Alaska Department of Transportation & Public Facilities

Whitshed Road and Pedestrian Improvements

IRIS Number NFHWY00129, Federal Project Number 0837004

Northern Region

November 1, 2018

Project Scope & Purpose

Scope: Provide pedestrian accommodations along Whitshed Road between the Copper River Highway and Orca Inlet Drive intersections.

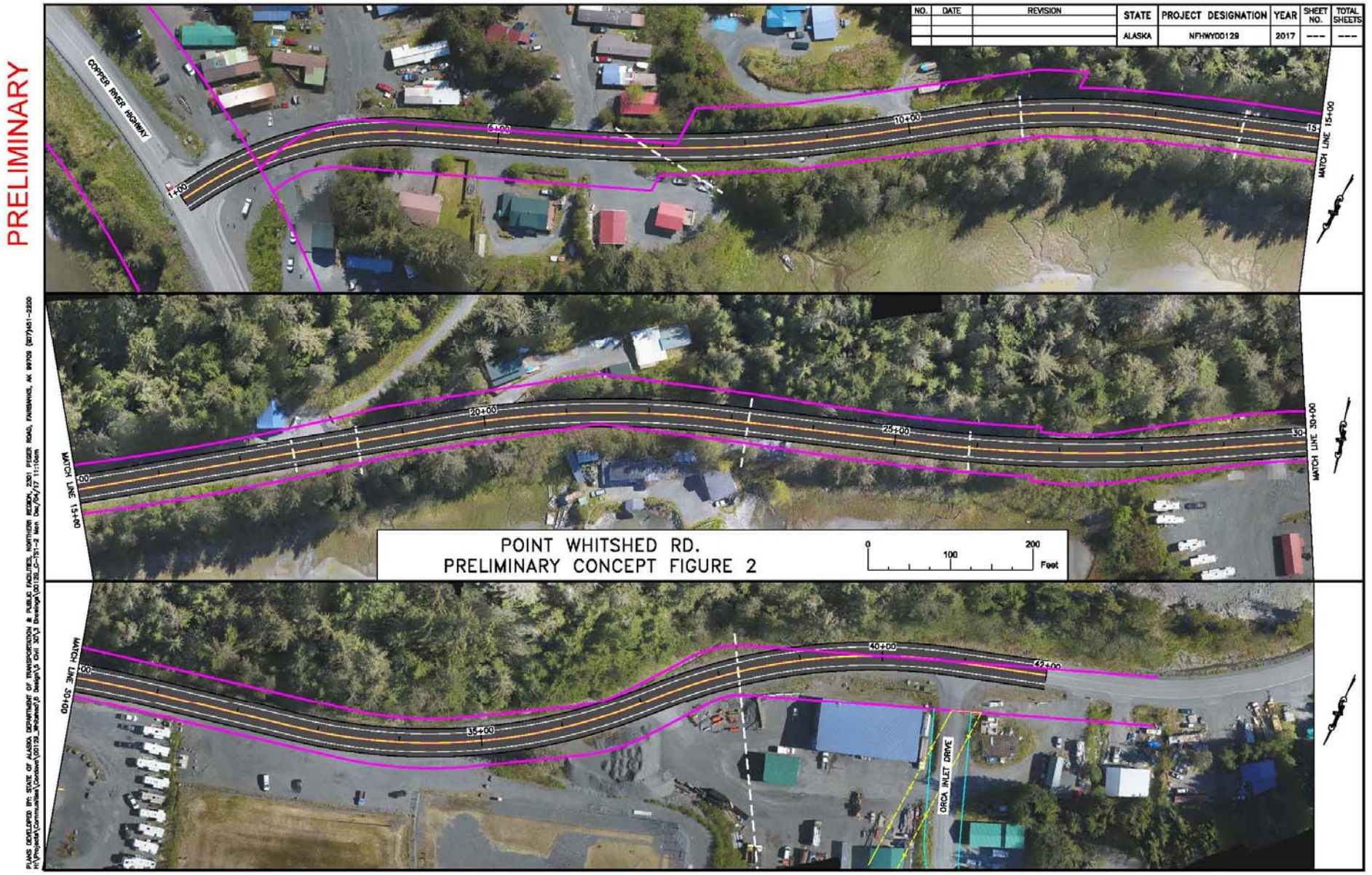
Purpose:

- Improve safety and mobility for all users - motorists, pedestrians and bicyclists

Need

Whitshed Road is narrow and lacking shoulders in some areas causing non-motorized users to share the 11-foot paved travel lanes or trek off the paved roadway.


