



BIRD CREEK PONY TRUSS BRIDGE REPLACEMENT
CONSTRUCTION MANAGER – GENERAL
CONTRACTOR (CM/GC)

REQUEST FOR PROPOSALS
No. 21-08-208877

APRIL 23, 2021

ALASKA RAILROAD CORPORATION
327 WEST SHIP CREEK AVENUE
ANCHORAGE, ALASKA 99501



ALASKA RAILROAD CORPORATION
327 W. Ship Creek Ave.
Anchorage, AK 99501

April 23, 2021

Request for Proposals 21-08-208877
Bird Creek Pony Truss Bridge Replacement

Response Required: This page must be completed and returned ensuring receipt of future addenda or additional information. Please email this form to HopeM@akrr.com. All addenda will be forwarded to the contact name and number listed below.

Firms that have not returned the cover sheet will not be informed of addenda and will only be alerted of addenda by checking with the ARRC Procurement Officer or by checking ARRC's internet site: www.alaskarailroad.com, select Suppliers and then Solicitations. Proposers must acknowledge the receipt of all issued addendums in their proposal/bid submittal as required.

Company Name _____

Mailing Address _____

City, State, Zip _____

Contact Name _____

Phone Number _____ Fax _____

Email Address _____

The Alaska Railroad Corporation web site www.alaskarailroad.com



ALASKA RAILROAD CORPORATION
327 W. Ship Creek Ave.
Anchorage, AK 99501

THIS IS NOT AN ORDER

RFP NUMBER: 21-08-208877

DATE OF RFP: April 23, 2021

Request for Proposals No. 21-08-208877

The Alaska Railroad Corporation (ARRC) is soliciting competitive sealed proposals from qualified general contractors for the following Project:

BIRD CREEK PONY TRUSS BRIDGE REPLACEMENT

Sealed proposals must be received by ARRC no later than 3:00 p.m., local time, on May 14, 2021 at:

Alaska Railroad Corporation
Supply Management Department
327 W. Ship Creek Ave.
Anchorage, AK 99501

One (1) original and one (1) electronic copy in a .pdf format of each proposal must be submitted. The sealed envelope or package used in submitting a proposal shall be clearly marked with the following information:

1. Proposer's Name
2. RFP No. 21-08-208877
3. Proposal for Construction Manager/General Contractor (CM/GC) Services for Bird Creek Pony Truss Replacement
4. Date & Time Scheduled for Receipt of Proposals

Proposals received after the time and date set forth above shall be rejected. All proposals submitted in response to this solicitation must be signed by an individual with the legal authority to submit the offer on behalf of the company.

A non-mandatory pre-proposal meeting and site visit will be held at 1:00 p.m. Alaska Time on May 3, 2021 at Bird Creek Alaska. To participate in this meeting and site visit, interested firms must provide full name(s) and cell telephone number(s) for proposed attendees to the listed email address for communications by **4:00 p.m. April 30, 2021**. Attendees will be responsible for their own transportation to the site. Attendees should plan on being at the pull out by 12:45 p.m. A representative of the ARRC will conduct the pre-proposal meeting and will provide an escort onto ARRC property for the site visit. Hardhats, safety vests, protective footwear, and safety glasses will be required, and must be supplied by attendees. This is not a mandatory meeting, although interested firms are encouraged to participate.

This Request for Proposal is not to be construed as a commitment of any kind nor does it commit the ARRC to pay any costs incurred in the submission of an offer or for any other costs incurred prior to the execution of a formal contract.

The ARRC may award a contract resulting from this solicitation to the responsible Offeror whose offer conforming to this solicitation will be most advantageous to the ARRC.

ARRC may reject any or all offers if such action is in the best interest of ARRC, and waives informalities and minor irregularities in offers received. ARRC may award a contract on the basis of initial offers without discussions. Therefore, each initial offer should contain the Offeror's best terms from a cost or price and technical standpoint. Any contract resulting from this solicitation shall incorporate the Standard Terms and Conditions contained in this solicitation package.

IMPORTANT: Work associated with this Request for Proposals will be funded in part by a Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grant from the Federal Railroad Administration (FRA) an operating administration of the United States Department of Transportation. Accordingly, any contract resulting from this solicitation shall incorporate the Required Provisions for Federal-Aid Contracts including the Buy America provisions stated in this RFP.

ARRC shall not be held responsible for bidder's lack of understanding of what is required by this bid. Should a bidder not understand any aspect of this bid, or require further explanation, or clarification regarding the intent or requirements of this bid, it shall be the responsibility of the bidder to seek guidance from the ARRC.

Protests Per ARRC Procurement Rule 1800.2

A protest based on alleged improprieties or ambiguities in a solicitation must be filed at least 10 days before the due date of the bid or proposal, unless a later protest due date is specifically allowed in the solicitation. If a solicitation is made with a shortened public notice period and the protest is based on alleged improprieties or ambiguities in the solicitation, the protest must be filed before the due date of the bid or proposal.

The protest of an invitation to bid or a request for proposals in which a pre-bid or pre-proposal conference is held within 12 days of the due date must be filed before the due date of the bid or proposal if the protest is based on alleged improprieties or ambiguities in the solicitation. A protest based upon alleged improprieties in an award of a contract or a proposed award of a contract must be filed within 10 days after a notice of intent to award a contract is issued by the procurement officer.

ARRC Disadvantaged Business Enterprise (DBE) Program: ARRC is an equal opportunity corporation that encourages the participation of DBEs as prime contractors and subcontractors on its contracts funded in whole or in part by the Federal Railroad Administration (FRA). The ARRC has a race neutral DBE Program and does not set DBE goals on individual solicitations. Nonetheless, the ARRC aspires to achieve an overall DBE participation of 3.0% in federal fiscal years 2019-2021 on contracts funded by agencies within the U.S. Department of Transportation. If this contract is funded in whole or in part by funds from the FRA, it is imperative that you consult the Federal Terms and Conditions portion of this solicitation. It is the Offeror's responsibility to take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that DBEs have the maximum possible opportunity to compete for and perform the Contract. DBE

requirements do not apply to Pre-Construction Services. Use of a DBE during Pre-Construction services does not apply towards the required DBE Percentage.



The Alaska Railroad is a member of Green Star (<http://www.greenstarinc.org/>). ARRC earned an initial Green Star Award in 1994 and a Green Star Air Quality Award in 2007. The Alaska Railroad considers Green Star membership to be a positive business attribute, and regards a Green Star award as a tangible sign of an organization's commitment to environmental stewardship and continual improvement within its operations.

Please direct all responses and/or questions concerning this solicitation to Michele Hope, Alaska Railroad Corporation, Supply Management Department, 327 W. Ship Creek Avenue, Anchorage, AK 99501, telephone number 907-265-4467, fax number 907-265-2439 and email address HopeM@akrr.com.

Best Regards,

Michele Hope

Michele Hope
Contract Administrator

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Section 1 – Introduction

The Alaska Railroad Corporation (ARRC) is accepting proposals entities (Offerors) interested in providing Construction Manager / General Contractor (CM/GC) services for a railroad infrastructure improvement Project at ARRC MP 86.6. The structure is located on ARRC's main line connecting the ports of Seward and Whittier with Anchorage. The structure is located within the Municipality of Anchorage on the railroad's Kenai Subdivision between Seward and Anchorage, approximately 28 miles south of downtown Anchorage. Figure 1 – Project Location shows the location of the bridge in relation to the Alaska Railroad network.



Figure 1 – Project Location

The bridge crosses Bird Creek where it flows into the Turnagain Arm. The Project location is at Latitude/Longitude 60°58'22.05"N and 149°28'1.78"W. The entirety of the Project work will occur inside ARRC's right-of-way. The railroad right-of-way is owned, operated and maintained by ARRC.

ARRC staff, with the assistance of a design consultant, is in the process of preparing design plans. The design phase however has not started. Currently, survey and geotechnical data collection is slated to begin in the Spring of 2021. ARRC will procure a separate Independent Cost Estimator (ICE), with

whom ARRC and the CM/GC Contractor will collaborate with throughout the design phase of the Project. The CM/GC Contractor is expected to perform the Pre-Construction services outlined in Section 3.2 – Pre-Construction (Phase 1) and be responsible for the final construction of the Project if an agreement on price is reached.

As the design nears completion, (*approximately 95% final plans*) the selected CM/GC Contractor will prepare and submit a Construction Services Cost Proposal (CSCP) in accordance with Section 3.8 – Construction Services Cost Proposal (CSCP) in order to begin final price negotiations. Subject to a successful price negotiation with ARRC, the CM/GC Contractor will be awarded a Contract for the construction portion of the Project and will be responsible to complete the construction while directly performing at least forty (40) percent of the work. The remaining portion of work may be completed by subcontractors. If an acceptable CSCP cannot be reached, the Project will be advertised following ARRC's normal design-bid-build process.

Section 1.1 – CM/GC Acronyms and Definitions

Wherever used in the Contract Documents the following terms, or pronouns in place of them, the intent and meaning, unless a different intent or meaning is clearly indicated, shall be interpreted as set forth below.

The titles and headings of the articles, sections, and subsections herein are intended for convenience of reference and will not govern their interpretation. Whenever used in the Specifications or other Contract Documents the following terms have the meaning indicated which are applicable to both the singular and plural thereof. Working titles that have a masculine gender are intended to refer to persons of either sex.

Terms not defined either herein, or within Appendix A - ARRC CM-GC Acronyms and Definitions, shall have their ordinary accepted meanings within the context that they are used. Words that have a well-known technical or trade meaning when used to describe work, materials or equipment shall be interpreted in accordance with such meaning.

Section 2 – Project Background

Section 2.1 – Project Information

The Project will improve railroad safety, efficiency, and reliability on the Alaska Railroad, a Class II railroad that is owned and operated by ARRC, a public corporation of the State of Alaska. The bridge is part of the railroad's main line between Anchorage and the Ports of Whittier and Seward, three key traffic and revenue generating locations. Approximately 46% of the Alaska Railroad's total annual traffic crosses the bridge, representing about \$49 million of annual revenue, which is approximately 40% of ARRC's total annual railroad revenue. Traffic levels across the bridge vary by season, from as many as 2 to 3 trains per day in the winter to between 5 and 12 trains per day in the summer including 4 to 8 daily passenger trains. More than a quarter-million railroad passengers per year and more than 12,000 loaded freight cars per year cross the bridge.

