

TWIN TUNNELS WESTBOUND BORE WIDENING

IM 0703-408 - 19879

IM 0703-407 - 19880

CMGC SERVICES MANDATORY PRE-PROPOSAL MEETING

November 8, 2013 – CDOT HQ: 10am



Agenda

- Introductions
- **Twin Tunnels Westbound Bore Widening Project**
 - Project Team
 - Project Overview and Summary
 - Project Goals and Risks
 - Project Schedule
- CMGC 101
 - What is it?
 - Why did CDOT select CMGC for this projects?
- I-70 CSS – Context Sensitive Solutions
- Reminders, Updates, Questions and Answers

Introductions

- I-70 Corridor Program Engineer: Jim Bemelen, P.E.
- I-70 Environmental Project Manager: David Singer
- Project Manager: Benjamin Acimovic, P.E.
 - Design, Preconstruction, Administering Contract
- Resident Engineer: Russel Cox, P.E.
- Project Engineer: **TBD**
- Region 1 EEO Officer: Micki Perez

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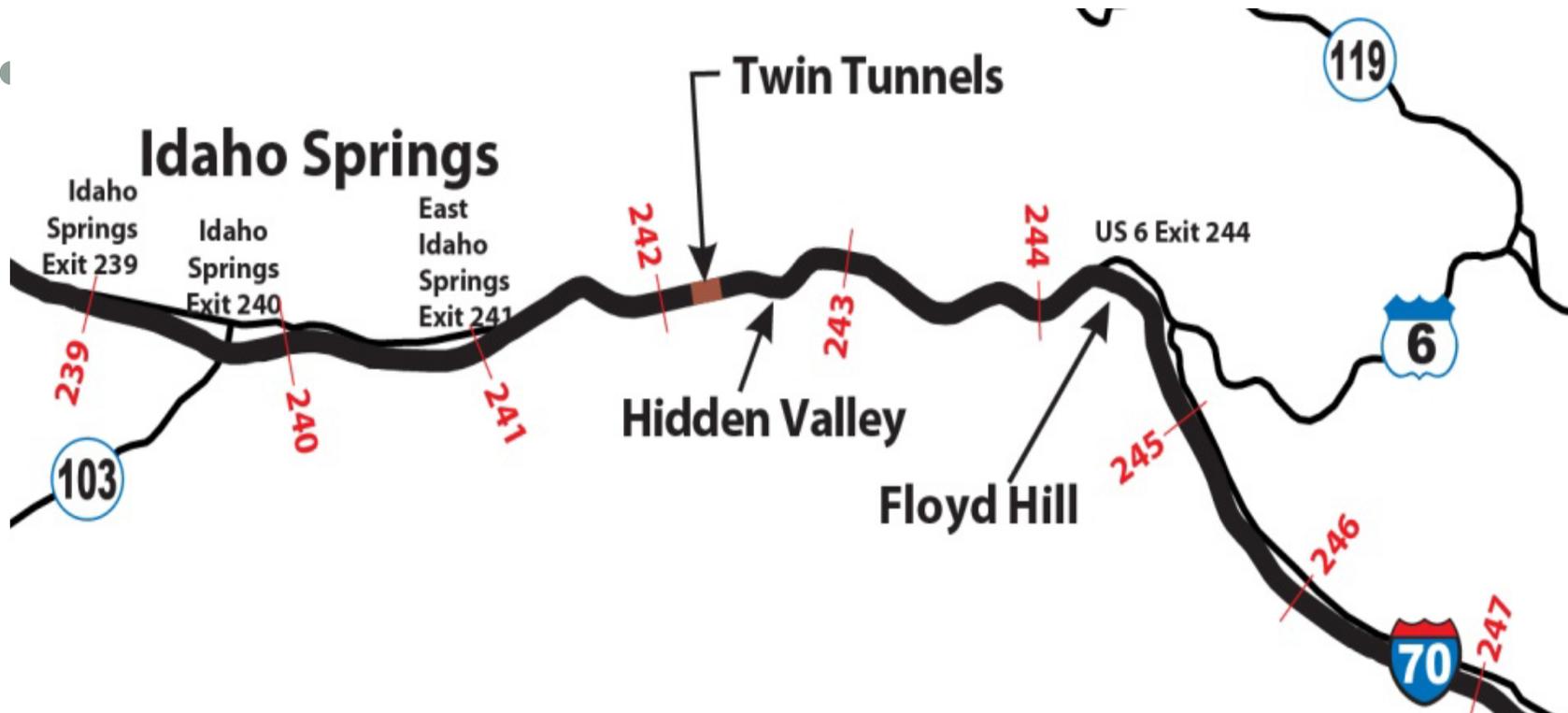
• Project Team Members

