

2001 Design–Build Odyssey

Design-Build Institute of America



“Putting the Deal Together – Structuring the Contract and Costs”

National Council for Public-Private Partnerships

James Binder, President, Alternative Resources Inc.

James Creedon, Senior Vice President – Business, United Water

Dan Elias, President, Elias Group

Moderator: Brian Oakley, Director, Scully Capital



ARI



SCULLY CAPITAL
WASHINGTON NEW YORK



UnitedWater®

Elias
GROUP

2001 Design-Build Odyssey

Design-Build Institute of America



Putting the Deal Together - Structuring the Contract and Costs

Brian T. Oakley

Director

Scully Capital Services Inc.

1133 - 15th Street NW, Suite 700

Washington, DC 20005

(p) 202-775-3434 (f) 202-775-6049



2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*"Putting the Deal
Together –
Structuring the
Contract and Costs"*

Brian T. Oakley
Director
Scully Capital



Overview

- Background & Introduction
- Key Elements of the Procurement Process
- Contractor/Developer Viewpoints
- Putting the Deal Together: Partnership Issues
- Discussion

2001

Design-Build Odyssey

"Putting the Deal
Together – Structuring
the Contract & Costs"

DBIA

"Putting the Deal
Together –
Structuring the
Contract and Costs"

Brian T. Oakley
Director
Scully Capital



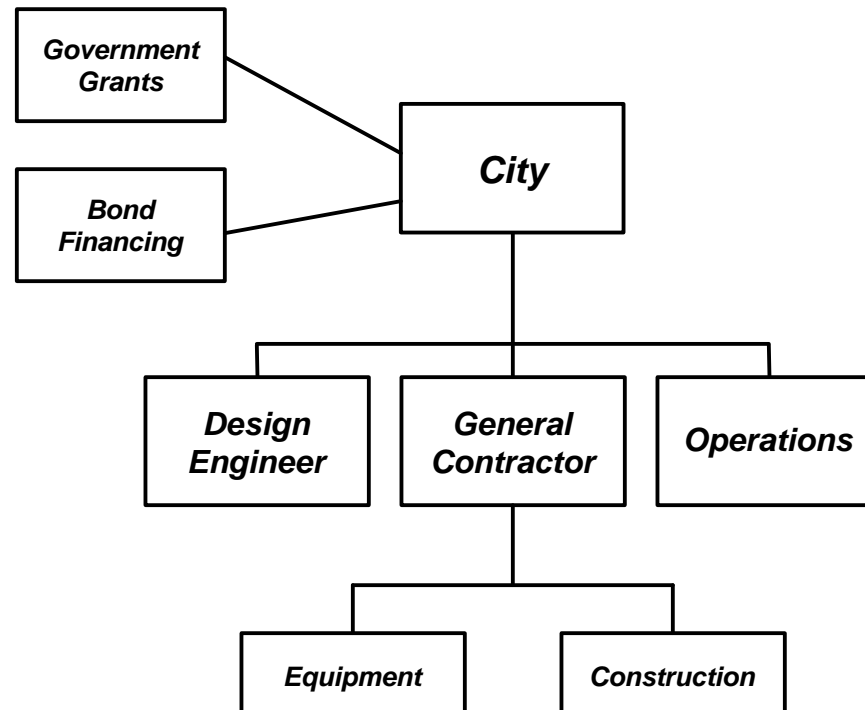
Background: Traditional Project Delivery Approach

Advantages

- Maintain Control Over Process
- Change-Orders Easily Accommodated
- Well-Tested/Universally Accepted
- Competitive Bidding at All Levels

Disadvantages

- Generally More Costly
- Can Take Longer
- Poor Incentive Structure
- Limited Recourse if Things Go Wrong



2001

Design-Build Odyssey

"Putting the Deal
Together – Structuring
the Contract & Costs"

DBIA

"Putting the Deal
Together –
Structuring the
Contract and Costs"