The existing Bird Creek Bridge is one of the last remaining operational impediments between Anchorage and the rest of the North American rail network that prevents ARRC from the unrestricted interchange of 286,000-pound rail cars and articulated intermodal flatcars carrying double-stacked containers. As a result, Alaska's freight rail shippers must use light-loaded cars weighing 263,000 pounds, requiring more freight cars to ship the same amount of material. This condition raises transportation costs, equipment costs, and inventory costs for Alaska companies engaged in domestic and international trade, limiting their ability to remain competitive, and increasing the costs of consumer goods shipped to Alaska. The practice of light-loading freight cars, and the resulting need to use more cars to haul the same amount of freight, contributes to crowding and congestion on ARRC's rail-barge connections, and requires ARRC to run longer trains on its network, and spend more time assembling and classifying trains at its yards in Seward, Whittier and Anchorage, increasing costs, transit times, and congestion. Longer trains can also create longer roadway delays at the Anton Anderson Tunnel, a highway/rail tunnel providing access to Whittier that is shared by the Alaska Railroad and the Alaska Department of Transportation.

Section 2.2 – Project Team

The Project Team, as referenced herein, is composed of ARRC staff, ARRC's Design Consultant (*to be determined*), the ICE, the CM/GC Contractor, potentially key subcontractors to said Contractor, and any additional Project stakeholders. The CM/GC Contractor is highly encouraged to have personnel experienced in Project management and railroad bridge replacement. The roles of the aforementioned parties is outlined in Section 3.3 – Pre-Construction Roles and Responsibilities.

Section 2.3 – Project Goals

The following Project goals are expected to be incorporated into the construction phase of the Project. Failure to address or determine the means to accomplish these goals during the pre-construction phase may lead to the Project being advertised by ARRC's traditional design-bid-build process instead of having the Project constructed by the selected CM/GC Contractor.

1. Minimize the number of required scheduled rail service outages to accommodate the necessary construction activities.
2. Minimize the footprint of the construction impact areas and haul routes to mitigate environmental impacts.

3. Minimize impacts to the Alaska Department of Transportations and Public Facilities (AKDOT&PF) infrastructure (*Seward Highway*) that runs parallel to ARRC’s mainline.
4. Minimize impacts to the pedestrian path that runs parallel to ARRC’s mainline.
5. Minimize impacts to the recreational use of the waterbody upstream of the Project site.
6. No permanent impacts outside of the established railroad right of way.
7. Ensure commitments made in the NEPA document are followed.
8. Complete the Project prior to August 01, 2023.

Section 2.4 – Anticipated Project Schedule

Note that the Project schedule (Figure 2 – Anticipated Project Schedule by Task.) outlined herein is subject to change.

Task	Tentative Date
Solicit RFP	April 23, 2021
Due date for RFP	May 14, 2021
Anticipated Notification of Selection of CM/GC	May 26, 2021
Pre-Construction Services Price Proposal Meeting	May 31, 2021
Pre-Construction Services Fee Negotiation End	June 9, 2021
Notice to Proceed / Award of Pre-Construction Phase	June 22, 2021
Development of Plans and Specifications	45 days from NTP (~July 29, 2021)
Submit CSCP	15 days from Development of Plans and Specifications
Negotiate Final Price / CSCP	September 6 – October 8, 2021
Construction Letting (<i>if no final price agreement</i>)	November 5, 2021
Procurement of sub- and superstructures	December 27, 2021
Begin Construction	March 3, 2023*
Complete Construction	August 01, 2023

Figure 2 – Anticipated Project Schedule by Task.

* Start date will be determined during the design phase of the Project in order to meet the required completion dates.

Section 3 – Project Scope of Work

Section 3.1 – Design Responsibility

The CM/GC Contractor is being selected early in the Project to join the Project Team. The CM/GC Contractor will not be expected to be the designer of record for the Project, but is expected to provide the Project Team with construction expertise and technical experience to assist in Project decision-making, ensure the technical challenges are addressed, and provide input on items affecting construction costs, schedule, constructability and market conditions. ARRC currently has firms, available through its AELS Term Service Contracts, that are intended to be utilized to perform the design work.

Section 3.2 – Pre-Construction (Phase 1)

The start of the Pre-Construction Phase marks the beginning of the collaborative partnering between ARRC, the Design Consultant, and the Contractor. The unique roles and defined responsibilities of each member during the Pre-Construction Phase of the Project are described **Section 3.3 – Pre-Construction Roles and Responsibilities**. The Project Team's focus should be on partnership and open communication to minimize risk, review constructability, improve the Project schedule, try new innovations, and maximize work within the budget.

The CM/GC Contractor shall consult with the Project Team during the design phase in order to develop, implement, and maintain a spirit of cooperation and open communication among the parties so that the goals and objectives of each are clearly understood, potential problems are resolved promptly, and upon completion, the Project is deemed a success by all. The Pre-Construction Services Fee (*Contractor's Pre-Construction Services Cost Proposal*) is described in Section 7.1. The CM/GC Contractor shall deliver Pre-Construction services by performing, at a minimum, the following:

Review ARRC standard drawings (*attached herein*) for the 125' Through-Plate Girder (TPG) superstructure that is to be utilized on this Project. ARRC is looking for the CM/GC Contractor's input on the structure options and layout when considering the site, early construction cost opinion/estimate, construction constraints, and means and methods. The CM/GC Contractor will provide to ARRC their recommended option and layout in writing with justification.

Review and analyze in-progress design, details, and specifications developed by ARRC's design consultant and provide input. ARRC is looking for the CM/GC Contractor's input on site access, equipment staging, material delivery methods, off site construction staging demands, etc.

Prepare, and update as necessary, the Risk Management Plan and its associated Risk Register.

Identify potential construction and constructability issues and risks for each to assist the Project Team in selecting the appropriate design for the Project.

Provide alternate design concepts and offer suggestions with respect to the means and methods, materials, innovations, maintaining traffic concepts, and construction sequencing to improve efficiency, cost effectiveness, completeness or clarity

Review the Project site with ARRC design and construction staff within two (2) weeks of award of the Pre-Construction phase, and prior to the final plan review meeting.

Provide input to the Project Team regarding current construction industry practices, labor market, and material and equipment availability.

It is allowable to use subcontractors or design consultants to supplement Pre-Construction services in order to provide necessary expertise. The hours for the CM/GC Contractor's design consultant are expected to be limited. Critical or key subcontractor involvement is desired during the Pre-Construction phase.

Notify the ARRC Project Manager, in writing, of all problems, conflicts, and/or deficiencies identified during the review and evaluation of design drawings.

Assist the ARRC Project Manager and design team in resolving problems, conflicts, and/or deficiencies identified during the review and evaluation of design drawings.

Provide construction estimates, and supporting documentation if requested, when the plans are 35 percent complete, 65 percent complete, 95 percent complete, and at the final cost negotiation stage. Unless otherwise approved by ARRC, the estimates will provide a unit price on standard AKDOT&PF pay items, where applicable. The construction estimate submittal package will include a coordination letter stating all the CM/GC Contractor's assumptions including the breakdown/distribution of indirect costs, personnel (*crew size, shift length*), equipment and rates (*e.g. blue book rates*), materials including sales tax, subcontracts, and any other considerations (*inflation, contingency, etc.*). If items of work cannot be estimated at these stages, provide a report of what the items are, the reasons a price cannot be estimated, and factors which will impact the item's pricing.

Provide a QA/QC document to ARRC within two (2) weeks of award of the Pre-Construction phase. This document should provide details on how the CM/GC Contractor will review the plans, perform quantity take offs, perform constructability reviews, help identify and mitigate environmental impacts, make recommendations, etc.

Provide a written report of Project related items or aspects ARRC should review or reconsider. At a minimum, the reports are to be submitted to the Project Manager after reviewing the 35% and 65% plans and specifications.

Submittal of Shop Drawings: If approved by the ARRC Project Manager, the CM/GC Contractor can provide shop drawings for review, comment and approval during the Pre-Construction phase.

Develop a preliminary Schedule of Values. At a minimum, the Schedule of Values must incorporate the below items unless otherwise approved by ARRC. If proposed, other payment mechanisms will be considered for approval.

Be described, in writing, with sufficient detail of the specific work included in the Schedule of Value Item and the limits of the Schedule of Value items so it can be accurately performed, tracked, invoiced and paid.

Identification of when payment can be requested, and payment can be paid.

Identify the estimated dollar value associated with the Schedule of Value Item.

Be able to be identified in a Critical Path Method (CPM) Schedule.

Develop a baseline CPM schedule during design using Microsoft Project, unless other software is approved for use to by ARRC. This schedule will be used to analyze the impacts of maintaining traffic

alternatives, track outage durations, and demonstrate the constructability of the Project within the allotted Project milestones. The Contract will include the Special Provision for Critical Path Method Network Schedule, so it is expected that the CM/GC Contractor, if awarded the Contract, will be able to use the baseline CPM schedule developed during design as the baseline CPM schedule for construction. In the event the CM/GC Contractor is not awarded the Contract, the design CPM schedule will become the property of ARRC.

Provide a final review and evaluation of the final plans and construction documents. Provide a written final review of the plans to demonstrate that the final plans, specifications, items of work, and quantities have been reviewed and are reasonable and accurate to complete the Project. The Project superintendent must be involved in the review and evaluation of construction documents.

Provide staff to assist in the Pre-Construction phase that will be active and have a lead role in the field during construction.

Work with ARRC to develop a communication plan within seven (7) days after the authorization to proceed with Pre-Construction services. The communication plan should clearly demonstrate how the CM/GC Contractor and ARRC will work to convey information and establish a clear line of communication. The plan should also demonstrate how the CM/GC Contractor and ARRC plan to include all parties with interest in the Project, including, but not limited to the public, private utilities, and businesses. The plan will serve as the baseline for communication and be followed for both the Pre-Construction services and services during construction.

The CM/GC Contractor should expect to attend, at a minimum, twenty (20) Pre-Construction coordination meetings with the Project Team. The expected meetings are as follows and shall generally follow the flow chart attached herein (Attachment 2 - ARRC Pre-Construction Phase Flowchart):

1. Project Scoping Workshop.
2. Partnering Workshop.
3. Initial On-Site Field Review Meeting.
4. Existing Structure Documentation Review Meeting.
5. Record drawings
6. Preliminary ARRC Transportation / Maintenance-of-Way Groups Coordination Meeting.
7. Value Engineering (VE) Workshop.
8. Preliminary Plan Review Meeting (Design Review - *FIR Meeting*).
9. Preliminary Estimate Meeting (*Cost Model Review Meeting*).
10. Preliminary Constructability and Staging Review Meeting.
11. Pre-Final Plan Review Meeting (Design Review - *DOR/FOR Meeting*).
12. Pre-Final Estimate Meeting (*Cost Model Review Meeting*).
13. Pre-Final On-Site Field Review Meeting (*Design Review*).
14. Pre-Final ARRC Transportation / Maintenance-of-Way Groups Coordination Meeting
15. Final Plan Review Meeting (Design Review - *DOR/FOR Meeting*).
16. Permit Meeting with Regulatory Agencies.
17. Approximately three (3) design review meetings. The design review meetings are intended to be conducted in person.
18. Final Price Negotiation Meetings (*minimum of two*).