- CDOT Project Leadership and Specialty Unit Team Members
- Design Consultant Firm – Atkins
- CMGC Services Firm – *In Procurement*
- Independent Cost Estimator – In Procurement
- Project Leadership Team – CDOT, FHWA, Stakeholders
- Technical Team – CDOT, FHWA, Atkins, Stakeholders
- Issue Task Forces and Teams:
 - 106 – Historical
 - SWEEP – Stream and Wetland Ecological Enhancement Plan
 - ALIVE – A Landscape level Inventory of Valued Ecological assets
 - SCAP – Sediment Control Action Plan

TWIN TUNNELS WESTBOUND BORE WIDENING

- Project Overview and Summary
 - Widening the westbound bore of the Twin Tunnel F-15-BN to 53'.
 - Restore the frontage road, trailhead, and trail on CR314 after detour is no longer in use.
 - Other aesthetic and design criteria (CSS).
 - PLT and the Technical Team from the eastbound tunnel widening will transition into the Design and Construction of this effort.
 - No guaranteed construction funding at this time.

TWIN TUNNELS WESTBOUND BORE WIDENING



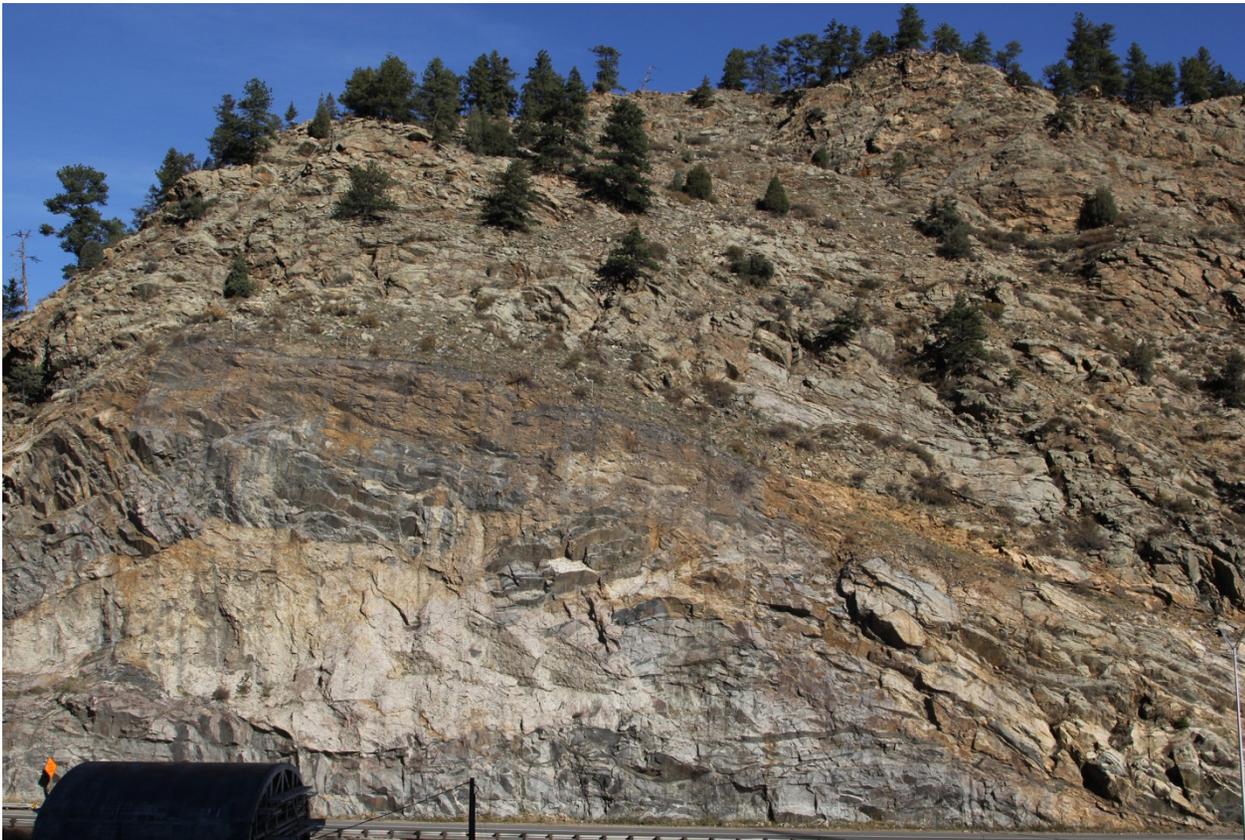
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- East Rock Cut #1



