maximum possible downside of under-reporting?
It might be design ...

- PL responds to a demand for money or services
- Protective indemnity provides excess and DIC limit when the insured sues a designer under contract to them
- Rectification pays for actual and necessary costs and expenses incurred to remedy a design defect when
  - You were responsible for design and construction, and
  - It could reasonably result in a PL claim
- What if it’s a GMP contract?

- Rectification does not care that you were damaged
- Protective indemnity cares that you were damaged
- PL cares that your claimant was damaged
- PL is excess of other insurance
What if the materials were defective?

- PL might respond if you had a duty to select or test materials and you deviated from the standard of care.
- Manufacturers may respond with respect to man-made materials.
- PL coverage rarely changed by contractual obligations.
- Things like MSE wall failures usually due to poor drainage; therefore, the materials in question are often soils.
What if it’s not built correctly?

Comprehensive general liability (CGL)
- If project has not been completed, then CGL doesn’t care
- CGL might care post-completion, if you didn’t self-perform the work

Builder’s Risk
- Makes you whole
- Peril must not be excluded
- Loss must be fortuitous
- Property damage must occur
- LEG 3
  - No damage = no soup for you
Project specific policies

“Who left this bucket of money here?”

- Designers’ project-specific PL policies are very susceptible to loss

- Design-builders have more exposures than designers. Those exposures may be tempered by better
  - Control of the overall construction process
  - Management of design
  - Keen constructability insights during design
  - Design assist
  - Insulation from loss by precedent coverages (see first bullet)
Project specific policies
Should your project-specific CPPI include the designers?

- Call Tenzing Norgay (that’s your broker)

- Better understand how you expect all of the applicable PL policies to interact, particularly when excess policies have different coverages than primary policies

- Rectification was designed to protect the limit of the primary PL policy containing rectification
  - Not to protect the primary project-specific A&E policy not containing rectification
  - The rectification on your annual CPPI policy was not intended to protect the limit of a project-specific CPPI policy not containing rectification
Project specific policies

Allow me to rectify a few more misconceptions

• Rectification was not designed to save the project

• Rectification was designed to indemnify actual and necessary costs and expenses incurred in order to avoid a larger third-party PL claim

• The claim department’s evaluation as to the viability of the potential third-party claim is very important

• Follow the ball:
  1. The majority of claims against you will be from your client
  2. You enter GMP contracts
  3. Your potential claim: your client may sue you for cost overruns

• Remember what “The Rock” says
So ... do I have to report everything? [sigh]
No. Not everything. But if you have any doubt, report.

Claim
- DUTY
- Demand for money or services

Circumstance
- RIGHT
- The claim definition can be narrow—and that’s good for you—IF your circumstance reporting right is broad
Driving issue in contractors’ large PL claims

Data Source: 2014 Study of Zurich CPPI large losses from 1994-2013
Contractors’ large PL claims
Where we experienced design inadequacy claims

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Contractors’ large PL claims

Inadequate construction management claims

- Scheduling: 39%
- Quality management: 39%
- Improper disposal: 11%
- Deleterious materials: 11%

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What increases risk?
You have no risk-free projects

- New relationships
- No design review
- Value engineering, alternative standards, material substitutions (a.k.a. increasing efficiency and risk in search of profit *without adequately vetting the change*). *In other words,* hope is not a strategy.
- Larger bid packages

*How do you avoid disasters?*
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