

# **Risks Associated with Alternative Delivery Methods**

## **Managing Expectations**

**Presented by**

**Dan Becker, CCM, PMP, CCE**



# 3 Primary Methods for Delivering Projects in WA and OR

- Design/Bid/Build
- Design/Build
- CM @ Risk (GC/CM in WA, CM/GC in OR)

# Other Alternative Delivery Methods Implemented in our Region

- **Job Order Contracting**
  - Pre-Pricing items for developing construction costs
- **P3 – Public Private Initiative**
  - Publicly or privately funded
  - Usually design/build , could be operated
- **IPD – Integrated Project Delivery**
  - Owner, Designer, & Contractor sign a single contract; all parties are tied to each other

# Reasons We Use Alternative Delivery Methods for our Projects

## ***Manage Risk***

- Risk management is the identification, assessment, and prioritization of risks
- Coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of events
- ISO 31000 defines risk as *the effect of uncertainty on objectives*, whether positive or negative)

# Critical Elements Towards Effective Risk Management

- Assigning risk to the party that can best manage the risk
- Collaboration – risk sharing
- Don't ignore issues as they arise
- Know your (and organization's) tolerance for risk and risk management approaches



# Assess the Appropriate Delivery Approach for your Project

- Project Characteristics
- Risk Management
- Know your organization
- Know your own style



# Project Characteristics

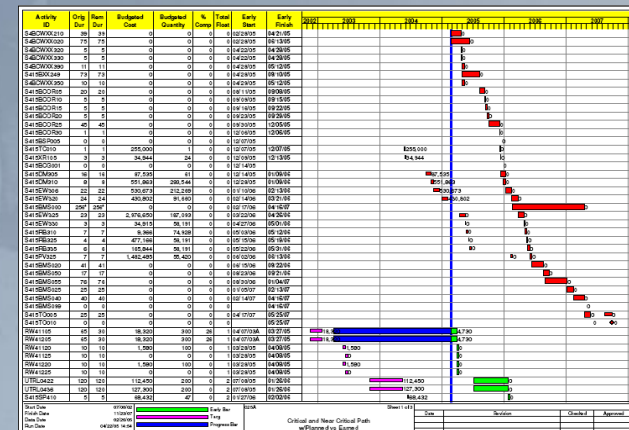
- **Greenfield project**
- **Remodel/Upgrade/Expansion**
- **Unique Characteristics**
  - New Technologies
  - Limited availability of resources
- **Project Schedule**
  - Consent Decrees
  - Other time constraints
- **Project Costs**
  - Funding Sources/partners
  - Cashflow



# Project Risks

## *What are your greatest concerns for delivering this project?*

- Coordination of documents
- Owner/designer directed changes
- Incompatible systems design
  - Mechanical/electrical systems
  - Competitive environment vs. existing systems
- Construction Phasing
  - Operational constraints
- Schedule demands
- Changes and/or claims





# Know Your Organization

- Can the organization develop an solicitation document and then let the contractor loose
- Does your organization need to stay involved in every step of the design and construction
- How do work out departmental disagreements
- Trust within the organization/between departments
- Procurement department



# Know your own Style

- **What is your personality;**
  - Do you go out of your way to avoid conflicts
  - Do you cherish the opportunity to challenge contractors
- **Are you willing use different procurement methods?**
  - This may mean challenging your organizations way of doing business
  - Are you tired of the design/bid/build/claim arguments

# Select the Appropriate Method to Delivery Your Project and Manage Risk

- Risk should be “assigned” to the party that can best manage it – not always
- Assigning risk to the “wrong” party can be costly
- Assess the resources available to you to develop and implement your plan.

# Design / Bid / Build

- **Most familiar process**
  - Most familiar with the construction community
  - Most familiar with public Owner organizations
- **Complete “control” over the design and construction process.**
  - Changes during the design phase
  - Full development of the project design
- **Lower first cost (in many cases)**
- **Lower first cost could result in claims later on**

## 2 Primary Alternative Delivery Methods used in the NW

- **Design/Build**
  - Selection based on qualifications and price
  - Single entity responsible for delivering the project; design and construction (and operations in some instances)
- **CM@Risk (GC/CM or CM/GC)**
  - Selection based on qualifications and some pricing information
  - Brought in during the design process (Usually around 30%)

# Benefits of Design/Build

- **Single source of accountability**
  - Contractor responsible for delivering an operating facility
  - Contractor responsible for the design and construction
- **Budget management**
  - Contractor develops a project within established budget
- **Enhanced communication**
  - Direct communication/collaboration between the Engineer and Contractor
  - Contractor and engineer collaborate to use their creativity to reduce costs and delivery time.