Section 3.3 – Pre-Construction Roles and Responsibilities

3.3.1 – ARRC Project Manager

In CM/GC, the ARRC Project Manager takes the lead role in managing and facilitating the Pre-Construction Phase. ARRC Project Manager will be aware that their role in a CM/GC Project may require more active team coordination and direct involvement than other Project delivery methods. The ARRC Project Manager is responsible for guiding design decisions while overseeing the collaborative effort between the Design Consultant and Contractor. The ARRC Project Manager is responsible for facilitating this collaborative process through active communication and Project Team meetings that include a Partnering Workshop, Project Scoping Workshop, Value Engineering (VE) Workshop, Design Review Meetings, and Cost Model Review Meetings. The ARRC Project Manager also leads the Cost Model and estimate review process, questioning both the Contractor and ICE estimates. The ARRC Project Manager serves as a facilitator between team members and potentially as the lead negotiator for ARRC during the GMP Proposal process.

3.3.2 – Design Consultant

In CM/GC, as with traditional DBB Projects, the Design Consultant contracts directly with the Owner and takes direction from the Owner in development of the design. In CM/GC, the role of the Design Consultant does not change as much as the role of the Owner for a CM/GC Project. As in a DBB, the Design Consultant's main roles are to design the Project, manage the design, and communicate with the ARRC Project Manager. However, the Design Consultant does give up some of the control over design decisions due to the higher involvement of an Owner. On a CM/GC Project, the Design Consultant also is required to work with the Contractor and ARRC, manage the iterative design process that is vital to CM/GC success, and expect changes in the design. The Design Consultant must keep the ARRC Project Manager informed and involved in all design reviews and risk decisions.

3.3.3 – Independent Cost Estimator

The ICE is ARRC's primary estimator during the Pre-Construction Phase of the CM/GC delivery method. The ICE uses production-based estimates and solicits quotes in the same manner that a Contractor estimates and bids a Project. The ICE has the responsibility to question the Contractor's prices, quotes, methods, and estimate in order to ensure that ARRC is receiving a fair and open price from the Contractor. If the Project has specialty work that is outside of the ICE's expertise, the ICE is required to use specialty estimators to provide accurate cost estimates. The ICE is also expected to know the local markets and network with Subcontractors and DBEs to build a trusted network to solicit quotes. The ICE needs to work with the Contractor to understand the competitive market near the Project site, regionally, nationally, and globally. The ICE is required to bring on subject matter expertise if the ICE lacks in-house knowledge of a major work item.

3.3.4 – CM/GC Contractor

A Contractor is selected to first serve as the Construction Manager during the Pre-Construction Phase. As part of the design team, the Contractor provides input on schedule, phasing, constructability, material availability, and cost throughout the Design Phase of the Project. With input from ARRC and the ICE, the Contractor is responsible for identifying Project risks and providing Opinions of Probable Construction Cost (OPCC) that help guide the design development and establish Project risk pools. The Contractor tasks during the Pre-Construction Phase include, but are not limited to:

- reviewing construction plans to provide input on constructability, construction phasing, traffic control, materials, and design decisions;
- developing design alternatives and innovations that improve the Project Schedule and cost;
- evaluating Project risks and developing a Risk Register and Risk Management Plan;
- establishing the Cost Model and OPCCs at required Milestones;
- conducting VE Workshops;
- obtaining Subcontractor quotes and coordinating with Subcontractors to meet Project DBE goals (*if applicable*);
- identifying long lead items (*material, equipment, and/or utility relocations*) that should be procured through the LLTP GMP process; and,
- preparing all reports and plans required by the Contract including, but not limited to: a Subcontractor Selection Plan, a Quality Control Plan, a Material Sourcing Plan, a Worker and Public Safety Plan, an Innovation Tracking and Performance Report, and a Procurement Proposal and Report for each LLTP GMP.

Section 3.4 – Pre-Construction Roles and Responsibilities Matrix

This RFP contains a Pre-Construction Roles and Responsibilities Matrix. The matrix provides a comprehensive list of activities that are assigned to the appropriate responsible party and coordinated with all team members. ARRC Project staff prepares the initial matrix as part of this RFQ and assigns either primary, secondary, or collaborative responsibility roles to the Contractor, Design Consultant, and ARRC. A template matrix is presented in Attachment 3 - Pre-Construction Roles of Responsibility Matrix and provides suggested responsibilities for the various activities. However, because each Project is unique, the matrix must be revised to meet the specific requirements of each Project. The matrix is reviewed with the selected Contractor and revised accordingly, and then it becomes part of the CM/GC Contract.

Section 3.5 – Pre-Construction Phase Work Flow

The Pre-Construction Phase is shown schematically on the flowchart in Attachment 2 - ARRC Pre-Construction Phase Flowchart. The flowchart details the basic steps in the process leading from preliminary design to the development of the final Plans and Specifications that are used to develop the GMP. The following list, which corresponds to the numbered Process Steps as depicted therein, provides a brief description of the steps involved in the process. These steps are described in greater detail throughout this RFP.

Partnering Workshop and Project Scoping Meetings

The CM/GC Pre-Construction Phase begins with the Partnering and Project Scoping Meetings. These can be conducted separately, but they are often combined into a multiday workshop spanning two (2) to three (3) days. The Project Scoping Meeting is used to review the team’s roles and responsibilities, preliminary schedule, Project elements, and scope.

Prepare Risk Management Plans / Risk Register

Following initial Project discussions, the Contractor prepares the Project Risk Register as part of the Risk Management Plan. The Risk Register is a tool used to identify, assess, mitigate, and monitor Project risks. The Risk Register includes a matrix that identifies each risk; its risk level, cost impact, schedule impact, and responsible party; approaches to minimize risk, and results of the risk mitigation. The Risk Register is continually reviewed by the Project Team and updated by the Contractor

throughout the Pre-Construction Phase to assist with key decisions on design development, risk, and Project costs.

Prepare Cost Model

Following initial Project discussions, the Contractor prepares the Project Cost Model with the assistance of ARRC and the Design Consultant. The Cost Model is an open and transparent document that defines the Contractor's pricing assumptions to communicate to ARRC and the ICE. It defines the Contractor's costs related to labor, materials, equipment, subcontractor and supplier quotes, means and methods, production rates, risk, direct costs, and mobilization. The Cost Model is continually reviewed by the Project Team and updated by the Contractor at each pricing milestone and Opinion of Probable Construction Cost (OPCC) submittal to assist with cost reviews by ARRC and pricing by the ICE.

35% Design Development

The Design Consultant proceeds with 35% design plans, collaborating with ARRC and the Contractor on key design decisions. During the 35% Design Development stage, the Contractor prepares a Project Schedule, performs constructability reviews, and offers suggestions for construction phasing and innovative design alternatives. At the end of the 35% design, the Design Consultant submits Field Inspection Review (FIR) Plans and Specifications for ARRC's review and comment. The Contractor also reviews the FIR Plans and Specifications and offers redline comments to improve the plans for constructability, clarify ambiguities, and provide consistency with the Contractor's proposed means and methods.

Value Engineering Workshop

A Value Engineering (VE) Workshop is required and occurs during the 35% design development stage and is facilitated by consultant not directly involved in the design process.

Cost Model Review Meeting

The Contractor updates the Cost Model based on the 35% design plans and a Cost Model Review Meeting is held with ARRC, the Contractor, and the ICE. The Cost Model Review Meeting may occur at the beginning of the Pre-Construction Phase dependent upon the percent of the preliminary design development that occurred prior to the solicitation of this CM/GC RFQ. At this meeting ARRC, the Contractor, and the ICE review the Cost Model for all pricing assumptions and means and methods that will be used to prepare the OPCC submittals.

OPCC #1 and ICE Submittal

The Contractor submits an OPCC to the ARRC Project Manager at the established pricing milestone, typically at 35 percent coinciding with the FIR plan submittal. The ICE prepares an independent estimate and submits it to the ARRC Project Manager.

Risk Management Meeting

A Risk Management Meeting is held following the submittal of the OPCC to review Project risks, discuss mitigation and associated costs, identify the responsible party to manage the risk, and establish risk pools. During this meeting, the ARRC Project Manager and Contractor agree on how risks and contingencies are quantified and assigned. The ICE and Design Consultant participate in this discussion to assist ARRC, stay informed, and understand risk and contingency assignments. At the conclusion of the Risk Management Meeting, the Contractor updates the Risk Register for newly identified risks and risks that have been mitigated and establishes or adjusts the Risk Pools that have been agreed to by the ICE and ARRC.

Cost Estimate Review Meeting

A Cost Estimate Review Meeting is held following the Risk Management Meeting and includes the Design Consultant, Contractor, ICE, and ARRC. The purpose of the meeting is to review and compare the Contractor's OPCC and the ICE Estimate, review pricing assumptions, review quantities, and reconcile pricing differences. Prior to the meeting, the ARRC Project Manager reviews the OPCC and ICE Estimate and identifies all bid items that have significant variances. During the Cost Review Meeting, the ARRC Project Manager, ICE, and Contractor attempt to reconcile pricing differences for these identified items. The ARRC Project Manager also compares the OPCC to the ICE to determine whether they are within a percentage difference acceptable to ARRC. The reconciliation process gives all parties the opportunity to understand each other's perspectives about pricing assumptions and risk assignment.

Risk Management Meeting

At the conclusion of the Cost Review Meeting, the Contractor must update the OPCC, Risk Register, Cost Model, and Schedule to reflect all changes resulting from the Design Review Meeting, Risk Management Meeting, and Cost Review Meeting.

Subsequent OPCC Submittals

Design development continues in this cycle of design submittals, OPCC and ICE cost estimate submittals, risk assessment, and cost reviews for all established pricing milestones. Typically these coincide with the FIR, Design Office Review (DOR), and FOR Submittals at 35%, 65%, and 95% design stages. However, additional OPCC submittals may be required if design refinements are required or if significant pricing variances remain. The goal, through this iterative process, is to narrow pricing differences throughout the CM/GC Pre-Construction Phase, such that any LLTP GMP submittals and the GMP Proposal are within a percentage of the ICE Estimate that is acceptable to ARRC.

Section 3.6 – Key Elements of the Pre-Construction Phase

CM/GC Project delivery requires a collaborative effort between ARRC, the Design Consultant, and the Contractor. All parties must act as an integrated team working to develop innovative design solutions that incorporate the Contractor's proposed means and methods. This section describes the processes, meetings, workshops, and reports that ARRC has established to assist ARRC Project Managers in facilitating the Pre-Construction Phase and provides additional details for the items introduced in the Pre-Construction Phase work flow narrative.