TWIN TUNNELS WESTBOUND BORE WIDENING

- East Rock Cut #2



TWIN TUNNELS WESTBOUND BORE WIDENING

- East Rock Cut #3



TWIN TUNNELS WESTBOUND BORE WIDENING

- West Rock Cut #1





TWIN TUNNELS WESTBOUND BORE WIDENING

- Rock Types Encountered in East Bore

TWIN TUNNELS WESTBOUND BORE WIDENING

Project Goals

1. SCHEDULE and BUDGET

- a. Meet the project schedule and budget to widen the westbound bore of the Twin Tunnels to a minimum of 54 feet with appropriate tapers and open fully for traffic by December 20, 2014, and to restore the frontage road, trailhead, and trail on CR314 after the detour is no longer in use, without sacrificing quality.

2. STAKEHOLDER INVOLVEMENT

- a. Provide meaningful stakeholder involvement as prescribed in the I-70 Mountain Corridor CSS.
- b. Facilitate and foster collaboration, communication, and partnerships among all members of the project team.

3. PUBLIC COMMUNICATION

- a. Provide accurate, meaningful, and timely communication.

4. SAFETY, MOBILITY, AND OPERATIONAL CHARACTERISTICS

- a. Improve safety, mobility, and operational characteristics in the project limits.

TWIN TUNNELS WESTBOUND BORE WIDENING

5. ENVIRONMENTAL

- a. Adhere to all environmental compliance requirements, including those documented in the Twin Tunnels final decision document, permitting stipulations and I-70 Mountain Corridor PEIS/ROD commitments.
- b. Implement innovative methods for environmental stewardship and community supported enhancements within the project scope, schedule, and budget.

6. QUALITY

- a. Design and construct a quality project that is consistent with the overall vision and commitments approved by the PEIS.

7. CONSTRUCTION

- a. Maintain mobility through the project during construction.
- b. Provide safe conditions for workers and the traveling public.

TWIN TUNNELS WESTBOUND BORE WIDENING

Project Risks

HIGH RISK - <75%

Construction and Constructability

- Financing
- Difficulty obtaining other agency approvals/agreements
- Political opposition
- Construction Schedule Risk
- Tunnel Blasting Overbreak Risk
- Rock Cut Overbreak Risk

Design

- Design Schedule Risk
- Traffic Demand Management (TDM) / Intelligent Traffic Systems (ITS)

Environmental Issues

- Delay in review and/or approval of environmental documentation

TWIN TUNNELS WESTBOUND BORE WIDENING

Project Risks

MEDIUM – 25 % < X < 75%

Design

- PS&E completion

Construction and Constructability

- Uncertainty in Construction unit costs (flooding impacts)
- Difficult or multiple contractor interfaces
- Material, labor, and/or equipment delays
- Work window restrictions (weather)
- Insurance (OCIP or Contractor)
- Unable to reach CAP

Environmental

- Unanticipated 4(f) or 106 issues
- Additional aesthetics issues (rock cuts/rock fall, portals, slope restoration)

See Project Delivery [Selection Matrix](#) on CMGC Website for more details.

