

National Stream Restoration Conference

2023







ENGINEERS AND CONTRACTORS FINDING COMMON GROUND DURING CHALLENGING ECONOMIC TIMES

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Project Roles



- Owner (Municipality, State Gov., Federal Gov., Private)
- Engineer (Consultant)
 - Sub-consultant
- Architect (Consultant)
 - Sub-consultant
- General Contractor (GC)
 - Sub-Contractor





Contract Documents



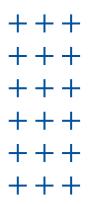


- Front End Documents
- Specifications
- Bid Form
- Construction Drawings (Not Plans)





Project Delivery Methods



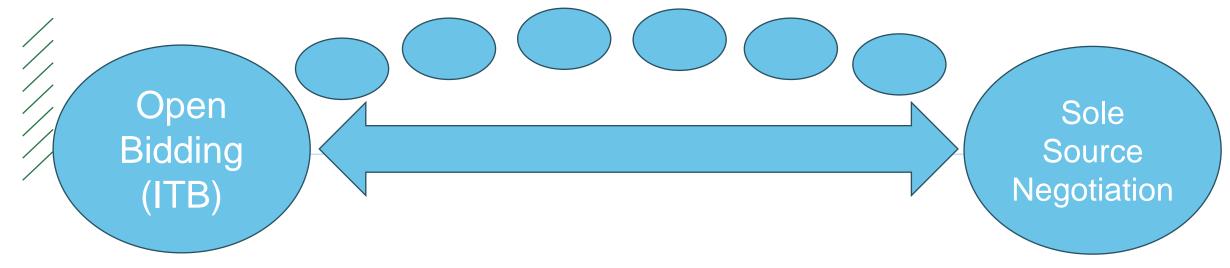
- Traditional (Design-Bid-Build)
- Alternative
 - Design-Build
 - Full Delivery
 - EPC
 - Cost Plus
 - Many others...





Hiring a GC



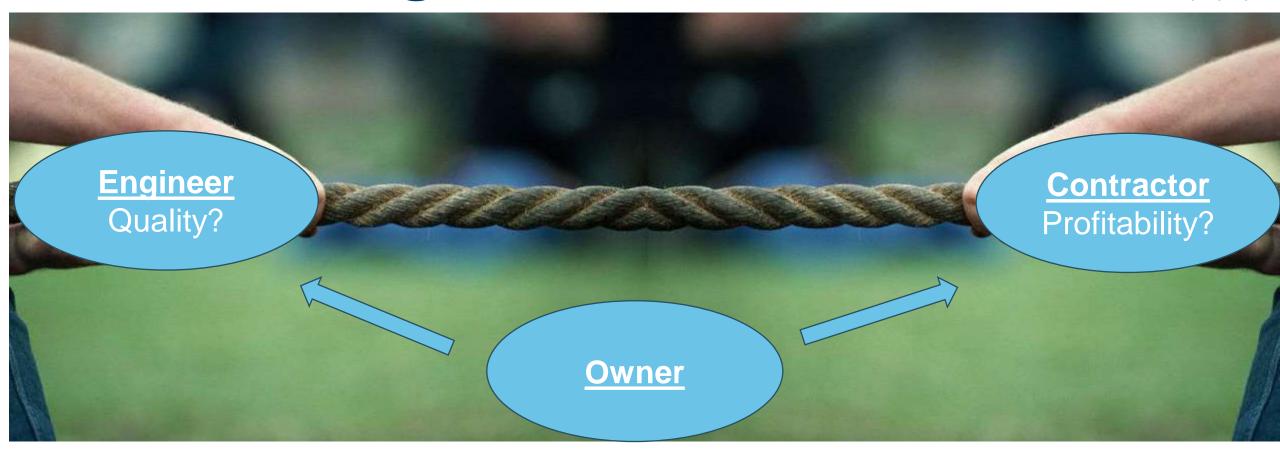






Owner-Engineer-Contractor

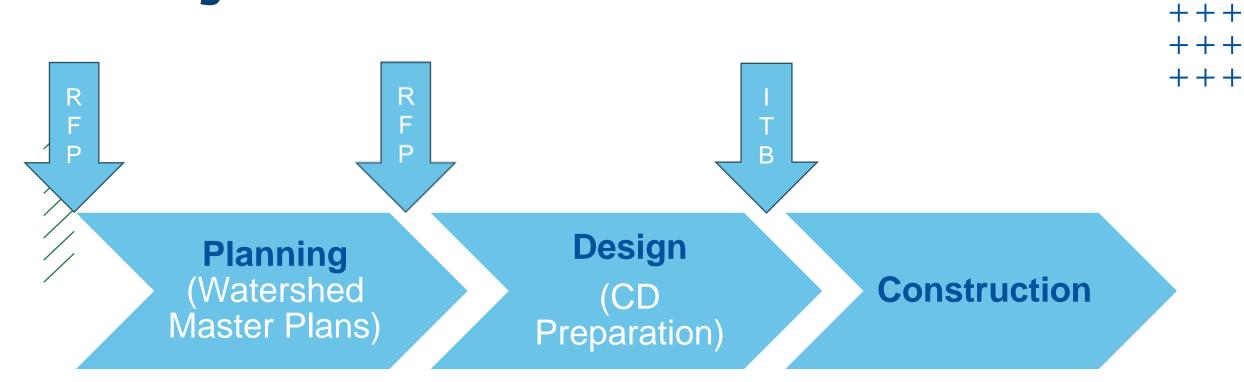








Project Timeline





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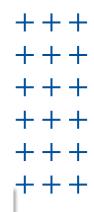
Planning Phase Considerations

- Traditional (Design-Bid-Build)
- Alternative
 - Design-Build
 - Full Delivery
 - EPC
 - Cost Plus
 - CM At Risk
 - Sole Source Negotiation
 - Others...