3.6.1 – Partnering

Partnering is critical to the success of a CM/GC Project, and the CM/GC Pre-Construction Phase begins with a Partnering Workshop. Partnering is a process for developing teamwork and cooperation through shared goals, defined issue resolution procedures, clear action plans, and the monitoring of team performance to ensure that goals are achieved.

The Partnering Workshop can be expected to last from a half day up to two (2) full days.

The following persons shall attend the workshop: ARRC's Project Manager, Project Manager Coordinator, and key Project personnel; the Contractor's on-site Project manager and key Project supervision personnel; and the subcontractors' key Project supervision personnel. The following personnel shall also be invited to attend as needed: Project design engineer, construction management personnel, key local government personnel, suppliers, key ARRC specialty personnel, ARRC EEO office personnel, design consultants, ARRC Maintenance-of-Way superintendent, ARRC environmental manager, other key railroad personnel, and key utility personnel.

3.6.2 – Project Scoping Workshop

The Project Scoping Workshop initiates the design development process and is used to define Project responsibilities and establish procedures and protocols to be followed during the Pre-Construction Phase. At the option of the ARRC Project Manager, the Project Scoping Workshop is often combined with the Partnering Workshop into a multiday workshop spanning two (2) to four (4) days.

The Project Scoping Workshop should cover at least the following items:

- introduce the Project, CM/GC, partnering session, and the Project stakeholders;
- discuss roles and responsibilities related to the CM/GC process;
- present Project goals and objectives;
- discuss Project status, funding, and preliminary schedule;
- present Project elements and scope;
- identify Project risks and develop an initial Risk Management Plan;
- establish OPCC pricing milestones (e.g.: 35%, 65%, and 95%);
- discuss the basic elements of the Cost Model;
- review relevant Plans, Specifications, and reports;
- conduct Project site and equipment tours;
- schedule progress meetings, FIR, and FOR meetings; and,
- establish Communication and Document Control Plan.

The ARRC Project Manager prepares the Project Scoping Workshop agenda.

3.6.3 – Collaborative Design Development

Design development is an iterative process in GM/GC Project delivery, where the Design Consultant and Contractor collaborate under the direction of the ARRC Project Manager. At each agreed-to milestone, typically at 35%, 65%, and 95% complete designs, the Design Consultant prepares a review set of construction Plans and Specifications. ARRC, the Design Consultant, and the Contractor participate in Project design review sessions at the close of each FIR and FOR submittal and as construction documents are finalized for each GMP Package. The purposes of the Project design review sessions are to: (1) assure consistency with the design intent; (2) ensure complete, coordinated, constructible, and cost-effective designs for all disciplines; (3) assure that the design documents are code compliant; (4) endeavor to confirm that all work has been included and described in sufficient detail to assure complete pricing of work; (5) allow for phased construction; and (6) identify errors and omissions.

The Contractor provides the Design Consultant written reviews and redlined hard copies of Drawings, Plans, and Specifications. The Design Consultant collects all design review comments from the various participants, provides reports to ARRC, and ensures that with the issuance of each progress set of design documents, all comments have either been incorporated or resolved to the satisfaction of ARRC.

3.6.4 – Addressing Complex Construction and Developing an Innovative Approach

The CM/GC Project delivery method provides the opportunity to incorporate innovative approaches into the design development. The Contractor should provide input on the design during the design process and particularly at the Design Review meetings and VE Workshop. ARRC and the Design Consultant will be open to the Contractor's suggestions and review innovative methods and materials under consideration.

To monitor and track this process, the Contractor is responsible for preparing an Innovation Tracking and Performance Report. This report tracks all innovations offered by the Contractor, ARRC, and Design Consultant team members from the Procurement Phase through the Pre-Construction Phase. It also tracks the performance of these innovations during any Construction Phase or LLTP of the Project.

3.6.5 – Assessing and Improving Constructability

As part of the collaborative design process, the Contractor provides constructability reviews for the feasibility and practicality of any proposed means and methods; selected materials, equipment, and labor; material availability; site improvements; earthwork and foundation considerations; and coordination of the Drawings and Specifications, verification of quantities, and so forth. Through this review the Contractor should provide alternatives that provide cost or schedule savings or limit impacts on the traveling public.

The Design Consultant then has the opportunity to tailor the design to the Contractor's preferred means and methods. Some of the most valuable input that the Contractor provides is a review of the actual construction phasing and traffic control that the Contractor uses during construction. By collaboratively developing construction phasing plans, the Project Team can be assured that construction schedules are accurate and can be accomplished during construction. Significant design decisions can be made that reduce construction impacts on the traveling public. The CM/GC Project Delivery method allows ARRC to evaluate and direct decisions regarding construction phasing, schedule, and impacts on traffic, thereby determining solutions that provide the best value to the public.

To document and facilitate this process the Contractor is responsible for developing a Constructability Report after review of each Milestones plan submittal, which includes a review of the cost and risks associated with the constructability of the proposed design.

3.6.6 – Services and Open Book Estimating

General: The CM/GC shall provide consulting, scheduling and estimating, and cost control services, and will function as one of the key team members (Project Team) consisting of ARRC, the program management consultant, the design consultant, and the CM/GC. The CM/GC's Key Personnel participating in the Pre-Construction Phase shall be made available for the Construction Services if awarded to the CM/GC, and any Key Personnel changes shall require prior written approval of ARRC. The CM/GC will be responsible for:

developing a Guaranteed Maximum Price (GMP) during the Pre-Construction Phase to construct the Project; and

Scheduling, estimating, and recommending optimal Construction Work phasing and sequences.

If awarded a construction phase amendment, the CM/GC will be responsible for:

performing and delivering the Project to ARRC within the approved GMP; and

self-performing or subcontracting certain minimum percentages, as set forth within this RFP, for the Construction Work related to completing the Project.

Pre-Construction Phase Services: Pre-Construction Phase Services shall include, but not be limited, to the following:

Consult with, advise, assist, and provide recommendations to ARRC on all aspects of the planning, design, and proposed Construction Work, as requested by ARRC.

Participate in an initial kickoff meeting and goal setting session with ARRC; the outcome of this session will be to review the goals as currently identified by ARRC to ensure that the CM/GC understands these goals and to allow the CM/GC to provide recommendations to ARRC regarding these goals. Identification and mitigation of risk through analysis and assessment by participation in on-going risk analysis during the Pre-Construction Phase.

Develop and update Project schedules.

Computation and reconciliation of quantities of materials based on Construction Documents.

Develop detailed Construction Phase cost estimates in accordance with cost estimating requirements set forth below:

- Provide a preliminary evaluation of ARRC's Project budget and schedule requirements
- If so directed, participate in an initial alternatives analysis
- Prepare a cost estimate based on the 60% construction documents
- Perform constructability and material availability reviews; provide written reports and recommendations for the conceptual drawings at the, 75% and 95% development stages that identify revisions to improve clarity for estimating, and propose value engineering-like revisions that reduce Construction Phase costs and time of performance

Collaborate with ARRC and the design consultant in the development of Early Work Packages including permitting, consultation, and assistance.

Assist ARRC in preparing the necessary documentation to obtain environmental and administrative permits for the Construction Phase and otherwise comply with all legal requirements relating to the Construction Work.

Provide recommendations on that minimize adverse effects of labor or material shortages, time requirements for procurement, installation, and Construction Phase completion, and other factors related to Construction Phase cost, including estimates of alternative designs if so directed, or materials, and other possible economies.

Provide information on Construction Phase materials, methods, systems, phasing, and costs to assist in determinations aimed at providing ARRC with the highest quality Project consistent with the budget and design intent.

Recommend to ARRC a schedule for procurement of long-lead-time items that will constitute part of the Construction Work as required to meet the Project schedule.

Prepare and submit a safety plan, in compliance with ARRC requirements.

Develop, implement, and maintain a quality plan that assures work, equipment, and material conformance (i) with applicable legal requirements and (ii) to the applicable requirements of every section of the specifications. Develop a quality program to ensure continuing attention to the production and installation of error-free work complying with the Construction Documents, including education, training, tool box meetings, meetings with subcontractors and suppliers, and other activities that accomplish the following:

- Emphasize the importance of high-quality work;
- Stress the concept that quality is best achieved during initial fabrication and/or installation of the Construction Work (*i.e.*, "Do it right the first time");
- Enhance the exchange of technical and other information pertaining to quality throughout the Proposer's Project organization; and,
- Eliminate non-complying Construction Work requiring rework or replacement.

Prior to development of the GMP, prepare a detailed, baseline, cost-loaded, Critical Path Method (CPM). CPM schedule submittals for 75%, 95% and GMP, shall be cost and resource loaded, encompassing all Project activities and all costs. Schedules shall be prepared in software that is intended for the CM/GC's use during the Construction Phase (Microsoft Project is preferred). It shall be comprehensive for the Project and include ARRC and design consultant activities based on input from those entities. For each submittal a schedule narrative will be required. The schedule will be presented as both "PDF" in Gantt chart format and native (.mpp) format.

Construction Cost Estimate Detail:

Construction cost estimates submitted to the owner for review on the Project shall be open book estimates. They shall comprise detailed reports of item-by-item breakdowns of construction cost presented in the CM/GC's estimating software output files. The Owner will provide a cost estimate breakdown structure and this will be refined with the CM/GC at the initial meeting on estimating. The CM/GC may use his own estimating programs so long as they are consistent with the desired breakdown structure. The cost-estimating output must provide the required level of detail and transparency of calculation and rollup as required.

The CM/GC shall provide successively refined Construction Costs Estimates at pre-construction. Each Construction Cost Estimate shall be:

- Exclusive of non-complying Construction Work requiring rework or replacement;
- Comprehensive for the entire Project;
- Presented in the approved cost-estimating model format;
- Inclusive of all direct costs and allowable field indirect costs as described in paragraph (h) below;
- Exclusive of home office overhead and profit, which shall be presented separately as a fixed fee in accordance with Section 7.1 – Pre-Construction Fee;
- Exclusive of Risk Contingency, which shall be established using the results of the risk analysis and mitigation process;
- Inclusive of Design Development Contingency that results from incomplete design prior to Final Construction Documents;
- Based on milestone design drawing packages delivered by the Designer; and,
- Accompanied by a brief narrative to address variance analysis since the preceding estimate and remaining significant unknowns that may affect the Construction Cost Estimate. Include a discussion of how specific items were developed in the estimate, such as (*but not limited to*) fuel pricing, material sources, labor rates, and any craft labor agreements. Discuss approach to equipment availability and rental rates, including any equipment adjustments to hourly equipment rates used in the estimate based on schedule usage of equipment versus length of time equipment will be on the job, or if a buy-sell basis of ownership costs is applicable to the Project. Discuss which material and subcontract pricing is firm, which uses plug prices, and the expected variability of such pricing. Discuss temporary construction required, such as haul roads, detours, temporary bridges and access, and borrow or waste pit development. Discuss approach to schedule, including hours of work, double or triple shifts, weather and winter considerations, and in general the duration of the estimated work.