Brian T. Oakley
Director
Scully Capital



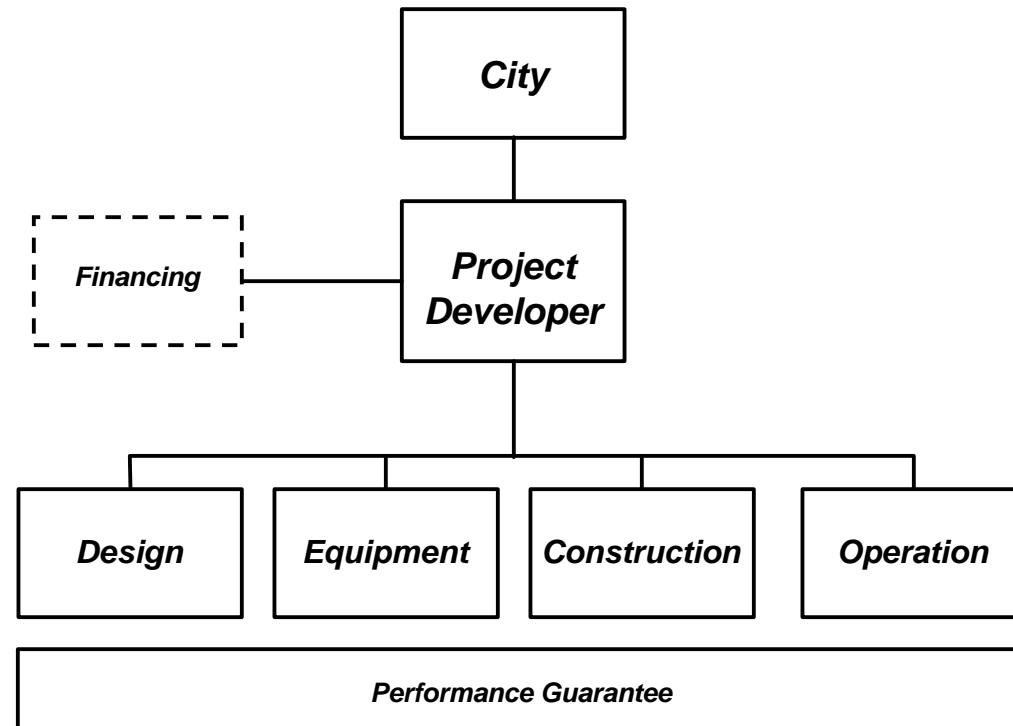
Background: Alternative Delivery Models

Advantages

- Single Point of Accountability
- Private Sector Risk Assumption
- Acceleration Delivery
- Reduced Lifecycle Costs

Disadvantages

- Less Discretion
- Requires More Planning for Procurement
- Output Oriented
- Legal Systems Need to Adapt
- Developer Financial Health is Important



2001

Design-Build Odyssey

"Putting the Deal
Together – Structuring
the Contract & Costs"