TWIN TUNNELS WESTBOUND BORE WIDENING

Project Schedule

- Mandatory Pre-Proposal Meeting – November 8, 2013
- Submittal of Proposal – November 15, 2013 5:00 pm
- Short Listing Selection Panel Meeting – November 22, 2013
- Short List Approval & Notification of Candidates – November 22, 2013
- Cost and Bid Proposals Opening – December 4, 2013
- Selection Panel Mtg. (Mock Score Interviews) - December 4, 2013
- Chief Engineer Selection Approval & Contractor Notification – December 6, 2013
- Contract Approval/Execution – December 10, 2013
- Combined FIR/FOR – TBD, January, 2014
- Preconstruction Phase – October 2013 to April 2014
- Construction Phases – March 2014 to October 2015
- Construction Package 1 NTP: February 1st, 2014
- Construction Package 2 NTP: March 1st, 2014
- Westbound and Eastbound tunnels open to traffic – No later than December 20th, 2014

TWIN TUNNELS WESTBOUND BORE WIDENING

- **Project Schedule**

- Possible two packages with two CAP (Construction Agreed Price) proposals.
- Possible Co-Location during critical design points

CMGC 101: An Introduction

- CMGC (Construction Manager/General Contracting) is based off of the vertical CMAR or Construction Manager at Risk where the CMAR firm helps in design and then oversees the construction as the Construction Manager subbing out the construction work. In the CDOT CMGC delivery practice, the Contractor or CMGC firm does not perform as both the General Contractor and the Construction Manager during construction.
- A contracting method that involves a Contractor in both the design and construction phases of a project.
- The intent is to form a partnership with CDOT, Stakeholders, the Design Consultant, and the Contractor. The focus is on a partnership in which mitigates risk, improves the construction schedule, streamlines the design process, and produces a project that adheres to the budget. An important role of the Contractor is to help acquire the constructability information to reduce risk in the design and construction phase.

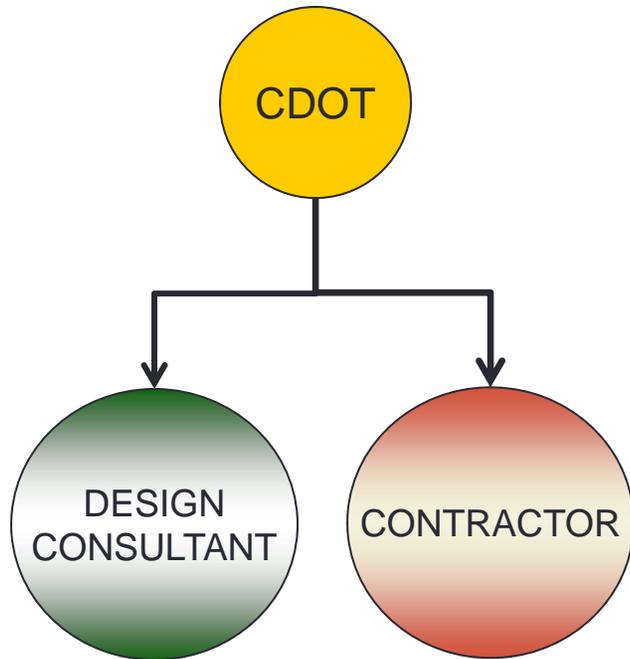
CMGC 101: An Introduction

- The Contractor acts as an advisory or subject matter expert in the area of construction, constructability, construction estimating, risk assessment/mitigation, and construction phasing in the design phase.
- The Contractor, if a Construction Agreed Price (CAP) is accepted, then serves as the General Contractor during the appropriate construction phase.
- All construction bid packages must be severable and biddable.
- If CAP proposal is not accepted, CDOT may choose to bid the project out. CMGC Firm would not be allowed to bid the project as prime general contractor.

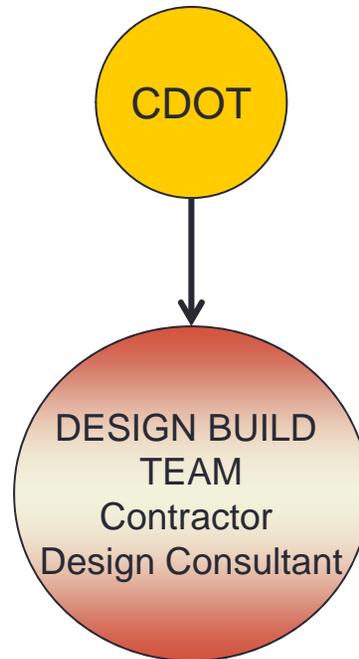
CMGC 101: An Introduction

- What is the different between D-B-B, D-B, and CMGC?