- Foreman Specification
- Part 1 General
- Part 2 Required Work Experience
 - Foremen shall have experience with at least # projects...
- Part 3 Submittal
- Part 4 Measurement
- Part 5 Payment



SECTION 01 10 99 CONSTRUCTION FOREMAN

PART 1 GENERAL

1.01 SUMMARY

- All work performed by the Contractor shall be supervised by a Foreman (male or female) with qualifications and work experience in RU, NC that meet requirements of this specification.
- The Forman must be present for 100% of days the CONTRACOR is performing any work on the project.

PART 2 REQUIRED WORK EXPERIENCE

2.01 GENERA

A. Foreman shall have experience with at least 3 projects in FU, NC on a stream, their or bayou with a contributing drainage area of at least 10 square miles. These projects must have a component of construction inside and below the Ordinary High Water Mark as defined by the United State Army Corps of Engineers.

2.02 PLANT INSTALLATION

 Foreman shall have experience with all least 3 projects where live stakes, trees, strubs or vines where planted on at least 1 acre.

PART 3 SUBMITTAL

UBI SUBINITAL

A. The Contractor shall submit documentation of the Foreman's experience that meets the requirements of Part 2. Three projects for each category are required, projects that meet requirements of mole than one category may be reused. Contractor to submit a short description of the work, a photo strowing the completed work and the name, phone number and email address of the owner of the project.

PART 5 MEASUREMEN

A. There will be no separate measurement for this work.

PART 6 PAYMENT

 All work covered by this flem will be paid for at the contract lump sum price bid for Construction Foremant', Such price will be full payment for the work covered by this specification including flems incidental to the work.

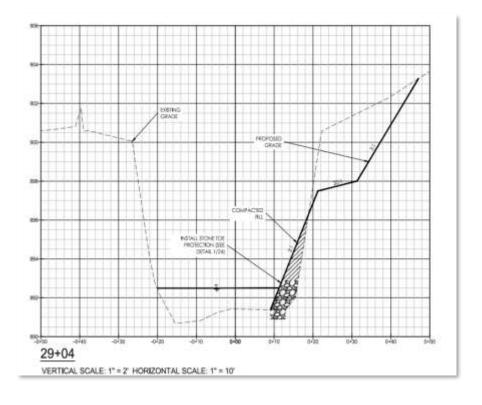
END OF SECTION 00 45 00





- Earthwork
 - Provide cross sections, DEM
 - Lump sum payment
 - Quantity







- Stone (Boulders and Rip-Rap)
 - Pay per TN?
 - Pay per EA?







- Value Engineering
 - Review by Contractor(s)



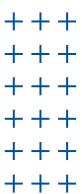






- Flexibility with Payment Specifications
 - Example Coir Fiber Matting







- Fuel Escalation
 - U.S. Energy Information Administration

Index Cost	Per Hour Adjustment	Per Ton Adjustment
\$3.75-\$3.99	\$1.00	1.50%
\$4.00-\$4.24	\$2.00	3.00%
\$4.25-\$4.49	\$3.00	4.50%
\$4.50-\$4.74	\$4.00	6.00%
\$4.75-\$4.99	\$5.00	7.50%
\$5.00-\$5.24	\$6.00	9.00%
\$5.25-\$5.49	\$7.00	10.50%
\$5.50-\$5.74	\$8.00	12.00%

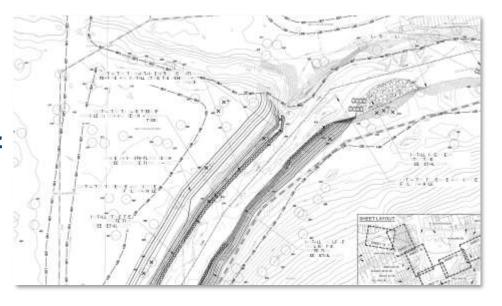






- Engineer's Flexibility with Construction Drawings
 - Revise construction sequence?
 - Site layout?
 - Crossing location or type of crossings?









- Communication
 - Frequent communication/documentation about out of tolerance work.
 - Establish a relationship with the Contractor.
 - Pick up the phone!







Where Do We Find Common Ground?



Quality of Construction Implementation

Owner & Engineer - achieved design goal Gen. Contractor - Min. chance of returning for repairs



- Gen. Contractor Makes estimated profit, stays in business
- Owner & Engineer GC stays in business, bids on next project, competitive market.





Where Do We Find Common Ground?







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