BEGIN PROJECT AT
COPPER RIVER HWY
Odiak Lagoon
POINT WHITSHED RD.
END PROJECT AT
ORCA INLET DR.


PRELIMINARY
NO. | DATE | REVISION
STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS
ALASKA | NFHWY00129 | 2017 | --- | ---
COPPER RIVER HIGHWAY
MATCH LINE 15+00
MATCH LINE 30+00
MATCH LINE 45+00
ORCA INLET DRIVE
POINT WHITSHED RD.
PRELIMINARY CONCEPT FIGURE 2
0
100
200
Feet

Why use CMGC for this project?

- The narrow Right-of-Way combined with the exceptionally steep rock topography beyond the paved road surface limits the physical room to fit new pedestrian accommodations and accommodate construction activities while maintaining traffic.
- Your design ideas and construction expertise is needed to develop a constructible design.

Project Goals

- Develop an approved Environmental document
- Develop a constructible, cost effective design that fulfills the project's purpose
- Minimize ROW and utility impacts
- Minimize temporary and permanent construction impacts
- Identify construction obstacles
- Identify ways to reduce or eliminate construction risks, change orders and claims

CMGC Goals

- Create a collaborative owner/contractor relationship
- Share and transfer knowledge
- Identify, mitigate, and minimize risk
- Support innovation
- Improve design constructability
- Optimize the project schedule
- Meet budget goals

Innovations

Project **challenges provide opportunities**. What innovations do you have for:

- Providing non-motorized accommodations in a narrow corridor
- Limiting ROW needs and impacts
- Rock excavation
- Drainage improvements and culvert replacements
- Reducing impacts to local residents and traffic
- Finding efficiencies
- Reducing future maintenance costs
- Other challenges you see

Risk Allocation

Challenges also includes risks. Identifying, assessing and managing/mitigating risks during design can avoid or minimize disputes, change orders, increases in project costs and schedule delays

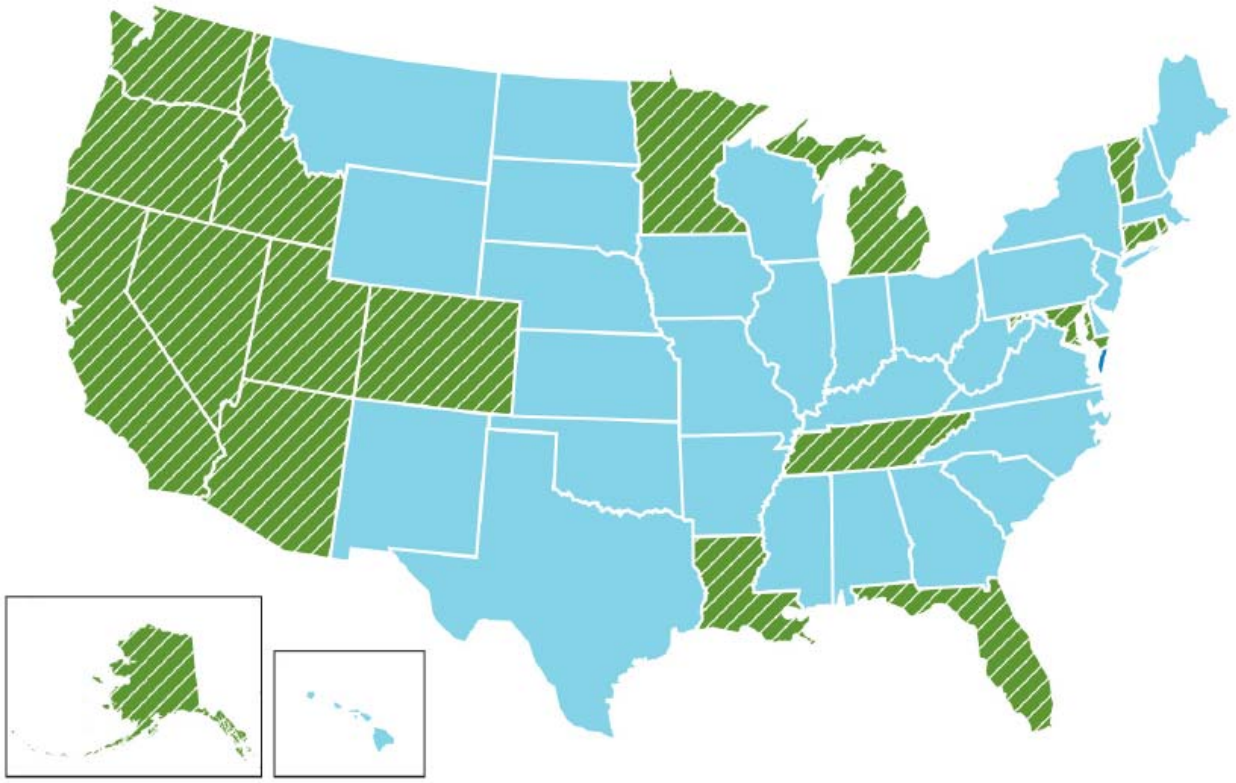
Known risks for this project include:

- Narrow right-of-way and project corridor
- Steep rock topography adjacent to the roadway
- Underground utility conflicts
- Traffic Control
- Project Constructability

Current Schedule

- CMGC Stage 1 (Design) Notice to Proceed – Dec. 2018
- Approved Environmental Document – 4th Quarter 2019
- Approved Design Study Report – 2nd Quarter 2020
- Review PS&E – 4th Quarter 2020
- Final PS&E – 2nd Quarter 2021
- Notice to Proceed Stage 2 (Construction) – 3rd Quarter 2021
- Construction Substantial Completion – 3rd Quarter 2022

CMGC use around the US



ADOT&PF's CMGC Experience

- **Successfully** used on Parks Highway: Riley Creek Bridge Replacement
- **Underway:**
  - University Avenue Reconstruction, Fairbanks
  - Parks Highway MP 231 Enhancements, McKinley Village
  - Tok Cutoff MP 38-50

CMGC Overview

- Introduce Innovation
- Promote Transparency
- Demonstrate Accountability
- Create Efficiencies

CMGC Team Approach

- **Project Development Team:**
  - Owner (ADOT&PF)
  - Designer (ADOT&PF)
  - Independent Cost Estimator (ICE)
  - Contractor (CMGC)

Project Development Team

- **ADOT&PF Design**
  - Russell Johnson, P.E., Design Project Manager
  - Duane Davis, P.E., Lead Design Engineer
- **ADOT&PF Construction**
  - David Arvey, P.E., Construction Project Manager
- **ADOT&PF Contracts**
  - Barbie Tanner, P.E., Contracts Engineer

Project Development Team

- **CMGC Assistance - Michael Baker International**
  - Derek Christianson, P.E., CMGC Lead
  - Karin McGillivray, CMGC Facilitation
  - Anne Brooks, P.E., Contractor Outreach Coordinator
- **Independent Cost Estimator (ICE) – Stanton Constructability**
  - Ed Jones, Lead Estimator
  - JC Wheelwright, Civil Estimator

Project Development Team

- **CMGC Contractor (Your team here!)**
  - Who will be your **Contract Manager** … ???
  - Who will be your **Project Manager** … ???
  - Who will be your **Project Superintendent** … ???
  - Who will be your **Cost Estimator** … ???