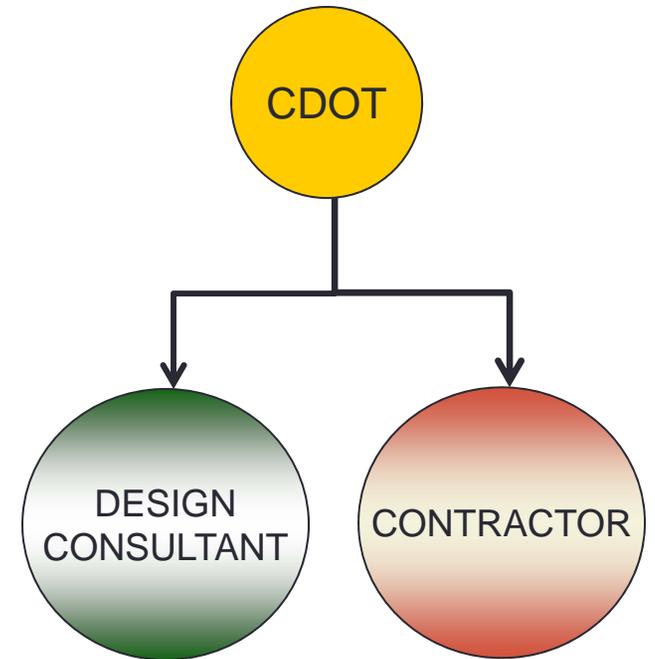
- D-B-B



- D-B



- CMGC



CMGC 101: An Introduction

- An RFP “AD Date” is announced
- Potential proposers start researching
 - Visit the site, start looking at risks, Letter of Interest (LOI)
 - Meet with stakeholders and CDOT/Design staff when requested.
- During 4-6 week (or less) AD period – limited contact with PM
 - Mandatory “Pre-Proposal” held at 50% of AD period
- Submit a Proposal that includes a Statement of Interest.
- Shortlist Selection for Interview phase w/ Team challenge
- Interview Phase with 3-4 Short Listed Firms
- CMGC Management Price Percentage is submitted and opened only after all qualifications (qualitative) scoring is complete and fixed.
- Flat Fee Negotiation and Award.
- Pre-Construction Phase begins
- Ends with Final Construction CAP
- Construction Contract starts

CMGC 101: An Introduction

- Does the Owner and Stakeholder Team see value in having a “Well-Qualified Contractor” sitting at the table with the Designer and the Owner to:
 - Provide input on constructability, value engineering, materials, and phasing
 - Provide input on Target Risk areas and minimize, eliminate or transfer to the appropriate entity, and develop a Risk Register
 - Have “open” discussions about costs and schedules (Open Cost Model).
- Develop a strong relationship with the entire project team, including external stakeholders like utilities and local government groups
- It’s vital to use partnering on these CMGC projects.

“CMGC take partnering to a whole new level.”

“No blame only solutions.”

June 2011 – FHWA CMGC Peer Exchange

CMGC 101: An Introduction

- The Design Consultant develops a design for the project while collaborating with the Contractor and CDOT.
- Team develops Risk Register, Open Cost Model, and tracks innovations.
- ICE – Independent Cost Estimator is checking all estimates.
- After the FOR Meeting (85-90% complete) the Contractor submits a CAP (Construction Agreed Price). CDOT negotiates with the Contractor and either accepts or rejects the CAP. There can be multiple attempts at reaching the CAP.
- Multiple CAP packages for phased construction or long lead time items.
- Each CAP package must be a completed bid package that could be advertised. Well defined beginning and ending.

Why CMGC on Twin Tunnels?

- Initial Risk Assessment, Goal Development, and Perform analysis with Project Delivery Selection Matrix

PROJECT DELIVERY METHOD OPPORTUNITY/OBSTACLE SUMMARY			
	DBB	DB	CMGC
Primary Evaluation Factors			
1. Initial Project Risk Assessment	+	-	+
2. Project Complexity & Innovation	-	-	++
3. Delivery Schedule	+	X	++
4. Cost	+	N/A	+
5. Level of Design	+	X	++
Secondary Evaluation Factors			
6. Staff Experience/Availability (Owner)	Pass	N/A	Pass
7. Level of Oversight and Control	Pass	N/A	Pass
8. Competition and Contractor Experience	Pass	N/A	Pass

Key:

- ++** Most appropriate delivery method
- +** Appropriate delivery method
- Least appropriate delivery method
- X** Fatal Flaw (discontinue evaluation of this method)
- NA** Factor not applicable or not relevant to the selection of project delivery

Why CMGC on Twin Tunnels?

