

# WORLD DEMOLITION SUMMIT 2019

Robert Patullo, Ramboll & John Webb, Brandenburg

## The Benefits of Turnkey, Design-Build Demolition Projects



# Ramboll – Full Project Life-Cycle Services

Complete design and construction services

Environmental evaluation, inspections, testing, remediation and execution

New facility design and construction

Site evaluation, repurposing and execution



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## Bob Patullo, VP, Construction – Ramboll

38 years of design/build and construction experience

12 years of design/demolition/repurposing projects

Pre-project team assembling, planning, scheduling and execution

Focus on fortune 500 companies

Primary focus on pharmaceutical and health care facilities

- Facility closure
- Design/build execution
- Occupied facilities and sites
- Production and facility decontamination

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# John Webb, Business Development – Brandenburg

18 continuous years at Brandenburg

Business development

- Provides design/estimating
- Maintains relationships

Primarily an industrial contractor

Sector focus

- Power generation – coal plant closures
- Petrochemical – east coast refinery closures
- Pharmaceuticals – mergers created excess capacity

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## Design/Build vs. Design/Bid/Build

Why Clients Prefer a  
Design/Build Approach  
for Demolition Projects

- ✓ Single source project responsibility and accountability
- ✓ Team approach to safety and project execution
- ✓ Team approach to problem-solving
- ✓ Cost estimating with real world pricing and scope
- ✓ Team approach to project scheduling and execution strategy

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## Design/Build vs. Design/Bid/Build

Benefits of Using a Design/Build Approach for Demolition Projects

✓ A team/partnering approach from day one

✓ Common goals and objectives

✓ Establishes clients end results for project planning

**End results** drive project **scope of work** → Scope of work drives **safety** → Safety drives **design** → Design drives **means and methods** → Means and methods drives **schedule and cost**

✓ Client and teaming partners work for a common goal

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# Design/Build vs. Design/Bid/Build – Safety

## ✓ Design/Build

Team pre-planning of project execution

Design documentation is developed for a safe execution of work

Coordination of activities compliment each other

## ✗ Design/Bid/Build

The execution plan is developed by design engineers

The execution plan is part of an RFP/bid package

Project award is based upon what safety metrics?

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# Design/Build vs. Design/Bid/Build – Execution

## ✓ Design/Build

Team pre-planning from day one

Project team is exposed to the client's goals and objectives from day one

Design engineers and project execution team have input and work towards a common goal

Environmental concerns and execution strategy are confirmed during design

Design documentation is developed to ensure a safe execution of work in the field

## ✗ Design/Bid/Build

Project planning and execution strategy is after the RFP award

Design documentation scope is questioned during the bid process

Coordination of execution activities are based upon the RFP document scope

Project execution assumptions are based upon what?

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# Design/Build vs. Design/Bid/Build – Cost

## ✓ Design/Build

Team pre-planning for required scope of work to complete the project

Design documentation cost is based upon actual project scope needs

Environmental concerns are based upon contractor input

Safety is built into the project execution implementation plan

Schedule is based upon team pre-planning to optimize estimate cost

Project team establishes the real cost early on

## ✗ Design/Bid/Build

Costs are based upon RFP documentation and interpretation of documents

Interpretations of plans and specifications are open to change orders

Means and methods for execution may conflict

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# Design/Build vs. Design/Bid/Build – Schedule

## ✓ Design/Build

Team pre-planning scope of work will dictate the project schedule

Design documentation based upon meeting an overall schedule with value engineering built in

Environmental scope execution is designed to minimize schedule impacts

Safety means and methods are built into the overall schedule

Schedule is constructed to minimize cost

Fast-track options for design and field execution

## ✗ Design/Bid/Build

Schedule is based upon interpretation of RFP documentation

Review of bids and bid clarifications will effect the final schedule

Means and methods for execution of work will effect the schedule

Eliminates fast-track options

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# Design/Build vs. Design/Bid/Build

## WRAP UP AND CASE STUDIES

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# Case Study – Flint River, GA

- 1000-acre chemical manufacturing plant
- Included asbestos abatement and line breaking
- Structural demolition resulted in 17,000 tons recycled
- Included foundation excavation
- Contaminated soil and groundwater issues



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# International Case Study – Silica Plant

- Fire-damaged manufacturing facility
- Compromised structure
- Regulated and hazardous waste
- Governmental oversight



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# Questions?

## THANK YOU!

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