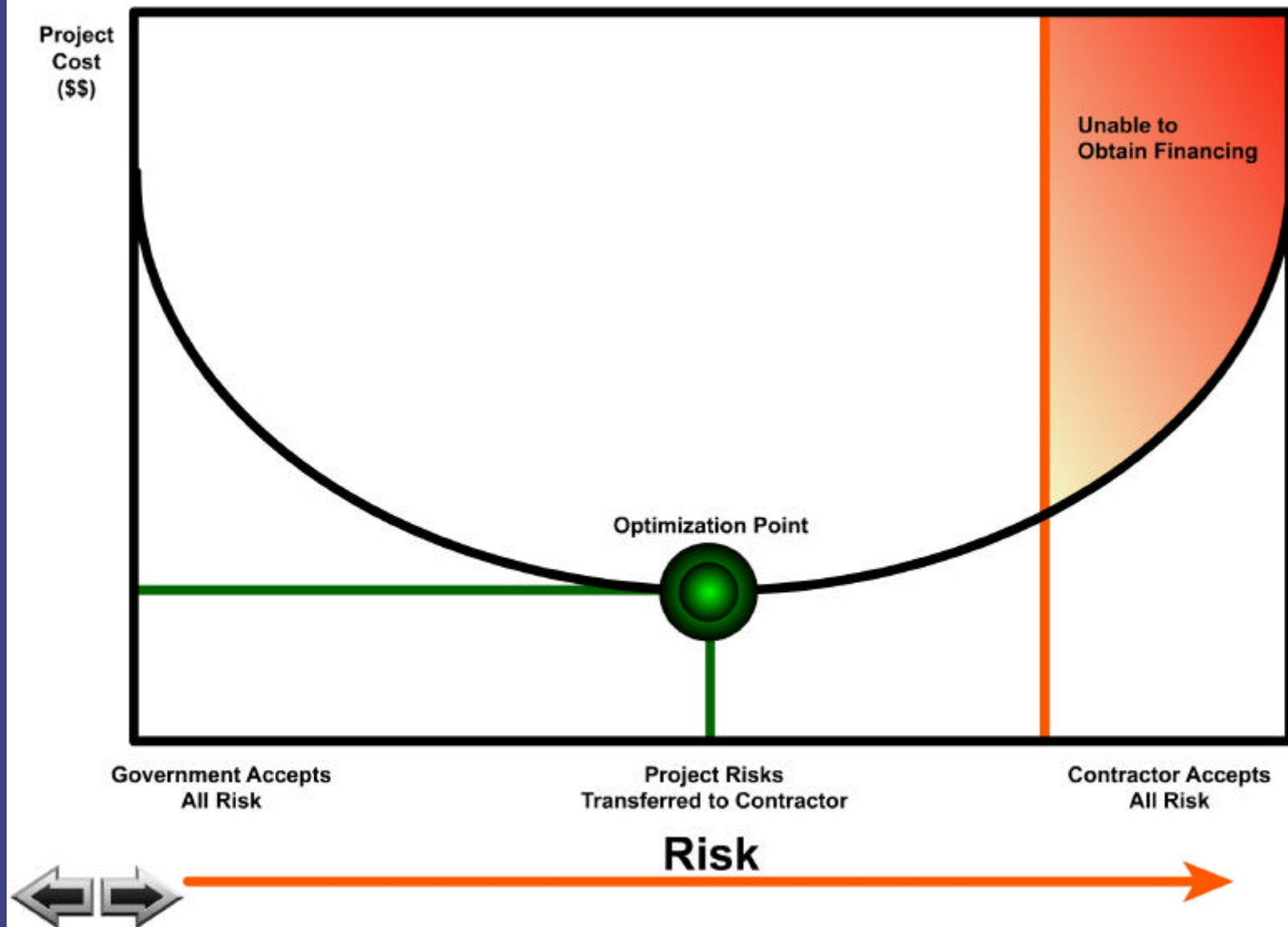
DBIA

"Putting the Deal
Together –
Structuring the
Contract and Costs"

Brian T. Oakley
Director
Scully Capital



Privatization Objective: Lower Costs and Successful Projects



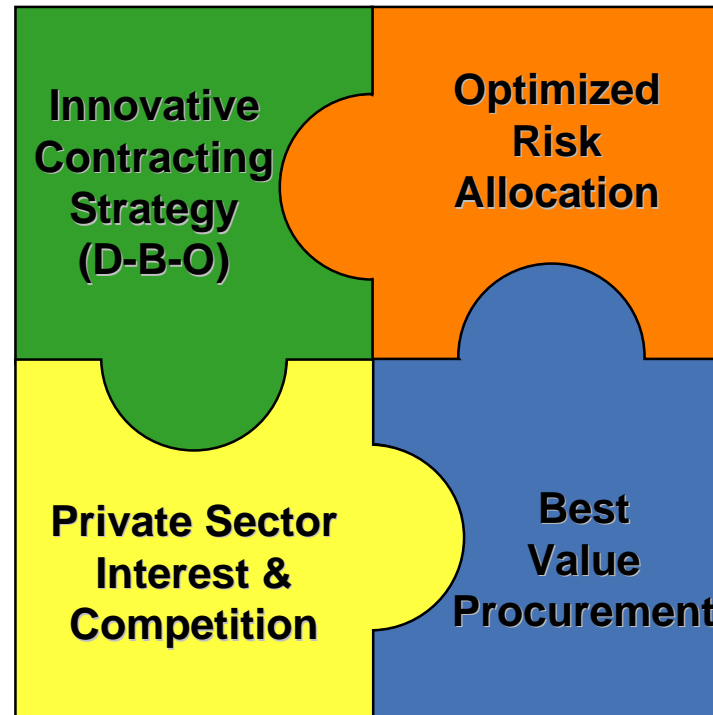
Innovative Contracting & Financing - Background

"Putting the Deal Together – Structuring the Contract & Costs"

DBIA

"Putting the Deal Together – Structuring the Contract and Costs"