The CM/GC shall provide a detailed Construction Cost Estimate for milestones indicated. The estimate is to be developed using current pricing for wage and equipment rates (material pricing will depend on how quoted and the amount of time for which the quote is fixed). All estimates shall represent realistic costs given known conditions (e.g., labor production rates). Since early Construction Cost Estimates

will not have the pricing for all material suppliers and subcontractors to enable firm fixed pricing for use in the GMP, there may be limited items of plug pricing, which should be noted.

Submitted documents shall clearly itemize the estimated costs of performing the Work of the Bid Items and the CM/GC's field indirect items. A summary-level cost is requested for each of the items provided as well as a detailed cost of each item. The detail shall provide crews with rates of production for each activity within the line item. Crews shall clearly show the numbers of equipment and personnel within each activity and work hours for overtime calculations. Estimates of cost shall be further divided into the CM/GC's customary cost categories such as man-hours, labor, permanent materials, expendable materials, equipment ownership and operation, and subcontract cost, as appropriate. The detail of the work breakdown may include several activities within a line item, and then that shall subtotal to a one-line entry for the summary report. The summary report shall include the same cost categories, along with the unit cost of the total. Further groupings of similar items of Work can be agreed upon to further facilitate reconciliation of owner and CM/GC estimates. For line items with an incomplete design, a Design Development Contingency shall be developed per line item and be clearly itemized in a separate value from (i.e., separated from the customary cost categories) in the line item estimate.

The CM/GC shall participate in a design review for each milestone design submittal to discuss development and changes as well as the cost and constructability impacts of the design.

At the final design milestone, the CM/GC shall prepare a Proposal for executing the Project at a GMP. The GMP is the sum of the total, and agreed upon, estimated Cost of the Work plus a fixed fee. The fixed fee is a fixed percentage of the total construction cost of the construction services under the Contract.

The Risk Contingency amount shall be established using results of the risk analysis and mitigation process. As part of the GMP negotiation, Risk Contingency will be assigned to either the Owner or CM/GC. Risk Contingency assigned to the Owner will be administered through the Change provisions in the Construction General Conditions. Risk Contingency assigned to the CM/GC will be included as a separate line item(s) within the GMP, or as mutually agreed.

The CM/GC shall prepare a detailed baseline cost-loaded Critical Path Method (CPM) Schedule to serve as the Project Baseline Schedule, which identifies all activities and progress payment processing during construction. The proposed Project Baseline Schedule shall be cost-loaded with the estimated Cost of the Work included in the GMP and shall be a part of the GMP proposal.

The CM/GC's field indirect costs shall be included in the Cost of the Work. The list below shows an example breakdown of indirect cost categories that is acceptable to ARRC. However, it is also acceptable to use the CM/GC's own customary indirect template with an explanation of the costs included within each item, as long as the level of detail is similar to that shown.

Field indirect costs shall include the following categories (*as applicable*):

1. Job Supervision and Overhead: Wages including benefits, payroll insurance and taxes for onsite management, supervision, engineers, safety personnel, quality control staff, and administration staff.
2. Survey: Cost of construction survey including both CM/GC-hired and outside service.
Site Office Expense: Ownership or rental of building, maintenance, removal, utilities, office and engineering expendables, furniture, computers and infrastructure, and photographs.

3. Insurance and Taxes: Insurance other than that based on payroll, and other specified or CM/GC-required insurances. Taxes excluding payroll taxes such as property tax.
4. Temporary Buildings: Ownership or rental, setup, maintenance, and removal of such buildings as owner's office (if not a direct bid item), warehouses, first aid building, and other miscellaneous temporary buildings.
5. Personnel Expense: Small tools and supplies, safety expendables, drug screen testing, training, physicals, and hiring expenses. Include any per-diem costs for craft or indirect personnel. Limited relocations of supervisory personnel may be discussed with the ARRC for inclusion in this category.
6. Project Utilities: Site utilities such as temporary electric, water, and sanitary.
7. Mobile Equipment: Overhead vehicles, maintenance equipment and personnel (if not in Equipment Operating Expense), and general service equipment and personnel (such as flatbeds and forklifts if not in direct cost).
8. Mobilization: Transportation of equipment and other items for move in, move out, set up, and take down. Include personnel moves and related expense.
 (Construction Plant: Site fences, parking areas, material yards, temporary access, and other such special construction not included in direct costs. Haul road construction and maintenance to be included in direct costs.
 Quality Control: Cost of quality control labor, equipment, and supplies and outside services and CM/GC-hired personnel with site overhead wages.
 Bonds: Payment and performance bond or other guaranties as specified or allowed. Include subcontract or material bond.
 The CM/GC is cautioned that the proposed indirect costs and level of supervision and management that are presented should in normal course of the work be actually mobilized to the field. The ARRC expects that the field supervision and management presented in the proposed indirect costs will actually be mobilized to the field and that the ARRC will benefit from this management in execution of the contract. If significantly less management effort is actually expended on the Project, than represented in the proposed indirect costs, the ARRC reserves the right to re-negotiate this item at their discretion.

Allowable Construction Costs for Direct and Field Indirect Costs: Definitions of some of the items included in direct and field indirect costs are set forth below and shall not be included in the fixed fee:

1. Labor: Wages and add-ons including overtime, vacation pay, and all fringe payments such as health and welfare, pensions, and any other that may be included in union agreement or as paid to both craft and staff employees. Payroll insurance including Worker's Compensation and General Liability, if based on labor amounts. Payroll taxes, including FICA and State and Federal unemployment.
2. Permanent Materials: Materials incorporated into the Work. Includes estimated loss, waste, and non-pay overruns, and any shipping for these materials.
3. Construction Expendable Materials: Non-permanent materials, temporary facilities, small tools, formwork, temporary construction, office supplies, services, insurance, and taxes.
4. Equipment Ownership: Rental or ownership charge of both company-owned and outside rentals on any rentals. Equipment rental rates shall be subject to review and shall be customary for the CM/GC for the work required.
5. Equipment Operating Expense: Repair parts, tires and tracks, repair labor, services and fuel, and oil and grease.
6. Subcontract: Items of work subcontracted, including contracted trucking.

Use of Cost of the Work Estimate and GMP: The detailed cost breakdown structure will be the basis of developing the Construction Cost Estimates during pre-construction and of preparing the GMP.

Fixed Fee: The CM/GC shall propose a fixed fee for the Work expressed as a percentage of the Cost of the Work. The fixed-fee percentage will include the CM/GC's profit and the home office overhead (G&A) allocated to the Project. The fixed-fee percentage proposed in the RFP will be used in the Construction Cost Estimates and final GMPs.

The profit component of the fixed fee is to include any bonuses and incentives but excludes all costs associated with direct Project construction activities, including but not limited to risk or Risk Contingency. Home office overhead (G&A) is defined as all auditable costs that are allocated to all of the CM/GC's ongoing Projects, including insurance that is maintained by the CM/GC as a general cost of doing business.

The fixed fee shall not include any field indirect costs or direct costs of the Project and the fixed-fee percentage shall be applied to the total estimated construction cost.

3.6.6 – Value Engineering Requirement

The ARRC Project Manager will determine the focus of the VE study, which may include cost and/or schedule improvements. Typically the VE Workshop occurs during, or prior to, the 35% design development stage. For Projects delivered using the CM/GC contracting method, a VE analysis is not required prior to the preparation and release of this RFQ for the CM/GC contract. The VE analysis is required to be completed, and approved recommendations incorporated into the Project plans, prior to requesting a construction price proposal from the CM/GC Contractor.

ARRC agrees that the CM/GC contracting method provides a greater opportunity for Contractor input during the design phase of a Project and as such the CM/GC Contractor may be a part of the VE analysis. The requirement for a VE analysis provides the greatest opportunity for the Designer, Contractor, and Owner to work together to identify value improvement opportunities for the Project.

Cost savings as a result of the Contractor's participation in the VE Workshop are not shared. Cost saving concepts developed through the VE Workshop during the Pre-Construction Phase may be incorporated into the Contract Documents at the discretion of the ARRC Project Manager.

Value engineering by the CM/GC Contractor is to occur throughout the Pre-Construction Phase during the iterative design and review process. Because the Contractor is involved in the design development, Value Engineering Change Proposals (VECPs) are not accepted during the Construction Phase.

3.6.7 – NEPA Process

Although Project design can be accelerated and advanced through CM/GC, ARRC Project Managers are aware that the design must progress in accordance with the Code of Federal Regulations (CFRs) which allows preliminary design activities to proceed prior to conclusion of the National Environmental Policy Act (NEPA) process, as long as preliminary activities do not materially affect the objective consideration of alternatives in the NEPA review process.

The CM/GC Contractor cannot be part of, or influence, the environmental alternatives process. However, once the Project has obtained environmental clearance the CM/GC Contractor can provide significant value by mitigating environmental impacts identified in the environmental assessment.

3.6.8 – Construction Plans and Specifications

Development of the construction plans proceeds in similar fashion to DBB except that the process is more iterative involving the Contractor for constructability reviews and design alternatives. ARRC design reviews occur at the FIR and FOR levels. ARRC specialty staff will be made aware of the limited time available for these reviews. The FOR review often requires a quick turnaround because revisions to the construction plans may affect the CM/GC Contractor's GMP Proposal that is typically prepared following the FOR submittal. To minimize the amount of changes after the GMP Proposal, the plans may be advanced to 100% stamped plans, should the Project schedule allow.

Development of the construction specifications also proceeds in similar fashion involving the Contractor for selection of materials, equipment, and alternative methods. Modifications that are proposed by the Contractor are included in Project Special Provisions and approved by ARRC. ARRC specification reviews occur at the FIR and FOR levels. Again, ARRC specialty staff will be made aware of the review time available for these reviews so as not to adversely affect the CM/GC Contractor's schedule and GMP Proposal that is typically prepared following the FOR submittal.

3.6.9 – Construction Schedules

The Contractor is responsible for preparing and maintaining an overall Project Schedule, with input from the Design Consultant and ARRC. The Project Schedule must be in a Critical Path Method (CPM) format that is coordinated with the Design Consultant's design schedule, ARRC and Federal Railroad Administration (FRA) review processes, and agreed-upon Milestone dates. The schedule must have reasonable detail to allow for assessment of potential LLTP proposals. The Project Schedule is updated following each OPCC submittal and at Milestone dates as determined at the Project Scoping Workshop.