Procurement Comparison

	Design-Bid Build		Design Build		CMGC	
	Owner	Contractor	Owner	Contractor	Owner	Contractor
Preliminary Design	✓		✓		✓	
Detailed Design	✓			✓	✓	✓
RFP/Bid/TMP	✓	✓	✓	✓	✓	✓
Construction		✓		✓		✓

CMGC **requires** collaboration during detailed design

RMJ1

CMGC Development Stages

Major Tasks & Milestones	2018				2019				2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
RFP/CMGC Selection				●	●															
Environmental Documentation					●	———	———	———	———											
Detailed Design										———	———	———	———	———	———	●				
Contractor Input					●	———	———	———	———	———	———	———	———	———	———	●				
Theoretical Maximum Price																●				
Construction																●	———	———	———	●

RMJ2

Project Development Stages

CM **GC**

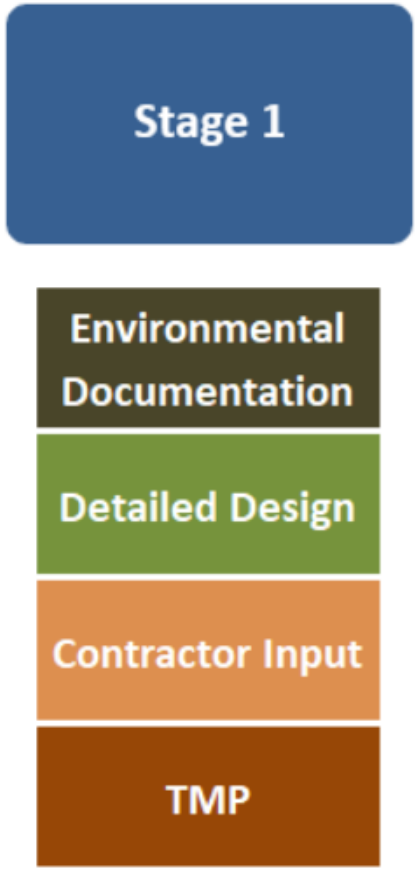
Request for Proposal → **Stage 1** → **Stage 2**

Stage 1
- Environmental Documentation
- Detailed Design
- Contractor Input
- TMP

Stage 2
- Construction

RMJ3

Stage 1: Preconstruction Services



- **Collaboration** - Contractor provides design assistance through collaboration with DOT&PF including:
  - Design innovations and efficiencies
  - Identifying construction impacts
  - Constructability reviews
  - Cost estimates and project pricing
  - Identifying and mitigating risks
  - Permitting assistance

RMJ4

Stage 1: Preconstruction Services

Stage 1

Environmental Documentation

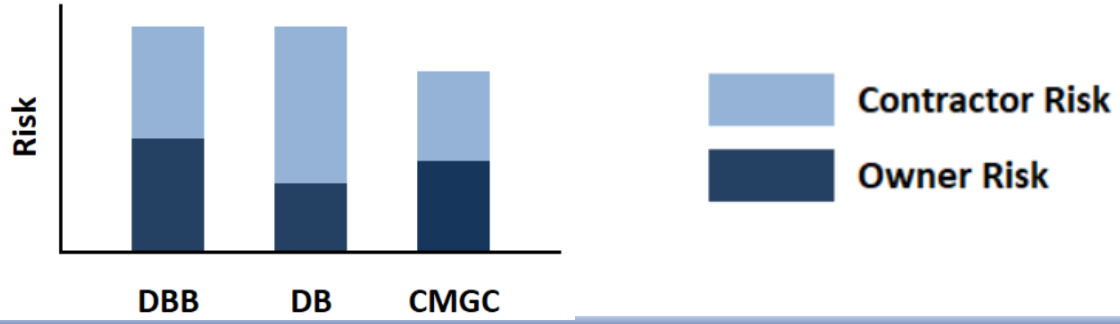
Detailed Design

Contractor Input

TMP

Risk Mitigation:

- Identify, track and eliminate risk
- Risks can be investigated and eliminated or minimized through collaboration with contractor
- Owner still retains control over design and contract administration



Stage 1: Preconstruction Services

Stage 1

Environmental Documentation

Detailed Design

Contractor Input

TMP

- **Value Added:**
  - Construction impacts identified in advance assist with permitting and defining right-of-way needs
  - Risks identified in advance reduce the likelihood of change orders and claims for overall project cost savings
  - Maximizes innovation and efficiencies
  - Improved quality with invested contractor as partner/collaborator