Brian T. Oakley
Director
Scully Capital

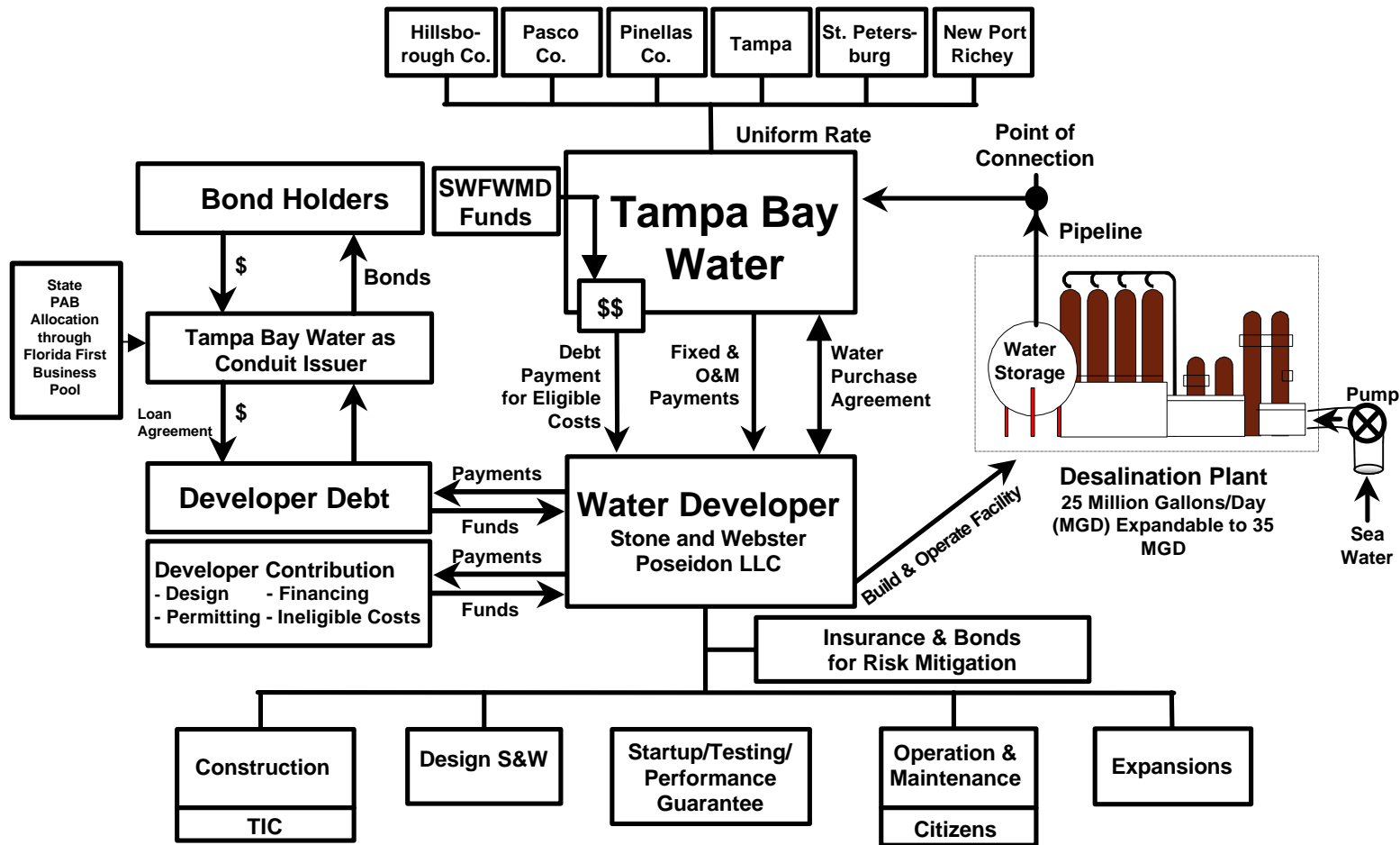


**Putting the Deal Together
Requires a Balanced Approach**

DBIA



Overview of Project Structure



2001 Design-Build Odyssey

Design-Build Institute of America



Putting the Deal Together - Designing & Implementing a Best Value Procurement

James J. Binder, P.E.

President

Alternative Resources, Inc.

9 Pond Lane

Concord, MA 01742

(p) 978-371-2054 (f) 978-371-7269



ARI

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
President
Alternative
Resources, Inc.



Overview

- Options & Objectives for Public-Private Partnerships
- D-B & D-B-O Risk Transfer Opportunities
- Deal Prerequisites
- What Makes a Good RFP
- Key Elements of a Successful Deal
- Protecting Your Investment: Up-Front Considerations

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
President
Alternative
Resources, Inc.



Options for Public-Private Partnerships

- Public Ownership and Finance, Private Design, Construction and/or Operation
- Private Ownership, Finance, Design, Construction, and Operation
- Combinations of the Above



*Project Can and Should Be Crafted around
Specific Needs of the Community*

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
*President
Alternative
Resources, Inc.*



Why Consider a Public-Private Partnership?

- Potential Cost Savings
 - Design/Construction of Capital Improvements
 - Operations
- Risk Reduction
- Improved Performance
- Need for Alternative Financing

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
President
Alternative
Resources, Inc.



Risk Shifting with D/B and D/B/O

- One-Party Responsibility, Single-Point Guarantee for Services
- Substantial Technical Guarantees, Opportunity to Shift Significant Technical Risk to Contractor, e.g.:
 - Fixed Price for Construction
 - Fixed O&M Service Fee with Indexed Escalator (If It Breaks, They Fix It)
 - Guaranteed Schedule for Design, Construction, Acceptance
 - Guaranteed Performance -- Treatment, Flow, Environmental Performance
 - Maintain Condition of Facility, Less Normal Wear and Tear (Concept of Asset Management)

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
President
Alternative
Resources, Inc.



Good Procurement: Pre-Requisite to Successful Deal

- Start with Attitude of "Trust" Necessary for a Successful Partnership
- Adopt an Honest/Sincere Approach Conveying that Contract Will Be Let as a Result of the Procurement Process
- Demonstrate that There Is a Fair and Even Playing Field for All Proposers -- i.e.:
 - No Favorites
 - No Exclusionary Evaluation Criteria Biased toward a Particular Vendor

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
President
Alternative
Resources, Inc.



