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Which End of Your Building is Sinking: Examining Front End vs. Back End Risk

I. Understanding Risk Mitigation for Construction Projects

Risk management includes front-end planning of how major risks will be mitigated and managed once identified. Therefore, risk mitigation strategies and specific action plans should be incorporated in the project execution plan, or risk analyses are just so much wallpaper. Risk mitigation plans should:

- Characterize the root causes of risks that have been identified and quantified in earlier phases of the risk management process.
- Evaluate risk interactions and common causes.
- Identify alternative mitigation strategies, methods, and tools for each major risk.
- Assess and prioritize mitigation alternatives.
- Select and commit the resources required for specific risk mitigation alternatives
- Communicate planning results to all project participants for implementation.

Some risks, once identified, can readily be eliminated or reduced. However, most risks are much more difficult to mitigate, particularly high-impact, low-probability risks. Therefore, risk mitigation and management need to be long-term efforts by project directors throughout the project.

Case Study

In early November 2014, excavation for the construction of a new two unit residential structure with a detached garage began at a lot north of the loss. The structure consisted of the original two-story residence at the west side with an addition at the east side of loss residence. The original portion of the structure consists of unreinforced masonry walls supporting wood roof framing, and two levels of wood floor framing over a partial basement/mechanical room area and crawlspace.

The adjacent lot north of the Project had been partially excavated, and a portion of the north exterior wall of the Claimant residence had collapsed and fallen into the excavation at the adjacent property.

The portion of the structure that had collapsed was the majority of the unreinforced masonry exterior wall at the two-story portion of the residence closest to the north property line. The soil supporting the exterior masonry wall collapsed into the excavation at the adjacent property resulting in a loss of vertical support for the north exterior wall of the Project causing this wall to collapse and rotate into the excavation at the adjacent lot, mostly intact. The structure was a total loss considering the technical challenges associated with any repairs combined with the costs of such repairs, which are likely to exceed the value of the residence. This is due to numerous factors including the age of the structure, the existing structural systems, and the condition of the soils below the existing structure.

The as-built shoring plan at the adjacent construction consisted of 20 shoring piles (10 adjacent to both the north and south property lines) installed prior to the start of excavation.

The original geotechnical engineer specified that shoring piles should be 10-inch diameter piers spaced at 3 feet

on-center with an embedment depth equal to the depth of the excavation. On the first shoring plan, the engineer provided a schematic plan view of the lot with 25 piers along the north and south property lines (50 piers total.) Only half that number were actually installed at the project, resulting a catastrophic collapse of the adjacent structure when the vertical support for the structure failed.

Claimants Standpoint

Understanding claimants position on a loss of this type is important to consider when approaching a potential loss situation. Coordination with adjacent landowners during construction process can help minimize potential risks and communication with those same adjacent landowner's post loss is also vital to the adjustment process. It is possible to come to a negotiated repair protocol once a loss has occurred and maintaining perspective on a claimant's motivations is a vital component of that negotiation process.

Adjusters Standpoint

The adjuster in these scenarios is in a difficult situation because they are coordinating and managing a variety of demands and expectations. The adjuster needs to remain cognizant of their insureds coverages at the same time evaluating for the carrier the extent of coverage available in addition the adjuster needs to be aware of when it is appropriate and useful to engage attorney services and forensic consultant services at the same time they need to also be aware of the expenses accumulating with respect to a potential claim**.**

Lawyers Standpoint

When a loss event occurs it's important to proactively analyze risks and determine resolution strategies. Ways to do that include gathering necessary project documentation, immediately identifying and interviewing relevant witnesses, and coordinating closely with the client. Client coordination in especially important in adjacent structure losses because those losses typically involve active business that are being immediately impacted by a loss.

II. Mitigating Risks

Construction Documentation

Construction projects involve coordination among multiple team members, including the owner, contractor, architect and stakeholders, as well as compliance with a host of laws, codes and regulations. Even in a small construction project, financial and reputational risks need to be accounted for and addressed proactively.

To mitigate these risks, one must be able to recognize, anticipate, evaluate and manage potential problems. If risks are not identified and addressed early, the project team could become disjointed and, consequently, less efficient. Team members may start pointing fingers, or lawsuits and litigation could develop that ruin relationships and reputations while significantly derailing projects.

Documentation plays a major role in how project management teams evaluate and mitigate risk. Project managers use program controls to create, administer and manage reporting of documents and systems. This reporting process helps support a continuous improvement mindset by documenting mistakes, so the team can avoid them in the future.

Causation (Pining, Shoring, Dewatering)

Proactive use of a forensic consultant in lateral support losses is vital. It is important to consider causes issued at the very first notice of a loss not only to appropriately evaluate a claim for coverage but also to preserve segregation potential.

Temporary Repairs vs. Permanent Repairs

What a company must do to prevent further loss vs. fixing a permanent repair. Claims adjusters need to be careful with respect to betterments with repairs, claimants will often seek more extensive repair than is necessary to resolve the issue to seek to better their property than return to a pre-loss condition.

Elements of Coverages (Business Interruption)

Builder's risk insurance can be defined as coverage that protects a person's or organization's insurable interest in materials, fixtures and/or equipment being used in the construction or renovation of a building or structure should those items sustain physical loss or damage from a covered cause.

The term "builder" is misleading because insureds can include not only the contractor(s) performing the work, but the ultimate owner, lending institution and others. Suppliers of materials, although having an insurable interest in the property being used in the construction, are not normally candidates for builder's risk insurance.

III. Getting Ahead of a Loss

Avoiding loss by use of forensic consultant

When an insured is engaging in a high-risk construction project and the insurance company who is underwriting the liability policy and they are aware of the risk to adjacent structures often it is financially worthwhile to invest in the services of a forensic consultant to monitor the project and require the insured as condition of coverage to employ a forensic consultant to monitor. The consultant's role is to insure the adjacent structures are adequately supported to avoid potential catastrophic loss which would impact the policy.

Valuation of Losses- What is the ability to spend now to save on back end etc.

It is difficult for claims or underwriting to justify an expense like a forensic consultant over the life of a project, so a risk analysis at the time of policy underwriting is very important to minimize loss.