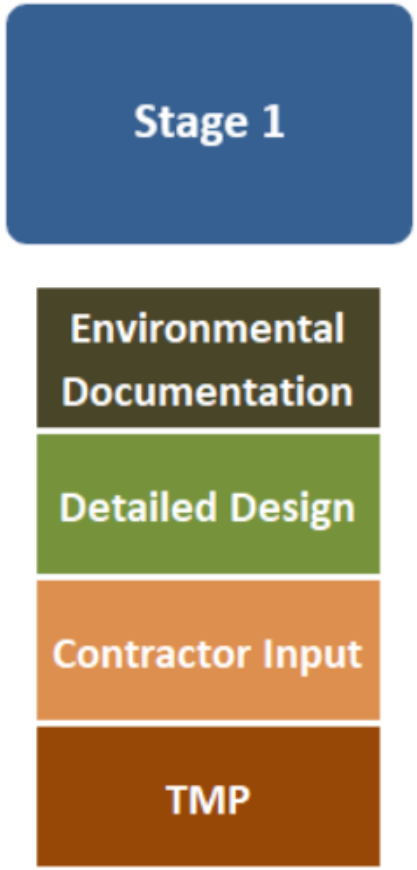
RMJ6

Stage 1: Preconstruction Services

- **Schedule:**
  - Permitting assistance from contractor on specific means/methods
  - Enhanced utility coordination, early identification of utility impacts and relocations
  - Develop construction sequencing and schedule

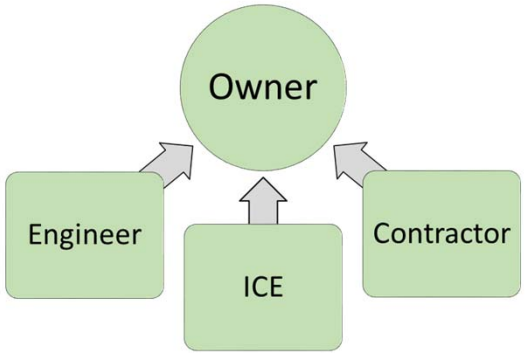
RMJ7

Stage 1: Preconstruction Services



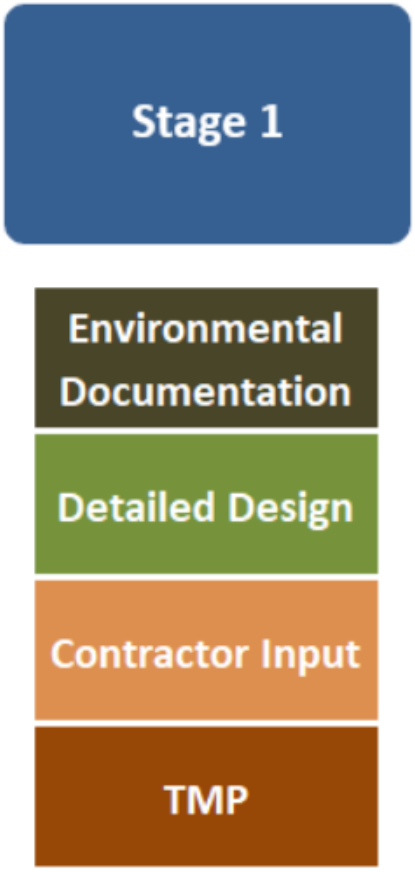
Fair price strategy used to arrive at TMP

- Engineer's estimate
  - Typically based on State averages
- Contractor Estimate
  - Based on production rates & unit price
- Independent Cost Estimate (ICE)
  - Cost validation
  - Reflects current market conditions



RMJ8

Stage 1: Preconstruction Services



- DOT&PF and Contractor negotiate Theoretical Maximum Price (TMP):
  - If agreement is reached – proceed to Construction
  - If agreement is not reached – proceed to advertise for Bids