3.6.10 – Subcontracting and Supplier Plan

As part of the Cost Model, the Contractor must prepare a Subcontracting Plan. The Subcontracting Plan shall be started during the 35% design phase and updated and included with each OPCC prepared by the Contractor. The Subcontracting Plan is also included in the GMP Proposal final package for EEO review.

As part of the Supplier and Subcontractor outreach, the Contractor is expected to solicit and obtain three (3) or more quotes for subcontracted work and materials to ensure competitive pricing. However, if approved by the ARRC Project Manager, the Project Team may decide to use a Subcontractor that provides the best value if it determined to be in the best interest of the Project.

Section 3.7 – Risk Management

The following section provides a summary of risk management and the tools that ARRC has developed to assist with risk management on CM/GC Projects. Personnel involved with CM/GC contracting are encouraged to read the NCHRP Report 658, Guidebook on Risk Analysis Tools and Management Practices to Control Transportation Project Costs (Reference Information Document 4 - NCHRP – Guidebook on Risk Analysis Tools and Management Practices to Control Transportation Project Costs) for additional guidance on risk management.

Risk management is the identification, analysis, planning, allocation, and control of Project risks. It is central to the CM/GC Project delivery method. Throughout the Project, the Design Consultant, Contractor, and ARRC collectively collaborate to identify Project risks, propose mitigation, and actively control risks. The Contractor is primarily responsible for identifying construction risks and takes the lead in tracking Project risks, preparing the associated cost and schedule impacts and monitoring and

controlling risk during the Construction Phase. The ICE provides support in verifying the costs associated with the risks. The Design Consultant is responsible for advancing and refining the design to minimize or eliminate identified risks. ARRC's Project Manager is ultimately responsible for deciding which party owns and controls the risk and determines the Contract dollars assigned to the Project risk pools. Understanding which risks can and must be controlled by ARRC and which risks can and are best shared with or allocated to the Contractor, results in an efficient and effective GMP and overall lower Project cost.

The risk analysis and management process (Figure 3 – Collaborative Risk Management Process.) generally includes the following five steps, which are described in detail in subsequent sections:

- Identify the risk;
- Assess and analyze the risk;
- Mitigate and plan for the risk;
- Allocate the risk; and,
- Monitor and control the risk.



Figure 3 – Collaborative Risk Management Process.

3.7.1 – Identify the Risk

General Project risks were identified during ARRC's Project delivery method selection process. During the delivery method selection process, ARRC identified Project-specific risks that would benefit from early contractor collaboration which led to the selection of the CM/GC Project delivery method. During the CM/GC Pre-Construction phase, the Contractor shall identify the Project risks and propose methods for controlling those risks. These early identified risks become the basis of the initial Project risk matrix, which is prepared by the CM/GC Contractor. The Project Team reviews the risk matrix during, or shortly thereafter of, the Project Scoping Meeting to reach a consensus of Project risks, agree on the likelihood that the risk will occur, and discuss a general approach to mitigate the risk or maximize an opportunity to provide value to the Project. Additional Project risks are identified and addressed throughout an iterative design development process, as illustrated in the Pre-Construction Phase flowchart provided in Attachment 2 - ARRC Pre-Construction Phase Flowchart.

What are considered Project Risks: A Project risk is an uncertain event or condition that, if it occurs, has a negative or positive effect on a Project's objectives, cost, schedule, or quality. Typical examples include unknown soil conditions, adverse groundwater conditions, hazardous materials, utility conflicts and delays, third-party processes and approvals, innovations, improved means and methods, and constructability problems.

What are not conspired Project Risks: Project risks do not include internal business risks. All of the Contractor's internal risks that are inherent in all Projects, such as labor and equipment availability and failure, worker attrition, equipment failure, and capital expenditures, are completely accepted by the Contractor. Although these are real costs and risks to the Contractor, they are not common or shared Project risks and must be managed solely by the Contractor as part of the Contractor's business. Similarly, ARRC's internal organizational processes, as important as they are to executing the Project, are considered risks that are completely accepted by ARRC. ARRC's Project Manager must be involved in any discussions where ARRC's Risk Pools are developed for these organizational process risks.

3.7.2 – Assess and Analyze the Risk

During the Pre-Construction Phase, the Project Team collaboratively assesses the Project risks through a series of Risk Management Meetings. These meetings will typically held at established pricing milestones following 35%, 66%, and 96% submittals, although often additional meetings may be required. Initial Risk Management Meetings typically focus on identifying and assessing Project risks and investigating innovative design solutions. During later meetings, the focus shifts to discussions of the cost and schedule impacts, risk allocation, and development of the risk pools, if necessary.

3.7.3 – Mitigate and Plan for the Risk

In the traditional Design-Bid-Build (DBB) process, without the benefit of the CM/GC collaborative process, Project risks result in the Contractor adding contingency to the bid. In the Design Build process, there is more opportunity to properly allocate and manage risk but still the Contractor must often add contingencies to the bid to cover risk that the Contractor is not in a position to effectively manage. In the CM/GC method, there is a unique opportunity to advance and refine the design to reduce Contractor identified risk. Risks that have been eliminated through design changes can then be either removed from the Risk Register or noted as having been resolved. If the Project risk cannot be eliminated, it remains on the Risk Register and the Contractor must prepare a mitigation plan for the risk. Mitigation can involve design changes, development of Risk Pools, Owner-accepted risk, Contractor-accepted risk, and avoidance of risk to eliminate or reduce the risk.

Some risk can be mitigated by early-stage construction packages and/or through the identification of long lead-time procurement Project elements. The CM/GC Contractor should look for any material or equipment that is likely to benefit from early procurement. These items can then be procured prior to the Construction Phase, if approved by ARRC (*which may be dependent upon the status of the NEPA process at the time of the request.*) The procurement of the identified materials follow the same guidelines as those outlined herein for all other services requested and will produce the LLTP GMP. Likewise, the Project Team should review the Project and identify construction phases that are likely to benefit from staged construction packages. For example, an early construction package could be procured to allow for utility construction to proceed or to allow the Project schedule to advance for a phase of construction while Project details are resolved on subsequent phases.

3.7.4 – Allocate the Risk

Once a risk has been identified and quantified, it is assigned to either ARRC or the Contractor. The goal is to assign the risk to the party who is best able to control the risk. Risks can be allocated solely to the Contractor or ARRC, or they can be shared. Risk is accounted for in three ways: (1) risk that is

allocated to the Contractor is included within the Contractor's bid items; (2) risk that is allocated to ARRC is accounted for in the ARRC Risk Pool; and (3) risk that is to be shared is accounted for in the Shared Risk Contingency Pool. Additionally, risk for minor overruns and Contract changes are addressed by an ARRC Risk Pool similar to DBB Force Accounts. Minor Contract Revisions (MCRs) for CM/GC Projects can usually be significantly less than for traditional DBB as a result of the risk mitigation process and cost allocation to risk pools.

The Contractor and ARRC develop risk pools for risks that need to be addressed through the ARRC Risk Pool or Shared Risk Contingency Pool by following four steps:

The CM/GC Contractor submits drafts of the items, including estimates for those items, to be covered by MCRs, Overruns, ARRC Risk Pools, and Shared Risk Contingency Pools for ARRC review and acceptance.

The CM/GC Contractor submits drafts of the definitions for Shared Risk Contingency Pools for ARRC review and acceptance.

The CM/GC Contractor submittals are reviewed by ARRC, with technical input from the Design Consultant and cost validation from the ICE.

Once accepted, ARRC adds the items and definitions to the Risk Register as a Project Special Provision for team review, acceptance, and signing.

3.7.5 – Monitor and Control the Risk

The objectives of risk monitoring and control are to systematically track the identified risks, identify any new risks, and effectively manage the contingency reserve. Risk monitoring and updating occurs after the risk mitigation and planning processes and then continues through the Pre-Construction and Construction Phases. The list of risks and associated risk management strategies are likely to change as the Project matures and new risks develop or anticipated risks are mitigated.

Periodic Project risk reviews repeat the tasks of identification, assessment, analysis, mitigation, planning, and allocation. Regularly scheduled Project risk management meetings can be used to ensure that Project risk is continually reviewed. If unanticipated risks emerge, or a risk's impact is greater than expected, the planned response or risk allocation may not be adequate. At this point, the Project Team must perform additional planning to control the risk. Changes to Project risks must be documented using the established Risk Register. During the Construction Phase, ARRC and the Contractor monitor contingencies and the Risk Pools to ensure that the established Risk Pools are adequate for the actual realized Project risks.

3.7.6 – Risk Register

The Risk Register is a tool used to document the risk management process. The purpose of the Risk Register is to define the risks, document the risks, identify cost and schedule impacts associated with the risks, and produce detailed mitigation plans for the risks. Each Risk Register includes the agreement of how ARRC and the Contractor defined the risks, who is responsible for the risks, and how the risks are to be paid for during construction. The Contractor is responsible for preparing and updating the Risk Register with input from ARRC, the ICE, and the Design Consultant.

By the end of the Pre-Construction Phase, the Risk Register describes all known Project risks, defines the Project Risk Pools, and becomes part of the Contract Documents. This Risk Register includes the agreements between ARRC and the Contractor that defines risk management for the construction

package(s). The Risk Register is formalized with the Construction Agreement and is a Contract Document that is signed and agreed to by both parties so that miscommunications and disputes during construction are limited. During the Construction Phase, the Contractor is responsible for monitoring and controlling the risks that have been allocated to the Contractor through the Risk Register.

The outline and ARRC template for a typical Risk Register includes the following:

Section 1: Project Overview, Purpose, and Procedure

- Project overview (*a full description of the Project from this RFQ with any changes that have occurred during the design development*);
- Project goals (*as previously developed during the RFQ phase and the Project Scoping Meeting*);
- Purpose of the Risk Register; and,
- Risk Register procedure and methodology.

Section 2: Construction Phase Risk Categories and Definitions

Construction package (*list the construction package(s) determined in the Pre-Construction Phase*);
Definition of the established Risk Pools and Agreements;
A list of each identified risk specifying which Risk Pool the item will be paid from; and,
Revisions to ARRC standard payment specifications for all Shared Risk Pool items, which define how the item will be paid and shared.

Section 3: Risk Matrix

Identifies each risk, risk level, cost impact, schedule impact, approach to minimize risk, responsible party, and result of risk mitigation. The sample Risk Matrix in shown below (Figure 4 – Sample Risk Matrix: Level 1.) illustrates a first level of risk identification to determine and assign potential risks. As the Pre-Construction Phase advances, a second level analysis (Figure 5 – Sample Risk Matrix: Level 2*) is performed to further allocate and price the risk. After progressing past Level 2, the Project risk matrix will be tracked on a master matrix similar to the ARRC template provided herein (Attachment 1 - ARRC Risk Register Template).

