Reaching Owner & Design-Builder Agreement on Risk Liability

Elizabeth Kelly, P.E. CH2M HILL Water Design-Build Council



The Utility Management Conference 2014: Making Progress More Apparent

Overview

- Owners / Design-Builders basic risks
- Avoiding undesirable events
 - How likely is it that they will occur
 - If they do occur, how severe will the adverse impact be
- Reaching agreement to managed and/or mitigated risk
 - Understanding which party is best able to mitigate or absorb risk

Thinking About Project Risks

- Scope
- Schedule
- Budget
- Performance

- Safety
- Labor Relations
- Reputation
- Relationships

Develop a Risk Philosophy

For example

- Understanding
- Transparency
- Allocation

Risks Typically Borne by the Owner

- Project requirements & objectives
- Land & easement acquisition
- Input specifications for raw water or wastewater effluent
- Site Conditions

Risks Typically Borne by the Owner

- Subsurface conditions (soils & obstructions)
- Permits usage, zoning and environmental
- Project Changes
- Timely payments
- Maintaining property insurance

Risks Typically Borne by the Design-Builder

- Government permits (building/admin)
- Integrating design with construction
 - Project and material costs
 - Facilities coordination

Risks Typically Borne by the Design-Builder

- Schedule: delay incentives; early completion bonus
- Professional Liability (bodily injury and/or property damage)
- Facility performance (until handover)
- Construction Warranty

What About...

- Weather
- Labor Unrest
- Constructability
- Failure of Technology
- Change in Law
- Uncontrollable Circumstances

Allocating Risks –

- Owner or Design-Builder: Share or Off-load
- Agree to share risks
 - appropriate and management risk compensation
- Not feasible or desirable to shift all risks to Design-Builder.
- Owner's project risk does not drop to zero under any circumstances
 - has defined responsibilities for successful project delivery.
- Risk can be reduced or mitigated, but not eliminated

Benefits of Risk Assessment and Management

- Significant cost and schedule benefits occur for both parties if determined during project delivery discussion.
 - Reaching agreement basis for contract development
- Early implementation of risk reduction strategies by Owner are also beneficial
 - site investigations, permit planning.

Recommended Practices

- Produce a draft contract for proposing companies to review and comment *before* incorporating into RFP
- Initiate a dialogue to assess and reduce topics subject to negotiation,
 - reduces negotiation time, and
 - establishes a collaborative relationship for delivery of a successful project

Workshop – Chartering Session

- Reinforces Collaboration with an initial kickoff workshop or project chartering session
- Aligns Owner expectations, project drivers and DB implementation
 - communications
 - reporting
 - monitoring and
 - oversight
- Includes early consultation on risk sharing and form of contract in advance of RFP.

General review of risk principles

RISK = LIKELIHOOD x CONSEQUENCE

Calibration is Key.

Consequence includes financial and non-financial elements.

Risk Formula

RISK = LIKELIHOOD x CONSEQUENCE

Calibration is Key.

Consequence includes financial and non-financial elements.

Early Assessment Process

- Preliminary analysis of basic risks (both parties) –also can be the basis for contract drafting.
- Submit draft contract to proposing companies for review and comment *before* incorporating into RFP.
- Reduce issues subject to negotiation,
 - reduces negotiation time
 - establishes a collaborative relationship for delivery of a successful project.

Risk Allocation Matrix

Built around several components

- Risk element
- Primary responsibility
 - Owner
 - Design-Builder
 - Shared
- Remarks (to clarify)

Also, possibly include Mitigation Plan

Industry References

Water Design-Build Council, DBIA, Consensus Docs (AGC)

Generally consistent with risk management principles

- Such industry-standard forms generally accepted by Design-Builders and CMARs with a minimum amount of negotiation
- Forms prepared by outside advisors
 - may not be consistent with principles,
 - and may require extended negotiations to reach an acceptable agreement

Achieving Collaboration

Design-Build and CMAR delivery methods produce a highly collaborative relationship between Owner & company responsible for project delivery.

- Relationship is established at the very beginning of the delivery process.
- Reinforced by agreements -- reflecting collaborative principles & the equitable sharing of risk & reward for a project well-delivered.
- All parties work for their mutual benefit & for the success of the project itself.

Education Provided by the Water Design-Build Council

- Trade organization of national (and international) design-build companies that serve the water and wastewater industry
- Advocates for the added value and applications of collaborative Design-Build, Design-Build Operate and CMAR delivery
- Define and develop DB and CMAR best practices for owner planning, procurement and project implementation
- Promote collaborative relationships between owners and industry practitioners to create innovative and quality solutions -- saving time and cost, with less risk for all parties

WDBC Mission

EDUCATION -- facilitate an understanding of Design-Build (DB) and Operate delivery methods and Construction Management-at-Risk (CMAR) for water and wastewater infrastructure projects

- Presentation excerpted from the *Municipal Water and Wastewater Handbook*, produced by the Water Design-Build Council (3rd Edition – 2013)
- Handbook is available for at no cost, and can be downloaded at <u>www.waterdesignbuild.org</u> or contacting the WDBC office.
- Training Workshops available at no cost.

WDBC Member Companies





BLACK & VEATCH

CDM Smith



HDR

Brown AND Caldwell

CH2MHILL.



PARSONS

Additional WDBC Resources

- The Municipal Water and Wastewater Design-Build Handbook (3rd Ed. 2013)
- Fact sheets, website and industry articles
- Monthly E-News on member projects and industry issues
- Website www.waterdesignbuild.org
- Market Size Study (Analysis of the Water Design-Build Council's memberfirm projects)
- Owner Satisfaction Survey (2008) Update 2012
- Impediments to Using Design-Build (Survey Findings 2013)
- Comparative Evaluation of Design-Build Versus Design-Bid-Build (2009)
- AWWA book titled Design-Build for Water and Wastewater Projects (developed by AWWA in conjunction with WDBC, WEF and DBIA in 2011)
- 2013 Products: Procurement Guide for Progressive Design Build
- Educational Video Series