

# ALTERNATIVE CONSTRUCTION CONTRACTING METHODS

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CAPITAL PROJECTS



# **AGENDA**

**Current Approach**

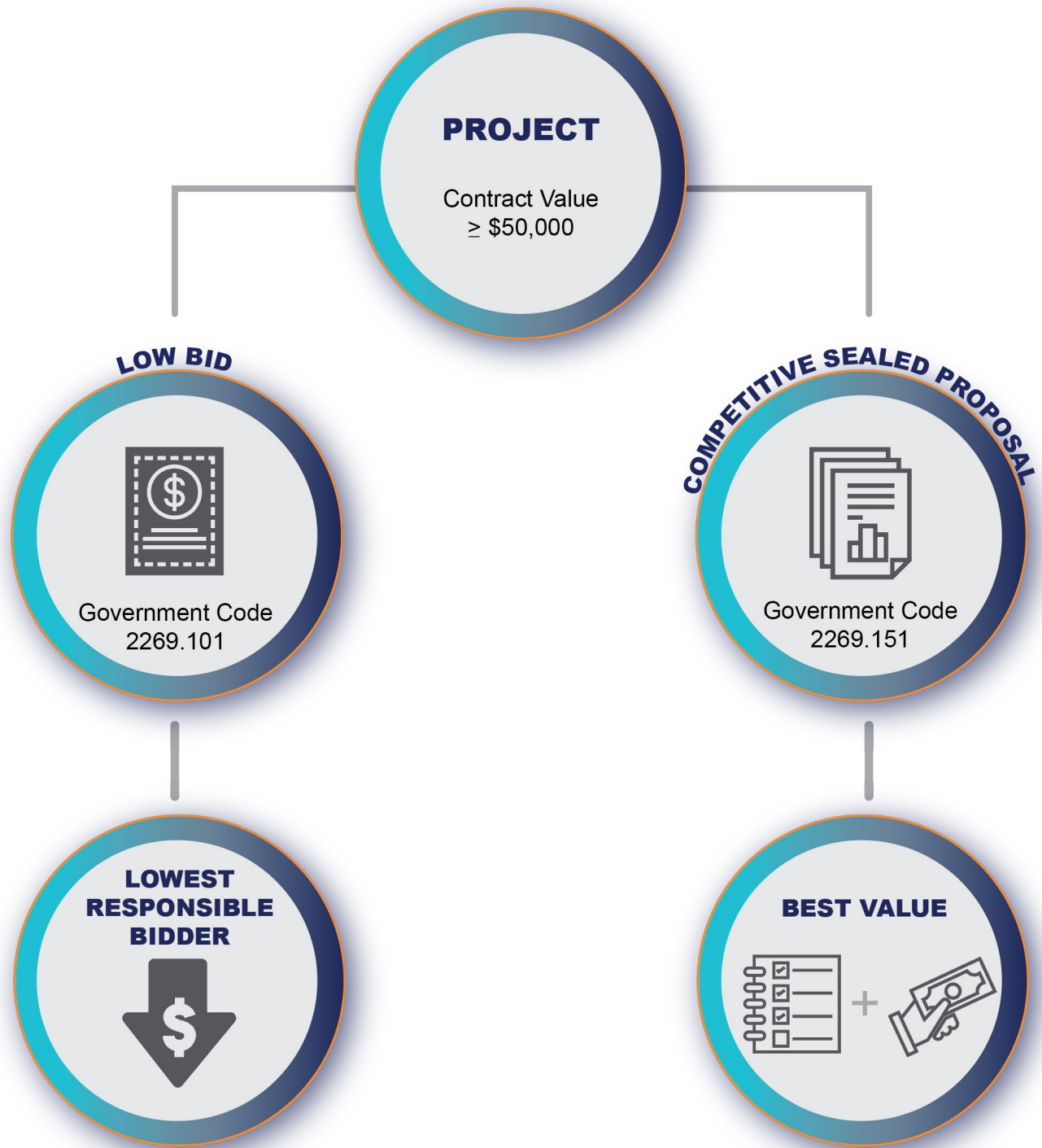
**Contracting and Delivery Methods**

**Proposed Project Delivery Method Selection Process**

**Next Steps/Recommendations**

# **CURRENT APPROACH**

Contracting Governing Rules



# TYPES OF CAPITAL PROJECTS

Project Type	2017	2018	2019	2020 YTD
Low Bid	95	75	93	33
Competitive Sealed Proposal	0	4	8	2
<b>Total</b>	<b>95</b>	<b>79</b>	<b>101</b>	<b>35</b>