Good Procurement (continued)

- Provide Setting for an Attractive Business Relationship for Both Buyer and Seller
 - Long-Term Contract (15 Years Plus)
 - Realistic Terms and Conditions for Contract, e.g.:
 - Well-Defined Work Scope and Division of Responsibility
 - Attainable Performance Guarantees
 - Equitable Risk Sharing
 - Realistic Conditions for Defaults and Remedies and
 - Fair Termination Clauses
 - Financial Terms that Keep Both Buyer and Seller Financially Whole

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
President
Alternative
Resources, Inc.



Content of RFP

A Good RFP Facilitates Successful Negotiations

- Introduction-Background/Objectives
- Facility/Asset Description (Existing/Proposed)
- Scope of Supply/Service, Including Performance Specifications/Guarantees
- Schedule Requirements for Supply/Service
- Draft Contract or Key Terms and Conditions of Such

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
*President
Alternative
Resources, Inc.*



Content of RFP (continued)

- Procurement Process and Schedule
- Instructions to Respondents: Content of Proposals to Be Submitted (Technical and Cost Proposals)
- Rights of Party Requesting Proposals
- Evaluation Process/Evaluation Criteria
- Appendices (Key Information Describing Existing Facilities)

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
*President
Alternative
Resources, Inc.*



Key Elements of a Successful Deal

- Comprehensive, Fair and Impartial Procurement - Assure a Competitive Procurement Process
- Well-Defined Work Scope and Division of Responsibilities
- Attainable Performance Guarantees

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
*President
Alternative
Resources, Inc.*



Key Elements of a Successful Deal (continued)

- Equitable Risk Sharing
 - Performance Risk
 - “As-Is” and Asset Management Risk
 - Environmental Risk
 - Schedule Risk
 - Cost Risk
 - Design/Construction Price
 - Operating Cost
 - Uncontrollable Circumstances/Change-in-Law

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
President
Alternative
Resources, Inc.



Key Elements of a Successful Deal (continued)

- Financial Security
 - Performance and Payment Bonds
 - Letter of Credit
 - Guarantor's Limits of Liability
- Penalties - Liquidated Damages
- Termination and Damages
 - Party at Fault
 - Limits for Change-in-Law, Uncontrollable Circumstances
 - For Convenience

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
*President
Alternative
Resources, Inc.*



Protecting Your Investment: Up-Front Considerations

- Establish Clear Design, Construction and Performance Standards in Your RFP
- Establish Clear and Detailed Contract Requirements for Design, Construction and Performance
- Establish Clear Contract Requirements for Design Review, Construction Monitoring, Acceptance, and Operations and Maintenance Monitoring

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the Deal
Together –
Designing &
Implementing Best
Value Procurement*

**James J.
Binder, P.E.**
*President
Alternative
Resources, Inc.*



Protecting Your Investment: Up-Front Considerations

- Establish Requirements for Predictive & Preventive Maintenance Schedules
- Establish Requirements for Equipment Repair & Replacement Schedule
- Plan to Utilize Independent Engineer/Financial Consultant to:
 - Conduct Annual Audits of Facilities Condition
 - Review Flow of Funds
 - Review SOP's and Practices
 - Inspect Inventory

2001 Design-Build Odyssey

Design-Build Institute of America



The Developer Perspective

Gary Albertson

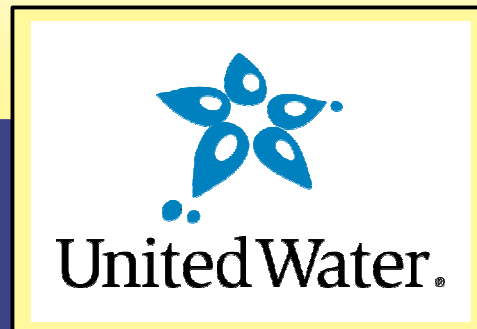
Senior Manager, Technical Services

United Water

2 Fox Chase Road

Oak Ridge, New Jersey 07438

(p) 973-208-7643 (f) 973-208-1571



2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*The
Developer
Perspective*

Gary Albertson

*Senior Manager
Technical Services
United Water*



UnitedWater.



Overview

- Company Background
- Comparison of Procurement Methods
- Advantages of DBO
- Issues for Go/No Go Decisions
- Key Ingredients for a Successful Partnership
- Example Project

2001

Design-Build Odyssey

"Putting the Deal
Together – Structuring
the Contract & Costs"

DBIA

*The
Developer
Perspective*

Gary Albertson

Senior Manager
Technical Services
United Water



Company Background

Ownership



2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

The Developer Perspective

Gary Albertson

Senior Manager
Technical Services
United Water



UnitedWater.



