Assessing and Managing Risk in Capital Project Delivery

# Effective Risk Management Planning

**Bob Wicklein and Craig Parsons** 





# Outline



- Introduction to Seneca Real Estate Group
- Identification of Risks
- Risk Categories
- Assessment and Priority
- Mitigation Actions Examples
- Case Study
- Questions

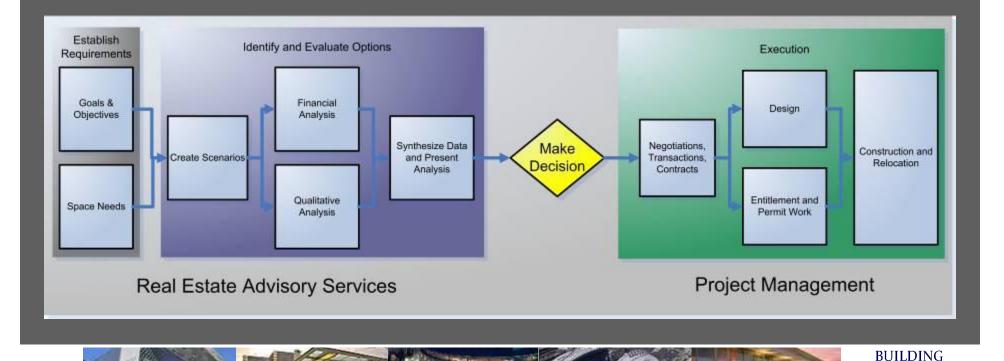


### **About Seneca**



EXCELLENCE

The Seneca Real Estate Group, Inc. provides comprehensive real estate advisory and development management services to private and public sector clients through the Northwest.



### **Commercial Office**



#### Bill & Melinda Gates Foundation Headquarters





### **Commercial Office**



#### 505 First Avenue – Starbucks





### **Commercial Office**

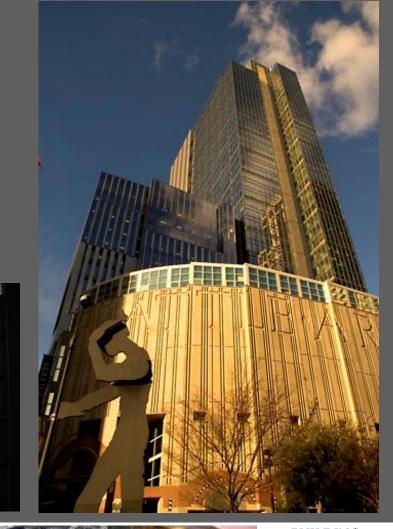


#### Preston Gates & Ellis (KL Gates)



#### Christensen O'Connor





#### Civic







#### Civic



#### Seattle Central Library





### Civic



#### Museum of Flight Pedestrian Bridge





#### Personal Courage Wing & Lobby Expansion



#### Medical/Bio Science



Seattle Children's Ambulatory Care Wing





#### Medical/Bio Science



Seattle Children's Janet Sinegal Patient Care Building





#### Medical/Bio Science



University of Washington – School of Medicine (South Lake Union)