LEVEL 1- RISK REGISTER										
Project Name: Example Project				Project Number: XX-XXXX						
Risk Identification				Risk Assessment			Risk Response		Allocation	
Status	ID #	Type	Identified Risk	Potential Cost Impact	Potential Schedule Impact	Risk Level	Strategy	Response Actions	Risk Owner	Updated
Active	10	Threat	Survey File	Inaccuracies or incomplete information in survey file may lead to rework of design	Design rework may delay the start of construction	Medium	Mitigate	Verify that the survey file is accurate and complete	ARRC	10/12/2012
Active	11	Threat	Lane Closure in Inclement Weather	Possible additional cost for construction equipment to support maintenance efforts	If not able to close for blasting operations, will affect the schedule critical path	Medium	Accept	Coordinate with ARRC maintenance to work within possible closures, incorporate flexibility into lane closure strategy	ARRC	11/23/2012
Active	12	Threat	Delay of ROW Acquisition	Delayed start of construction may increase costs due to price escalation	Due to the large number of parcels and businesses, may have to use the condemnation process to acquire ROW, which could delay start of construction by up to one year.	High	Accept	ARRC and Design Consultant to identify needed ROW early in design process. Project Team to review potential construction phasing to allow Project to proceed in phased approach	ARRC	11/23/2012
Active	13	Threat	Rock Joint Pattern Resulting in Excessive Overbreak	Increased cost for concrete, excavation, and shotcrete overruns	Additional time to construct and remove materials	High	Mitigate	Monitor during blasting to make adjustments to minimize as excavation proceeds, determine accepted amount of overbreak in GMP, consider risk pool	SHARED	12/2/2012
Active	14	Threat	Dry Utility Relocation Delays	Project delays may impact Project cost if critical Project elements cannot proceed and demobilization occurs	Utility conflicts may result in demobilization until resolved by third party utility owner	Medium	Mitigate	Identify flexibility in schedule to allow construction to proceed. Understand all required utility relocation during design phase and monitor utility relocations	ARRC	11/24/2012
Active	15	Threat	Nesting Birds	Nesting birds, protected from harassment under the Migratory Bird Treaty Act, may delay construction during the nesting season		Low	Mitigate	Schedule work to avoid nesting season or remove nesting habitat before starting work	CONTRACTOR	11/24/2012
Active	16	Threat	Increased Drilled Shaft Length	Increased cost for additional drilled shaft length	Increased schedule to perform additional drilling	Low	Mitigate	Review geotechnical information and obtain additional borings if necessary	ARRC	11/24/2012

Figure 4 – Sample Risk Matrix: Level 1.

LEVEL 2 - RISK REGISTER											
Project Name: Example Project							Project Number: XX-XXXX				
Risk Identification	Risk Assessment						Allocation			Monitor & Control	
Identified Risk	Potential Cost Impact	Potential Schedule Impact	Prob.	Schedule Impact (days)	Cost Impact	Factored Cost	Risk Owner	ARRC Risk Pool	Shared Risk Pool	Interval or Milestone Check	Status and Review Comments
Survey File	Inaccuracies or incomplete information in survey file may lead to rework of design	Design rework may delay the start of construction	20%	10	\$20,000	\$4,000	ARRC	\$4,000		Following completion of design survey	
Lane Closure in Inclement Weather	Possible additional cost for construction equipment to support maintenance efforts	If not able to close for blasting operations, will affect the schedule critical path	30%	20	\$50,000	\$15,000	ARRC	\$15,000		Monitor daily during construction	
Delay of ROW Acquisition	Delayed start of construction may increase costs due to price escalation	Due to the large number of parcels and businesses, may have to use the condemnation process to acquire ROW, which could delay start of construction by up to one year.	60%	160	\$250,000	\$150,000	ARRC	\$150,000		Review monthly during design until secured	
Rock Joint Pattern Resulting in Excessive Overbreak	Increased cost for concrete, excavation, and shotcrete overruns	Additional time to construct and remove materials	40%	15	\$245,000	\$98,000	SHARED		\$ 245,000	Monitor daily during blasting operations	
Dry Utility Relocation Delays	Project delays may impact Project cost if critical Project elements cannot proceed and demobilization occurs	Utility conflicts may result in demobilization until resolved by third party utility owner	30%	30	\$40,000	\$12,000	ARRC	\$12,000		Review monthly during design and weekly during construction	
Nesting Birds	Nesting birds, protected from harassment under the Migratory Bird Treaty Act, may delay construction during the nesting season		20%	40			CONTRACTOR			Monitor weekly to ensure habitat remains mitigated	
Increased Drilled Shaft Length	Increased cost for additional drilled shaft length	Increased schedule to perform additional drilling	10%	10	\$25,000	\$2,500	ARRC	\$15,000		Review following geotechnical investigation. Monitor daily during Construction	

Figure 5 – Sample Risk Matrix: Level 2*.

* Note not all columns are shown for clarity.

Section 3.8 – Construction Services Cost Proposal (CSCP)

The CM/GC Contractor shall submit a Construction Services Cost Proposal (CSCP) when the plans and construction documents are completed to a level sufficient enough to do so. All costs associated with developing and negotiating the CSCP is included in the Pre-Construction Service Fee. The CSCP can include three (3) possible payment methods areas; a Guaranteed Maximum Price (GMP), Adjustable Work, and possibly Contingency items.

The GMP contains all items that will be paid based on an agreed upon unit price. The quantity of the work items included in the GMP may increase or decrease as the Project is built, however, there will not be an increase in price to the GMP unless there is a scope change that significantly changes the scope of work. The GMP will not be exceeded without approval from the ARRC Project Manager, and only by a written work order. All costs or expenses in excess of the GMP shall be borne by the CM/GC, unless adjusted by a previously approved written work order.

The LLTP GMP contains all construction items that will be paid based on an agreed upon unit price prior to negotiation of the Construction Services agreement. The quantity of the work items included in the GMP will not increase or decrease as the Project progresses. There will not be an increase in price to the LLTP GMP unless there is a scope change that significantly changes the scope of work. The LLTP GMP will not be exceeded without approval from the ARRC Project Manager, and only by a written work order. All costs or expenses in excess of the LLTP GMP shall be borne by the CM/GC, unless adjusted by a previously approved written work order.

Adjustable Work includes items of work that are paid based on an agreed upon unit price and actual quantities placed during construction. This work shall be used to mitigate significant risks that cannot be accurately quantified during the design.

Contingency items, if used, are used to compensate the Contractor for items that cannot accurately be identified and quantified during the design phase.

The CM/GC Contractor should expect several rounds of negotiations to arrive at an agreed upon Construction Services Cost Proposal. Negotiation meetings will primarily occur with staff from the CM/GC Contractor, ARRC's Project Manager, ARRC's Engineering Department, ARRC's Design Consultant, and ARRC's Procurement Officer. Additional parties, including the ICE and FRA Area Engineer (*if required*), may be brought into the negotiations, if it is agreeable by both the CM/GC Contractor and ARRC.

The CSCP shall include, at a minimum, following:

Adjustable Work that may be paid based on an agreed upon unit price and actual quantities.

Guaranteed Maximum Price (GMP) proposal, including all overhead and profit considered within specified pay items; as well as any subcontracted work. Description of all other inclusions to, or exclusions from, the GMP, including all assumptions and clarifications.

Possible contingency items.

Lump Sum item costs (*i.e.: mobilization, minor traffic devices, etc.*) shall be detailed and include breakouts of what the costs include. These breakouts shall detail the costs for the prime and sub-contractors (*i.e.: personnel established, expenses, bonding amounts, etc.*)

Construction schedule showing the proposed start and finished dates and any significant milestones.

Contractor Quality Control Plan.

Clarification of understanding of the Alaska Department of Environmental Conservation (ADCE) requirements, in addition to the U.S Environmental Protection Agency (EPA) requirements, including adherence to the soil erosion and sedimentation control plan requirements.

Disadvantaged Business Enterprise (DBE) participation description, if participation is required.

The CM/GC shall make available all cost and budget estimates, including bid documents and bidding software files utilized to ARRC.

The CM/GC Contractor is expected to solicit at least three (3) bids, in accordance with ARRC Procurement rules, on work that will be subcontracted.

If the ARRC Project Manager and the CM/GC Contractor cannot agree on a Construction Services Cost Proposal, ARRC reserves the right to terminate the CM/GC services without penalty or payment, except payment for Pre-Construction Services, and to proceed with traditional design-bid-build or other non-traditional delivery methods. Any information provided by the CM/GC Contractor during the Pre-Construction phase will be used to develop the plans and specifications for the letting. Additional information such as meeting minutes, correspondence and other submittals provided during the development phase may be provided to bidders if a price cannot be reached.

Section 3.9 – Construction Services (Phase 2)

The CM/GC Contractor shall, once the Construction Service Cost Proposal is approved:

Construct, bid any remaining sub-contractor work, and manage all construction related contracts while meeting the DBE, if required, and other requirements.

Execute the Quality Control Plan.

Bond and insure the construction.

Address and adhere to all federal, state, tribal, and local permitting and environmental requirements.

Maintain a safe clean and well-organized work zone work site.

Directly perform, with their own forces, the required percent of all construction work specified in Section 1, excluding any identified specialty items.

Substantially complete the construction no later than July 01, 2023.

In the event that the Contract is terminated after the award of the construction phase to the CM/GC Contractor, the termination procedures in the ARRC General Conditions shall be followed.

Section 4 – General Requirements

- 1. Insurance Requirements.** The selected CM/GC must meet the following insurance requirements:

The CM/GC shall carry and maintain throughout the life of the Project, at its own expense, insurance not less than the amounts and coverage herein specified. ARRC shall be named as an additional insured on all insurance policies except the workers compensation policy. The minimum coverages and limits required are as follows:

- (a) Worker's Compensation insurance in accordance with the statutory coverages required by the State of Alaska and Employers Liability insurance with limits not less than \$1,000,000.
- (b) Commercial General Liability with limits not less than \$2,000,000 per occurrence and \$2,000,000 aggregate for Bodily Injury and Property Damage, including coverage for Premises and Operations Liability, Products and Completed Operations Liability, Contractual Liability, Broad Form Property Damage Liability, and Personal Injury Liability. Coverage shall not contain any exclusions of Explosion, Collapse, or Underground.
- (c) Commercial Automobile Liability on all owned, non-owned, hired, and rented vehicles with limits of liability of not less than \$1,000,000 Combined Single Limit for Bodily Injury and Property Damage per each accident or loss.
- (d) During the Early Work and/or Construction Services Phase of the Project, the CM/GC will be required to provide Pollution Liability Insurance with a Project limit of not less than \$2,000,000 to include coverage for Asbestos, Hazardous Materials, Lead, or other related environmental hazards.
- (e) During the Early Work and/or Construction Services Phase of the Project, the CM/GC may be required to provide Builder's Risk Insurance if mutually agreed. If required, coverage shall be provided on an "All Risk" completed value basis and protect the interests of ARRC, the CM/GC, and its subcontractors. Coverage shall include all materials, equipment and supplies that are intended for specific installation in the Project while such materials, supplies and equipment are located at the Project site and in transit to jobsite and while temporarily located away from the Project site.
- (f) During the Early Work and/or Construction Services Phase of the Project, the CM/GC will be required to provide Railroad Protective Insurance: Coverage requirements will be developed during preconstruction.