# PROFILE OF CAPITAL PROJECTS

Project Profiles	Minimum	Average	Maximum
Low Bid	\$1.3 million	\$10.9 million	\$34.3 million
Competitive Sealed Proposal	\$5.6 million	\$26.5 million	\$39.0 million

## SAMPLE PROJECTS

66-Inch Water Line Rehabilitation at US-59 and Beltway 8  
 Low Bid \$1,276,146

108-Inch Water Line from Aldine Westfield Road to Willis Street  
 Competitive Sealed Proposal \$31,017,665

# CONTINGENCY

# CONTINGENCY

## What is it?

- amount of money set aside to cover unexpected costs
- reserved, not allocated to any specific area of work
- acts as insurance against unforeseen costs
- used at direction of the City



# CONTINGENCY

## How is it Set?

- level of design detail determines the rate
- industry standard is 5% - 10% of bid price
- Houston Public Works uses 5% of bid price for capital projects
- contingency is not disclosed at the time of bid

# CONTINGENCY

## Who Owns It?

- controlled exclusively by the City
- not included in the construction contract
- expenditures documented in the form of change orders
- costs that exceed the contingency must be approved by Council

# CONTINGENCY

## What Happens to the Unused Contingency?

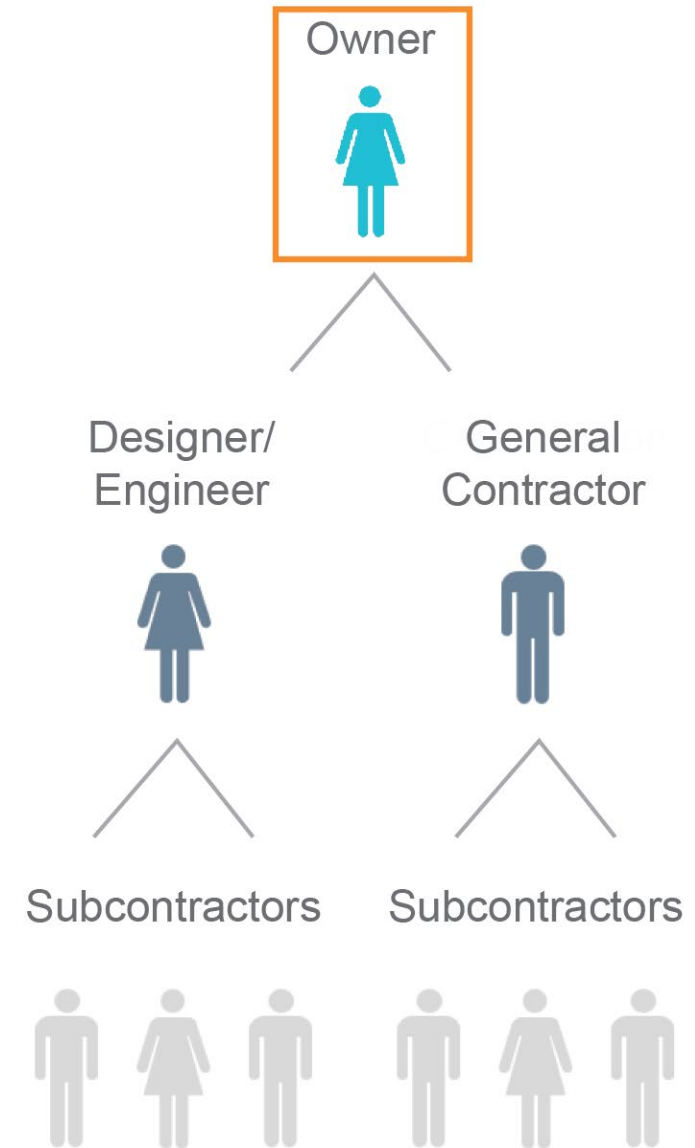
per City ordinance


“In the event there are unspent funds remaining in the Construction Appropriation (including Contingency) after construction and closeout of the project, such unspent funds are appropriated for CIP Cost Recovery relating to construction of facilities financed by the fund described in the title”