Bexar Metropolitan Water District

Bexar Metropolitan Water District

- Located in San Antonio, Texas
- Provides Water to 250,000 People
- Political Subdivision of the State of Texas
- Can Issue Tax-Exempt Debt

Project Goals

- Develop New Source of Supply
- Plant in Service ASAP
- Provide Excellent Quality Water
- Provide Innovation
- Be Cost-Efficient
- Design Build Operate

Bexar Metropolitan Created an Industrial Development Corporation (IDC)

- Why?
- Can't procure Design-Build by law as "Government Entity"
- What is the Purpose of the IDC?
- Exempt from Professional Services Procurement Act
- To Own the Plant
- To Issue Tax-Exempt Debt
- To Lease the Facilities Back to Bexar Met
- To Contract with DBO Company

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

The Developer Perspective

Gary Albertson

*Senior Manager
Technical Services
United Water*



UnitedWater.



Bexar Metropolitan Water District (contd).

What is the Project?

- 9 MGD Surface Water Treatment Plant
- Intake in the Medina River
- High Service Pump Station
- Five Mile Transmission Line
- Ground Storage Tank

United Water Guaranteed...

- Construction Cost
- Operating Cost
- Project Schedule
- Performance
- Permitting and Compliance
- Maintenance, Repairs and Replacements

Project Results

- 9-MGD Ultrafiltration Membrane Plant in Service in 16 Months
- High Quality Water Meeting all Requirements
- Guaranteed Fixed Design and Construction
- Long-Term Performance Guarantees
- Guaranteed Fixed O&M Costs
- Award Winning Project

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

The Developer Perspective

Gary Albertson

Senior Manager
Technical Services
United Water



UnitedWater.



Advantages of DBO

Lowest Life Cycle Cost

- Developer/Operator has Same Long-Term Perspective as Client
- Design, Constructor, Operator Work Together
- Capital Versus Operational Cost Benefit Analysis

Single Source of Responsibility

- Client has One Point of Contact: The Developer
- Strong Financial Guarantees
- All Conflicts Handled Internally by Developer

Shorter Timeline

- Engineer and Constructor Work Together as a Team
- Constructor Begins as Design is being Finalized
- Facility is Easier to Build
- Less-Capitalized Interest

Innovative Technologies

- Increased by Competition
- Collaboration by Designer, Builder, Operator
- Guaranteed Performance by Operator
- Maximized by using Performance-Based Criteria

Comparison of Procurement Methods

"Putting the Deal
Together – Structuring
the Contract & Costs"

