# Risk Management

**KNOW YOUR PURPOSE, BE PERSISTENT,**

***BUT...***

**KEEP YOUR WORK IN PERSPECTIVE WITH WHAT IS REALLY IMPORTANT!**

# Identification and Nature of Construction Risks

**Although construction risks can be categorized in many ways, only five groups are presented here--namely**

**<u>Physical</u>** **<u>Capability</u>**
**<u>Economic</u>** **<u>Construction-related</u>**
**<u>Political & Societal</u>**

**In the process of identifying risks, only those that are created by the parties themselves in their attempts to transfer risks are included.**

# Scope and Applicability To Construction

**Risks are present in all situations and businesses. As applied to construction, the <u>principal categories</u> include:**

1. **Construction-related risks**
2. **Physical risks (subsurface conditions)**
3. **Performance risks**
4. **Economic risks**
5. **Political and public risks**

# Shifting of Risk By Contract

**There are two basic precepts or <u>guidelines</u> that should be recognized as criteria for the sharing of risks inherent in a construction project.**

1. **Who can best control the risk?**
2. **Who can best foresee the risk?**

**<u>Courts</u> added <u>two guidelines</u> of their own:**

1. **Who can best afford the risk ("deep pockets" principle)?**
2. **Who most benefits or suffers if the risk materializes?**

# Risk Management

Although some risks can be avoided, risk management and liability sharing deal primarily with the following concepts:

- 1. Minimizing risks regardless of whose risk it is.
- 2. Equitable sharing of risks among the project participants.

# Risk Allocation

The parties must be prepared to discuss and decide on the following issues:

- 1. What levels of risk are realistic to assume
- 2. Who can best assume each risk.
- 3. What levels and kinds of risk are properly and most economically passed onto insurance carriers.

# Reducing the Effect of Risks

- Risks can never be avoided or eliminated
- Minimizing risks is desirable
- Methods can be employed in meeting risks and uncertainty
- Reducing risk has possible harmful effects

# Examples of Risks That May Affect the Cost or Time of Performance

- Governmental acts
- Acts of God
- Union strife & work rules
- Cost escalation
- Overlapping insurance coverage
- Unreasonable systems performance guarantees
- Owner involvement in design
- Appropriate designer involvement in construction

# Reducing the Effect of Risks

- Methods to reduce risk fall generally into six broad but overlapping categories:
  - Consolidation
  - Specialization
  - Control
  - Prediction
  - Diffusion
  - Selection

# Examples of Risks That May Affect the Cost or Time of Performance

- Adequacy of project funding
- Subsurface conditions
- Adequacy of labor force
- Permits and licenses
- Site access
- Sufficiency of plans and specs
- Innovative design
- Late or unsuitable owner-furnished materials & equipment

# Examples of Risks That May Affect the Cost or Time of Performance

- Delayed deliveries
- Delay in presenting problems
- Delay in addressing & solving problems
- Labor productivity
- Subcontractor capability
- Delays and disruptions
- Adequacy of performance time
- Change in needs or requests
- Safety

# Example of an Exculpatory Clause

- If the Contractor, in the course of the work, becomes aware of any claimed errors or omissions in the Contract Documents, it shall immediately inform the Engineer. The Engineer shall then promptly review the matter and if an error or omission is found, the Engineer will advise the Contractor accordingly. After discovery of an error or omission by the Contractor, any related work performed by the Contractor shall be done at its own risk unless otherwise authorized in writing by the Engineer.