- Key Points:
 - Schedule Driven - CMGC provided opportunities for multiple packages and rapid delivery. Phased CAPs can be utilized.
 - Complexity and Innovation – Lots of complexity and opportunities for innovation.
 - Risk Identification and Mitigation was critical.
 - Level of Design – 0%.

I-70 CSS – Context Sensitive Solutions

- CDOT has committed to using [Context Sensitive Solutions](#) (CSS) on the I-70 Mountain Corridor. The guidance contained in this Web site includes the Context Statement, the Core Values, a Decision-Making Process, stakeholder comments, background information, maps, plans and legal commitments, and other tools to implement CSS throughout the corridor.
- "Context Sensitive Solutions (CSS) is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. CSS is an approach that considers the total context within which a transportation improvement project will exist. CSS principles include the employment of early, continuous and meaningful involvement of the public and all stakeholders throughout the project development process."

I-70 CSS – Context Sensitive Solutions

- The heart of CSS is a 6 step process:
 - Step 1: Define Desired Outcomes and Actions
 - Step 2: Endorse the Process
 - Step 3: Establish Criteria
 - Step 4: Develop Alternatives or Options
 - Step 5: Evaluate, Select, and Refine Alternative or Option
 - Step 6: Finalize Documentation and Evaluate Process
- Involvement of Stakeholders with a Project Leadership Team and Technical Team.
- Mineral Belt Aesthetic Guidelines and Design Guidelines.

I-70 CSS – Context Sensitive Solutions

- When do we do CSS?
 - Environmental Studies
 - Feasibility Studies
 - Preliminary Design
 - Final Design
 - Construction
 - 6 Steps and criteria for each

Links:

- Websites
 - <http://www.coloradodot.info/projects/i70twintunnels>
 - <http://www.coloradodot.info/projects/contextsensitivesolutions>
 - <http://www.coloradodot.info/projects/i70twintunnels/WBwidening>

RFP Questions and Answers

- Question No. 1:
- Section 3.2.A.1.i.b.2 subsections i through vii (page 24) identifies five key personnel positions as well as two additional key personnel to be identified by proposer for a total of seven key personnel. Subsection vii also says to provide resumes for the key personnel. However, Section 2.8.I (page 21) says resumes should be limited to up to the five primary members of the team. Should resumes be included for all seven key personnel or the five listed on page 24 or the five we determine to be "primary members of the team"?
- **CDOT RESPONSE: Resumes and references for all seven key members should be included. This will be adjusted in Addendum #2.**

RFP Questions and Answers

Question No. 2:

- Can a font other than Times New Roman, such as a sans serif (Arial-like), be used for graphics, charts/organization charts, and tables?
- **CDOT RESPONSE:** The RFP states: All submittals shall use minimum font size of 11 Times New Roman and minimum font size of 10 Time New Roman on charts, graphs, and figures.

RFP Questions and Answers

- Question No. 3:
- Does CDOT have any electronic topographic information around the Twin Tunnel WB tunnel?
- **CDOT RESPONSE:** The 2011 survey will be posted on the website today.

RFP Questions and Answers

- Question No. 4:
- Can the RFP deadline be extended to November 22nd, 2013?
- **CDOT RESPONSE:** CDOT will not extend the CMGC Services RFP deadline. CDOT needs to bring in a contractor as soon as possible to determine if the proposed schedule is feasible.

Quick Reminders and Notes

- RFP Addendum No 2 and Q&A No 1 will be posted to the website shortly after this meeting.
- New information will be posted today. Check the website every day
- Project RFP Website:
<http://www.coloradodot.info/projects/i70twintunnels/WBWidening>
- SIGN IN! – This is a requirement of submitting a proposal.
- Proposals are due November 15th, 2013, 12:00pm Mountain

Questions and Answers

- General Questions about the Project and the RFP?
- Q & A + Addendum No. 1 is on website now.
- Q & A + Addendum No. 2 will be posted this afternoon - November 8, 2013 in order to include questions from this meeting.
- Additional information will be posted this afternoon on the website.
- Questions and comments will not accepted after this meeting unless critical in nature to the proposal process.