# CONTRACTING DELIVERY METHODS

# 1 DESIGN-BID-BUILD

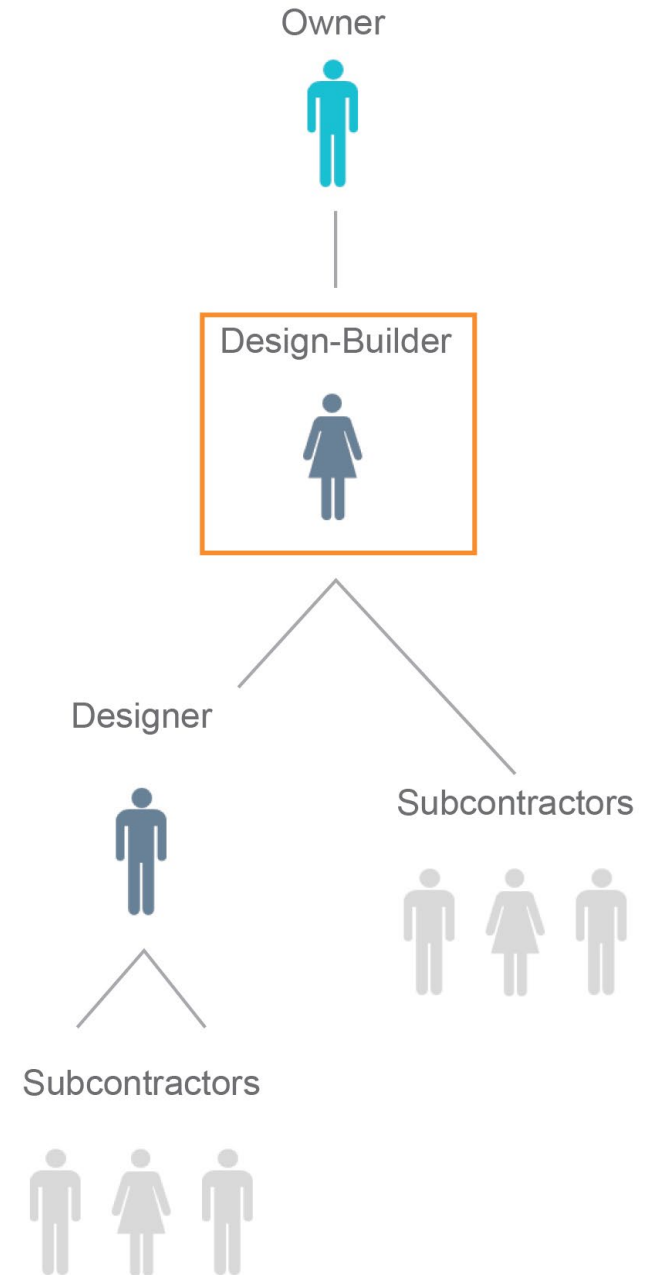
- agency designs, or retains a designer to furnish complete design services
- awards a separate construction contract based on the designer's completed construction documents
- majority of City of Houston projects