Stage 2: Construction

Stage 2

Construction

- Begins with acceptance of Theoretical Maximum Price
- Procure materials, provide labor, equipment and supervision, and manage subcontractors to complete work

Post Construction Evaluation

- Innovation successes, failures & missed opportunities
- Risks encountered during construction
- Change orders & claims
- TMP vs. final construction costs
- Changes to original construction schedule

RFP

Request for Proposal

- ✓ RFP to select CMGC began advertising October 22, 2018
- ✓ 5 weeks to prepare response
- ✓ Proposals due November 26, 2018
- ✓ CMGC selection December 2018
- ✓ Opportunities available for subcontractors

RFP

Request for Proposal

- Part A – Request for Proposal
- Part B – Submittal Checklist
- Part C – Evaluation Criteria
- Part D – Proposal Form, Certification of Eligibility,
- Pre-Audit Statement
- Indemnification and Insurance
- Proposed Statement of Services

RFP

Request for Proposal

Part C in this CMGC RFP has two sections that require responses in submitted proposals:

- Section I - Technical Proposal
- Section III – Price

Responses are not required for criteria with a Weight of “0”

RFP

Part C - Section I Technical

- 15 page maximum written narrative responding to weighted criteria
- Section I Weighted Criteria:
  - Objectives & Services (15% weight)
  - Project Risks (20% weight)
  - Innovation (20% weight)
  - Management & Proposed Team (10% weight)
  - Past Performance (10% weight)
  - Distinct & Substantive Qualifications (10% weight)

Responses must be specific and directly related to the Contracting Agency's Proposed Statement of Services (Appendix B of the RFP)

RFP

Part C - Section III Price

- Labor Billing Rates (5% weight):
  - Contract Management - 10% of total labor effort
  - Project Management - 35% of total labor effort
  - Project Superintendent - 35% of total labor effort
  - Cost Estimating - 20% of total labor effort

Response will be scored as follows except that the ***score will be zero if a rate for each listed function is not provided by an Offeror***:

$$\frac{\text{(Lowest aggregate rate from all Offerors) x (MPP*)}}{\text{(Offeror's aggregate rate)}} = \text{Offeror's Criterion Score}$$

*MPP = Maximum Possible Points = (5) x (Number of Evaluators) x (Weight)

RFP

Part C - Section III Price

- Construction Fee Proposal (10% weight):
  - Fee expressed as a percentage and consists of **overhead**, **profit**, and **any other applicable indirect costs**
  - Profit does not need to be identified separately
  - Combine all three components to form a single fee percentage
  - Applied to all work directly performed by the prime contractor
  - A 5% fee (not the proposed fee) will be allowed for the Prime Contractor on subcontractor work or subcontractor-supplied materials
  - Joint ventures or prime/subcontractor partnerships will be treated as one entity and entitled to the proposed fee

Response will be scored as follows:

$$\frac{\text{(Lowest fee from all Offerors) x (MPP*)}}{\text{(Offeror's Fee)}} = \text{Offeror's Criterion Score}$$

*MPP = Maximum Possible Points = (5) x (Number of Evaluators) x (Weight)

Opportunities for DBE

State of Alaska is Race Neutral for Federal Highway Administration funded Projects.

Contractors are encouraged to utilize DBEs to ensure ADOT&PF meets its overall DBE utilization program goal of 8.83% to maintain Race-Neutral status.

RFP

Q&A and Addenda

- Q&A will be posted on the RFP website as supplemental information through an addendum to the RFP:
  - May need to re-download Zip File to get supplemental information
- Only those listed on the RFP holders list will be notified of addenda (Please Register)

For more information

- Project Manager

  Russell Johnson, P.E., ADOT&PF Design
  Tel: 907-451-5059
  E-mail: Russell.Johnson@alaska.gov
  Fax: 907-451-5126
  TDD: 907-451-2363

- Project Web site:

  http://dot.alaska.gov/nreg/whitshed/

- Procurement Web Site:

  http://dot.alaska.gov/rfpmgr/lg.cfm

Questions?

How can we help you provide the best proposal to ADOT&PF?