# Benefits of Design/Build

- **Faster project delivery**
  - Construction can begin before completing the design
  - Design documents may not need to be developed the same level of detail as in the DBB method
- **Quality Control**
  - Removes ambiguity that may arise in material and construction specifications
  - Engineer working for the builder
- **Reduced design related change orders**
  - Changes attributed to conflicts in the design documents

# Managing Expectations for Design/Build Projects

- **Change orders will not be completely eliminated**
  - Owners may request changes
  - Differing site conditions may impact the project
  - Permitting authority changes
- **Quality management**
  - Owner needs to define quality standards in the RFP
  - Owner needs to review design for compliance with the standards defined in the contract documents
  - Owners need to monitor quality during construction (QA)
- **Claims can still occur**
  - While a collaborative process, failing to comply with the contract requirements can still lead to claims



# Managing Expectations for Design/Build Projects

- WA State is in the process of re-authorizing the DB statutes for 8 years
- The new statutes allow for selecting the DB contractor without a firm fixed price for construction.
- There are no guidelines in the new legislation on how to arrive at the cost for construction.
- Owners need to develop those guidelines in their RFP and contracts

# Benefits of CM@Risk

- Collaboration between the Owner, engineer and contractor
- Owner maintains management of the design process
- Contractor provides constructability review comments and recommendations during the design phase
- Contractor provides value analysis recommendations during the design phase
- Contractor has input into the construction phasing plan; it will be responsible for implementation of that plan
- Early award of project elements (subcontracts and/or equipment) can reduce the overall project duration.

# Managing Expectations for CM @ Risk

- Many Owners get hung up on negotiating the MACC / GMP
  - Develop parameters for negotiating GMP and MACC
  - MACC or GMP may be higher than when going out for low bid
- Change orders will not be completely eliminated
  - Owners may request changes
  - Differing site conditions may impact the project
  - Permitting authority changes



100,000	100,000
10,000	10,000
10,000	10,000
75,000	75,000
\$205,000	\$205,000
-250,000	-250,000

# Managing Expectations for CM @ Risk

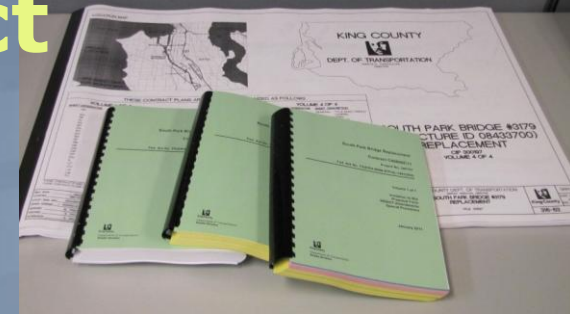
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# Key Elements for a Successful Alternative Delivery Project

- **Solicitation Document**

- Needs to spell out your expectations
- Define the rolls of the parties
- Define the selection criteria (including protest procedures)
- Develop to the appropriate level for the delivery approach and project needs;
  - Design-Build needs to include sufficient detail to convey your project needs
  - CM@Risk projects don't need the same level of detail



# Key Elements for a Successful Alternative Delivery Project

- Line up an experienced team to manage the ADP
  - Owner is responsible for the management of the contracts
  - Owner needs to monitor the quality of the project
- Selection Process
  - Well defined selection process
  - Find the team that best meets your project needs
  - Find the team that you feel most comfortable working with

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# Conclusion

- **ADP will help you manage risks associated with project delivery**
- **Successful ADP occurs when;**
  - **You line up the right team, (management team and contractor) to deliver the ADP**
  - **You take the time to develop a complete solicitation document to select the right contractor**
  - **You and your organization buy into the approach**



A blue-tinted photograph of a construction site. In the foreground, a worker wearing a hard hat and a light-colored shirt is looking at a set of plans. In the background, other workers are visible near a large concrete structure, possibly a dam or a bridge. The overall scene is busy and industrial.

Thank you

***QUESTIONS?***