DBIA

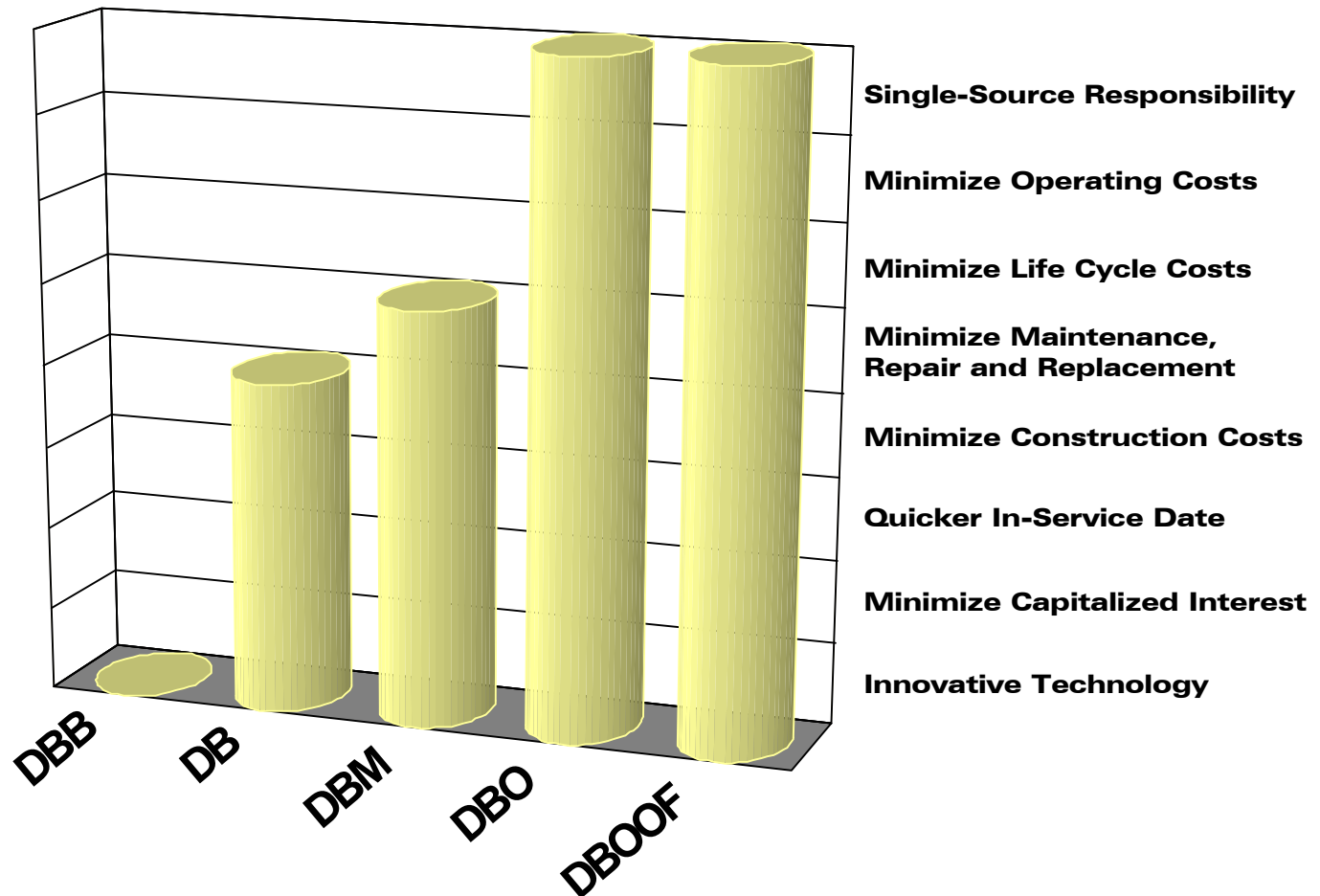
The Developer Perspective

Gary Albertson

Senior Manager
Technical Services
United Water



UnitedWater.



2001

Design-Build Odyssey

"Putting the Deal
Together – Structuring
the Contract & Costs"

DBIA

The Developer Perspective

Gary Albertson

Senior Manager
Technical Services
United Water



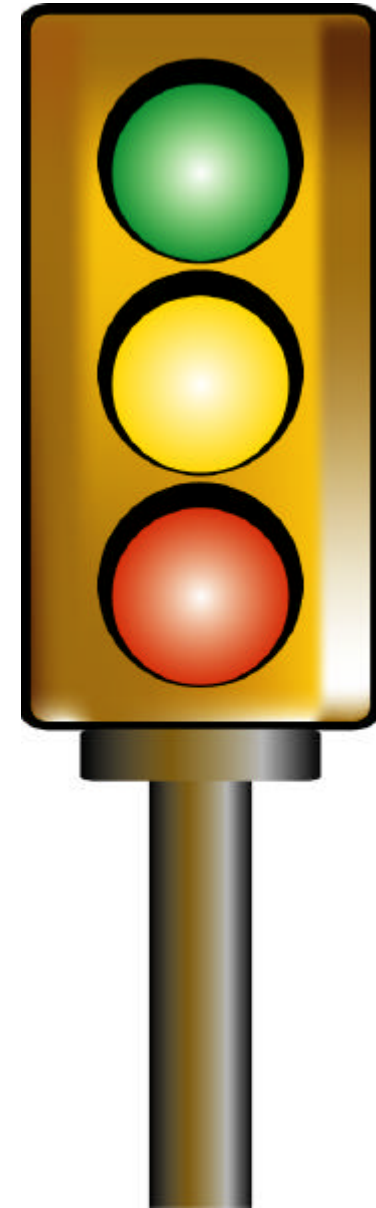
UnitedWater.



Issues for Go/No Go Decisions

Case-by-Case Approach

- Is the Project Real?
- Type of Project and Size?
- Likely Competitors?
- Is the Procurement Fair?
- Spirit of Partnership?
- Upside Potential vs. Downside Risks
- Do Our Strengths Align with Requirements?
- Can We Manage Development Costs?
- Do We Have Relationships?



2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*The
Developer
Perspective*

Gary Albertson

*Senior Manager
Technical Services
United Water*



UnitedWater.



Key Ingredients for a Successful Partnership

- Effective Risk Allocation
- Long-Term Operating Contract
- Reasonably Attainable Performance Guarantees
- Interaction During Development Phases
- Municipal Oversight
- Qualification-Based Selection/Best Value
- Quality Firm

2001 Design-Build Odyssey

Design-Build Institute of America



Putting the Deal Together

Dan Elias

President

The Elias Group

411 Theodore Fremd Avenue, Suite 102

Rye, NY 10580

(p) 914-925-0000 (f) 914-925-9344



2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

Elias
GROUP



Overview

- Challenges & Issues
- Elements of the Service Agreement
- Project Risk Characteristics
- Key Considerations in Allocating Project Risk
- Ingredients for Long-Term Success

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

Elias
GROUP



Project Challenges

- Loss of Control
- Loss of Public Accountability
- Personnel Impacts
- Procurement Barriers
- Complexity of Transaction