 Indicates owner of design details

## 2 DESIGN-BUILD

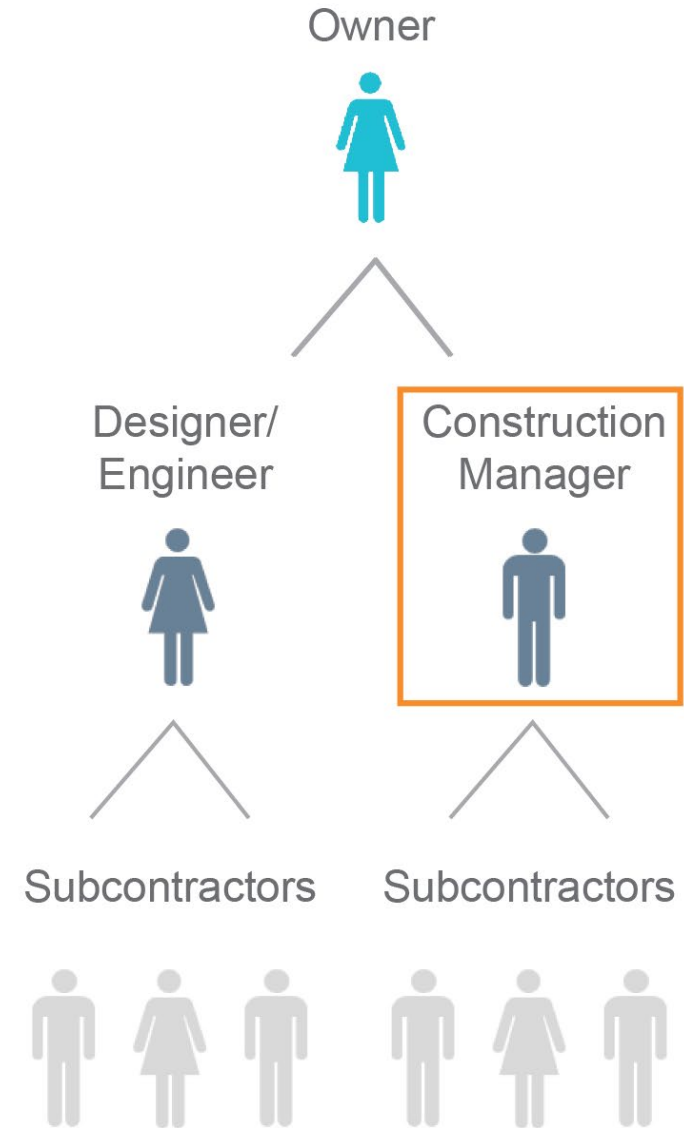
- agency procures both design and construction services in the same contract from a single, legal entity referred to as the design-builder
- project examples:
  - Northeast Purification Plant Improvement
  - Houston Intelligent Transportation System (HITS)




 Indicates owner of design details

### 3 CONSTRUCTION MANAGER AT RISK

- agency contracts separately with a designer and a construction manager.
- construction manager is selected to perform construction management services and construction works