### Education



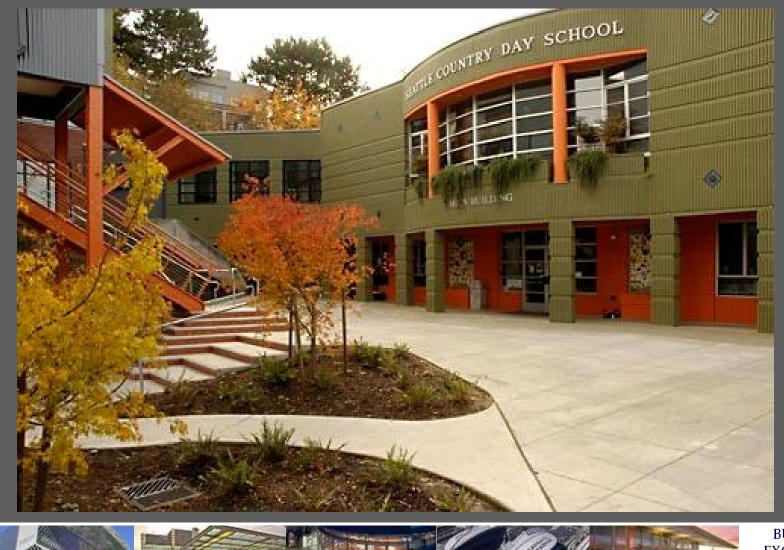
#### St. Thomas School



#### Education



Seattle Country Day School



# **Identification of Risks**



**Risk Categories:** 

- Entitlement
- Property
- Design
- Construction
- Financial

#### **Key Factors:**

- Market expertise
- Process expertise
- Knowledge of Client







# • Risk = Probability x Impact



# **Risk Planning**



# Factors to Identify: Brainstorm!

- Event: What could happen?
- **Probability:** How likely is it to happen?
- **Impact:** How bad will it be if it happens? (High, Med, Low.... 1-10, etc.)



# **Assessment and Priority**



# **Evaluate and score each risk:**

<u>#</u>	<u>Risks</u>	<b>Probability</b>	<b>Impact</b>	<b>Score</b>
1	Scenario X	9	9	81
2	Scenario C	9	6	54
3	Scenario G	6	5	30
4	Scenario Z	5	3	15
5	Scenario P	2	1	2



# **Risk Planning**



# **Develop Strategy:**

- **Mitigation:** How can you reduce the Probability (and by how much)?
- **Contingency:** How can you reduce the Impact (and by how much)?
- Assignment of Responsibility



### **Risk Mitigation**



# Mitigation and Responsibility:

<u>#</u>	<u>Risks</u>	Prob.	Impact	<u>Score</u>	<b>Mitigation</b>	<u>Responsibility</u>
1	Scenario X	9	9	81	Provide design alternates for	Architect
2	Scenario C	9	6	54	Research the costs for alternate	Project Manager
3	Scenario G	6	5	30	Commit resources early	Permit expeditor
4	Scenario Z	5	3	15	Document scope	Architect / Owner
5	Scenario P	2	1	2	Get written agreement	Attorney



# Mitigation Actions - Entitlement



- Planning and design review process:
  - Contract for planner services for duration of project
  - Pay premium for OT or add'l resources
- Neighborhood opposition
  - Appeals of decisions: Prevention through outreach early and often – to community stakeholders
- Delays in obtaining required permits
  - Permit expeditor services
  - Split submittal packages into phases



# Mitigation Actions - Design



- Scope Creep
  - Develop Client requirements (program) before start of design
  - Firmly establish budget
  - 'Design-to-budget' clause in contract
- Design Completeness
  - Consider pre-award of select subcontractors
  - Third party QA / plan review services



# Mitigation Actions - Construction

SENECA GROUP

- Labor work stoppage
  - Project Labor Agreements (PLA)
- Construction escalation/resource availability
  - Encourage realistic contingencies
  - Pre-award and/or early procurement
  - Maintain design alternates
- Shoring Case study



# Mitigation Actions - Financial



- Insolvency Risk
  - Pre-award and periodic audits of key players
  - Select performance bonding
  - Avoid proprietary systems where possible
- Financing Risk
  - Project viability may not be known until late in design / pricing process
  - Capital markets are frozen even for great projects!



### Case Study - 505 First Avenue



- Client Starbucks
- Located in Pioneer Square - Seattle
- Seven story office
  building over four
  levels parking (280K SF
  Office + 15K SF Retail)
- Completion in 2009



### 505 First Avenue – Site Conditions



- Timber pile foundations
- Water table at depth of eight feet
- Land was reclaimed from Elliot Bay with 30 feet of wood debris from early sawmills and 1889 Seattle Fire
- Sandwiched between two historic buildings
- Directly adjacent to an on ramp to the Alaskan Way Viaduct – very settlement prone



#### **505 First Avenue**



#### • Cutter Soil Mixing (CSM) video



#### **Inadvertent Historic Artifact**





**EXCELLENCE** 

### Questions



**Bob Wicklein and Craig Parsons** 

**The Seneca Real Estate Group, Inc.** 1191 Second Avenue, Suite 1500 Seattle, WA 98101

Phone: (206) 628-3150

<u>www.senecagroup.com</u>

Thank you for having us!