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

**Elias
GROUP**



The Service Agreement

- Linchpin for Entire Transaction
- Key Provisions
 - Responsibilities/Role of the Host
 - Responsibilities/Role of the Contractor
 - Performance Specifications/Operating Parameters
 - Term of Agreement
 - Pricing & Price Adjustment Mechanisms
 - Incentive & Penalty Provisions
 - Default & Cure Provisions
 - Termination Clauses
 - Protections Afforded to Contractor (Change in Law, Force Majeure)

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

**Elias
GROUP**



Typical Project Risks

- Permit – Construction and Operations
- Design & Technology
- Construction/Project Completion
- Operations
- Deal Economics/Financials
- Force Majeure

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

Elias
GROUP



Design-Build Risks

- ***Problem*** – Scope of Work Cannot Be Defined Clearly
- Budget Bust
- Unforeseen Conditions
- Delays
- Inferior Quality

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

**Elias
GROUP**



Operations Risks

- Permit Compliance
- Capital Projects
- Repair & Replacement
- Change in Law
- Uncontrollable Circumstances
- Cost

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

Elias
GROUP



Risk Allocation: What Is Fair?

- Allocate Risks Based Upon:
 - Fault
 - Foreseeability
 - Ability to Manage
 - Incentive Approach

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

Elias
GROUP



Fault Standard

- Each Party Should Be Responsible for the Consequences of Its Own Actions, or Inactions
- Standard Does not Address Unforeseen or Unknown Circumstances

2001

Design-Build Odyssey

"Putting the Deal
Together – Structuring
the Contract & Costs"

DBIA

*Putting the
Deal
Together*

Dan Elias

President
The Elias Group

Elias
GROUP



Foreseeability Approach

- "The Contractor should only price for those risks which an experienced contractor could reasonably be expected to foresee at the time of tender" ICE, 1970
- **Advantage:** Eliminates Pricing Costly and, Maybe, Unnecessary Contingencies
- **Problem:** Competitors May Gamble and Assume Risk without Properly Pricing It

2001

Design-Build Odyssey

"Putting the Deal
Together – Structuring
the Contract & Costs"

DBIA

*Putting the
Deal
Together*

Dan Elias

President
The Elias Group

Elias
GROUP



Management Approach

- Risk Belongs to the Party Best Able to Evaluate and Control It
- **Advantage:** The Party Best Able to Manage the Risk Can Minimize Both the Occurrence and Severity of the Risk for All Parties Involved

2001

Design-Build Odyssey

"Putting the Deal
Together – Structuring
the Contract & Costs"

DBIA

*Putting the
Deal
Together*

Dan Elias

President
The Elias Group

Elias
GROUP



The Incentive Approach

- Risks Should Be Placed on the Party Most in Need of Incentive (Presumably Already the Ability) to Prevent and Control Them
- **Problem:** Competitors May Gamble and Assume a Risk without Either Properly Evaluating It or without the Financial Ability to Absorb It, All for a Chance of a Bigger Payday

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

**Elias
GROUP**



What to Consider

- What Is the Delivery System?
- Who Can Best Control?
- Who Can Best Manage?
- Does the Owner Want to Manage?
- Who Should Take the Default Position?
- What Is the Premium for the Transfer?
- Can the Transferee Bear the Risk?

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

**Elias
GROUP**



Key to a Successful Project

- Equitable Risk Allocation
- Reasonable Financial Security
- Attainable and Objective Performance Standards
- Well-Defined Work Scope and Division of Responsibilities
- Mechanism to Monitor Performance

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

**Elias
GROUP**



Example: Washington Borough, Warren County, NJ

- New WWTP - 1.2 MGD
- Population 6,700, Plus Future Growth of 3,300
- Two Significant Industrial Users
- Engineering - Competitively Bid and Awarded (Killam Engineering)
- DBO Contract Awarded to US Filter on 2/3/98

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*Putting the
Deal
Together*

Dan Elias

*President
The Elias Group*

**Elias
GROUP**



Conventional v. DBO Procurement Costs

Washington Borough Side by Side Comparison

<i>Cost Category</i>	<i>Typical Conventional Procurement</i>	<i>Washington Borough Conventional Procurement</i>	<i>Washington Borough DBO</i>
Detail Design	\$888,600	\$442,523	\$370,000
Construction	\$8,886,000	\$8,886,000	\$7,443,996
Management	\$1,200,000	\$1,200,000	\$375,000
Monitoring	\$0	\$0	\$450,000
Change Order	\$486,953	\$112,852	0
Total	\$11,461,553	\$10,441,375	\$8,638,996
% Difference	0%	-9%	-25%

2001

Design-Build Odyssey

*"Putting the Deal
Together – Structuring
the Contract & Costs"*

DBIA

*"Putting the Deal
Together –
Structuring the
Contract and Costs"*

Brian T. Oakley
Director
Scully Capital



Discussion

Slides Available on the Web:

- **WWW.SCULLYCAPITAL.COM**
 - Click on publications
 - Downloadable in Word and PDF Formats