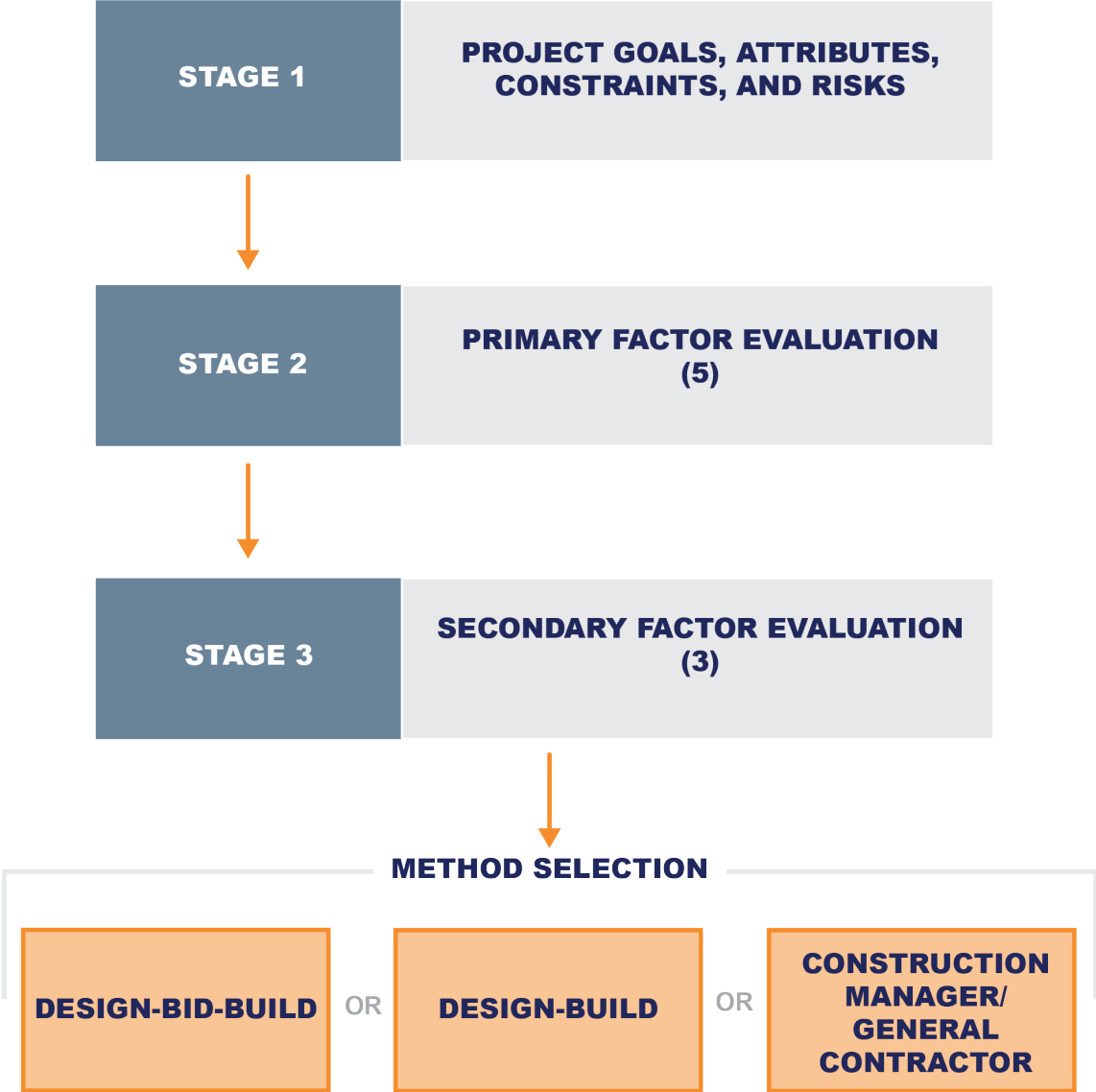


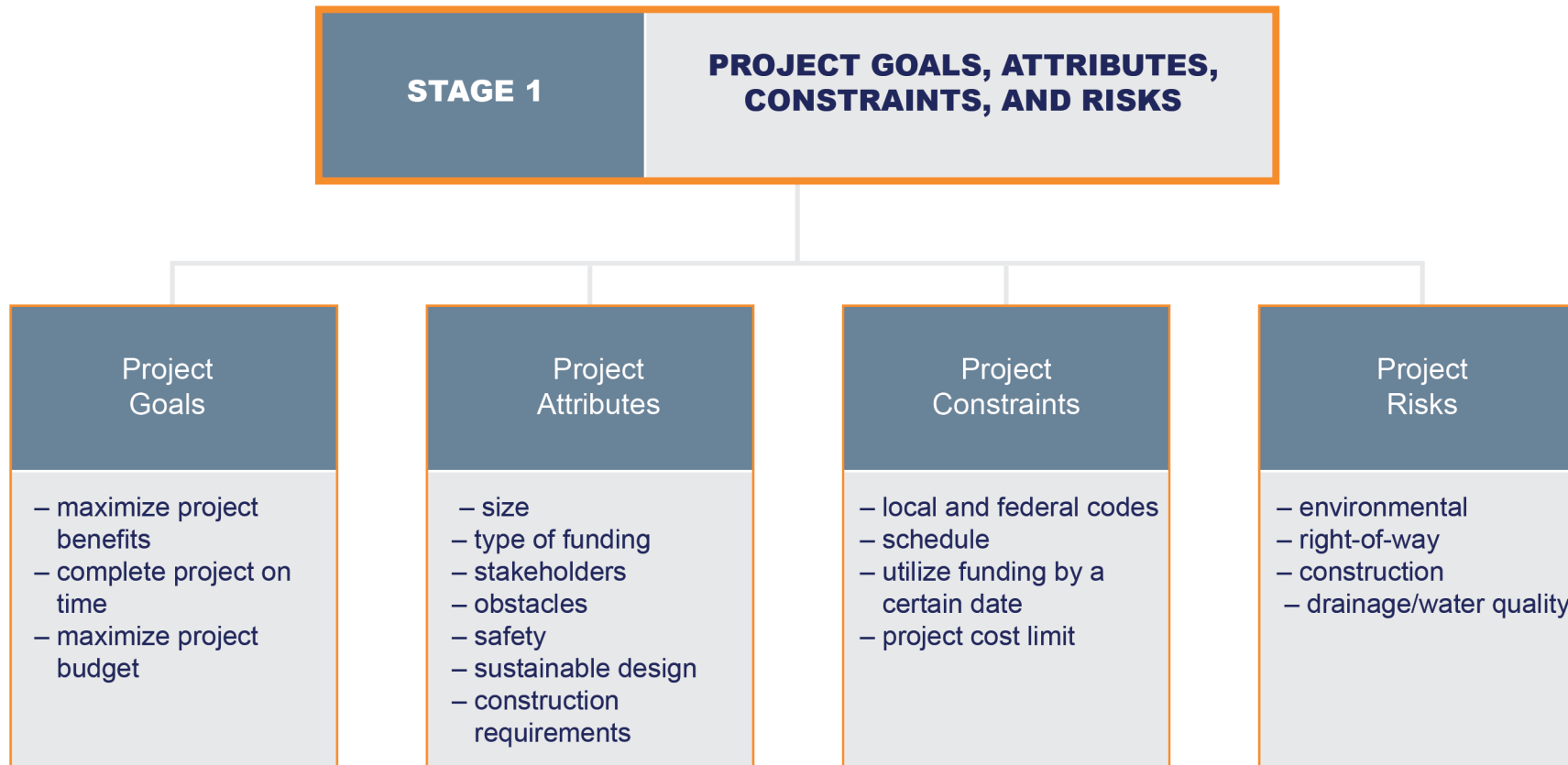
 Indicates owner of design details

# **PROPOSED PROJECT DELIVERY METHOD SELECTION PROCESS**



# 3 STAGE PROCESS





**STAGE 2**      **PRIMARY FACTOR EVALUATION (5)**

**Project Complexity & Innovation**

- applicability of new designs or processes

**1**

**Project Delivery Schedule**

- consideration of deadlines and timing of funding awards

**2**

**Project Cost Considerations**

- budgetary restrictions
- early and precise cost estimation
- control of project costs

**3**

**Level of Design**

- percentage of design completion at the time of project delivery procurement

**4**

**Risk Assessment**

- uncertain events or conditions that may have an effect on project objectives

**5**

**NOTE:**  
Completion of Stage 2 may eliminate one or more delivery methods

**STAGE 3**      **SECONDARY FACTOR EVALUATION  
(3)**

**Staff Experience & Availability**

agency staff and experience and availability as it relates to project delivery methods in question

**1**

**Level of Oversight & Control**

amount of agency staff required to monitor the design or construction and amount of agency control over the delivery process

**2**

**Project Cost Considerations**

level of competition, experience and availability in the market place and its capacity for the project

**3**

# SUMMARY

Include Project Delivery Method Selection in the following Reports:



Traffic Engineering



Geotechnical



Drainage



Initial Design



Environmental Assessment



# NEXT STEPS/RECOMMENDATIONS

# **NEXT STEPS/RECOMMENDATIONS**

- Prequalification to Contractors**
  - similar to professional services (HPW 100)
  - streamline redundant forms on a yearly basis
  - financial, legal, safety, environmental statements
  
- Project Delivery Method Selection in Planning Stage**

# thank you!



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