All insurance policies as described above are required to be written on an "occurrence" basis. In the event occurrence coverage is not available, the CM/GC agrees to maintain "claims made" coverage for a minimum of two years after Project Completion. Each policy of insurance required by this section shall provide for no less than thirty (30) days' advance notice to ARRC prior to cancellation or material modification and contain a waiver of subrogation against ARRC.

2. **Project Bonding Requirements.** For the Early Work and/or Construction Services Phase of the Project, the CM/GC shall furnish a one hundred percent (100%) performance bond and a one hundred percent (100%) payment bond on the forms provided in this RFP with a qualified corporate surety. No bid bond is required with this RFP response.
3. **Wage Rate Requirements.** The higher of the most current prevailing wage rates as defined by the (1) Federal Wage Decision or (2) State of Alaska, Department of Labor, Laborers' & Mechanics' Minimum Rates of Pay Pamphlet are required on this Project. Rates current as of the date of advertisement are contained in Section 8 – Federal and State Wage Provision of this RFP. Wage rates prevailing at time of award (if any) of Early Work and/or Construction Services Phase of the Project will prevail for construction services.
4. **Licenses and Registration.** The CM/GC must have a current Alaska Business License together with a current Alaska Contractor's License.
5. **Required Submittals.** To be considered responsive, Proposers must submit the following documents with their proposals:
 - (a) Contractor's technical proposal in accordance with the provisions of Section 6, Part 1, Items A-D.
 - (b) Bidder/Offeror Questionnaire; Section 11, Part 3.
 - (c) Certification Regarding Use of Contract Funds for Lobbying contained in Appendix D, Item 25.
 - (d) FRA Buy America Certification contained in Appendix D, Paragraph G, Item 22-49 U.S.C 22905(a).
 - (e) Contractor's Fee proposal in accordance with the provisions of Section 6, Part 1, Item E1.
 - (f) Contractor's Pre-construction Phase Services proposal in accordance with the provisions of Section 6, Part 1, Item E2.

Section 5 – Proposal Information, Conditions, Instructions and Format

- 1. Pre-Submission Proposal Inquires.** Proposers shall promptly notify ARRC of any ambiguity, inconsistency, conflict, or error which they may discover upon examination of the solicitation documents. Verbal inquiries regarding this RFP are not permitted. All inquiries must be made in writing and received at ARRC’s offices prior to 5 days before time for submission of proposals and the written inquiries must be submitted as follows:

Michele Hope
Alaska Railroad Corporation
327 W. Ship Creek Ave.
Anchorage, Alaska 99501
E-mail: HopeM@akrr.com

ARRC will respond to all or part of the written inquiries received through the issuance of a written Addendum to the RFP, if in the opinion of ARRC, such information is deemed necessary to submit proposals or if the lack of it would be prejudicial to other prospective proposers. Oral and all other non-written responses, interpretations, and clarifications shall not be legally effective or binding. Any Proposer who attempts to use or uses any means or method other than those set forth above to communicate with the ARRC or any director, officer, employee, or agent thereof, regarding this RFP shall be subject to disqualification.

- 2. Pre-Proposal Meeting and Site Visit.** ARRC staff will conduct a non-mandatory pre-proposal meeting and escorted site visit for prospective Proposers as stated in the Request for Proposals.

Proposers shall not trespass on private or ARRC property in the Project vicinity, and may not be on ARRC property without an escort.

- 3. Proposal Submission Deadline.** Sealed proposals must be received by ARRC no later than 3:00 p.m., local time, **May 14, 2021** at:

Alaska Railroad Corporation
Attention: Michele Hope
327 W. Ship Creek Ave.
Anchorage, Alaska 99501

One (1) original and one (1) electronic copy (in a .pdf format) of each proposal must be submitted. The sealed envelope or package used in submitting a proposal shall be clearly marked with the following information:

Proposer’s Name
RFP No. 21-08-208877
Bird Creek Pony Truss Bridge Replacement

Date and Time Scheduled for Receipt of Proposals

Proposals received after the time and date set forth above shall be rejected and returned to Proposer unopened. All proposals submitted in response to this solicitation must be signed by an individual with the legal authority to submit the offer on behalf of the company.

4. **Proposal Open and Subject to Acceptance.** All proposals shall remain open and subject to acceptance by ARRC for sixty (60) days after the deadline for proposal submission.
5. **Proposal Opening.** Proposals will be opened privately at ARRC's convenience on or after the proposal due date.
6. **Reserved Rights.** In addition to other rights in this RFP, ARRC reserves, holds and may exercise at its sole discretion, the following rights and options:
 - a. To supplement, amend, or otherwise modify or cancel this RFP with or without substitution of another RFP.
 - b. To issue additional or subsequent solicitations for proposals.
 - c. To conduct investigations of the Proposers and their proposals, including inspection of their facilities.
 - d. To clarify the information provided pursuant to this RFP.
 - e. To request additional evidence or documentation to support the information included in any proposal.
 - f. To reject any and all proposals, or parts thereof, and/or to waive any informality or informalities in any of the proposals or the proposal process for the RFP, if such rejection or waiver is deemed in the best interest of ARRC.
 - g. To award a contract or contracts resulting from this solicitation to the responsible Proposer whose proposal conforming to this solicitation will be most advantageous to ARRC.
 - h. To negotiate any rate/fee offered by a Proposer. ARRC shall have the sole right to make the final rate/fee offer during contract negotiations. If the selected Proposer does not accept ARRC's final offer, ARRC may, in its sole discretion, reject the proposal and start negotiations with the next highest ranked Proposer.
 - i. If an award is made and, prior to entering into a contract, subsequent information indicates that such award was not in the best interest of ARRC, ARRC may rescind the award without prior notice to proposers and either award to another proposer or reject all proposals or cancel the RFP.
7. **Proposal Costs.** Each Proposer shall be solely responsible for all costs and expenses associated with the preparation and/or submission of its proposal, and ARRC shall have no responsibility or liability whatsoever for any such costs and expenses. Neither ARRC nor any of its directors, officers, employees or authorized

agents shall be liable for any claims or damages resulting from the solicitation or collection of proposals. By submitting a proposal, Proposer expressly waives (i) any claim(s) for such costs and expenses, and (ii) any other related claims or damages.

8. Taxes. Pursuant to AS 42.40.910, ARRC is exempt from all forms of state or local sales, property and other taxes. Accordingly, any Proposer who submits a proposal shall not include any such tax in any of its proposal prices or in any calculation thereof.

9. Proposal Format. Interested firms shall submit the following:

- a. One (1) original proposal and one (1) electronic copy (in a .pdf format) containing a statement of qualifications and a concise narrative that addresses each evaluation criterion. Proposals shall have a maximum of fifteen (15) pages, exclusive of cover sheets, cover letter, table of contents, forms required by ARRC, resumes, or other attachments/exhibits.
- b. A signed cover letter of a maximum two (2) pages should introduce the proposed firm or Joint Venture, summarize the main qualifications of the firm, and include any other information the Proposer deems will emphasize the its ability to successfully perform the services required and demonstrate why selection of Proposer would be advantageous to ARRC.
- c. Fonts and page layouts shall be easily readable. Excessively small fonts will detract from proposal scoring.
- d. A limited number of larger (11x17 inch) sheets are acceptable for graphics or charts and shall be counted as one page under the page limitation criteria indicated above.

10. Capacity to Perform. Any Proposer considered for award as a result of this solicitation may be required to make assurance to the Contract Administrator concerning the Proposer's capacity and capability to perform. Previous contracts of a like nature, financial solvency, and other information may be requested of the considered Proposer. Failure to provide assurances requested in a timely manner may be cause for rejection of the Proposal.

11. Purchase Obligation. ARRC and responding firms expressly acknowledge and agree that ARRC has made no express or implied promises to expend any dollar amounts with respect to the services addressed by this RFP. By submitting a proposal in response to this RFP, each firm acknowledges and agrees that the provisions of this RFP, and/or any communication, statement, act or omission by representatives of ARRC (including consultants) in the selection process, shall not vest any right, privilege, or right of action in any Proposer.

12. Exceptions to Terms, Conditions and Specifications. Each Proposer shall indicate all exceptions to terms, conditions, and specifications of this solicitation individually in its proposal. Exceptions received or placed after the proposal

submission date will be considered as counter offers and as such will render the entire proposal non-responsive.

13. Public Information. All submitted proposals will be considered confidential until notice of intent to award is issued. After notice of intent to award is issued, all proposals will become public information.

14. Qualifications of Proposers. Proposers will be evaluated by ARRC based upon their experience, financial stability, appropriate equipment, responsiveness, technical knowledge and general organization. ARRC reserves the right to take any actions it deems necessary to determine if Proposers have the ability to perform the work outlined in the Scope of Services in a satisfactory manner. Such actions will include an evaluation of the Proposer's qualifications and references prior to Contract Award. Proposers may be disqualified, and their Proposals rejected, for any reason deemed appropriate by ARRC including, but not limited to, the following:

- a. Evidence of collusion between a Proposer and any other Proposer(s).
- b. An unsatisfactory performance record on Projects for ARRC, or any other organization.
- c. The appearance of financial instability (in the opinion of ARRC) and/or evidence that Proposer may not be financially able to complete the work required by the Project Scope in a satisfactory manner.
- d. If Proposer has failed to complete one or more public contracts in the past.
- e. If Proposer has been convicted of a crime arising from previous public contracts.
- f. If Proposer is not authorized to perform work in the State of Alaska.

15. Thorough Review of RFP and Work Site. Proposers are required to carefully examine this RFP, its associated documents and the work site prior to submitting a Proposal for work outlined in the Scope of Services. Submission by Proposer of a Proposal shall be considered conclusive evidence that the Proposer fully understands all the requirements of the Scope of Services. By submission of a Proposal, Proposer further warrants, agrees, and acknowledges all of the following:

- a. Proposer has taken all necessary steps to determine the full scope, nature and location of the work outlined in the Scope of Services.
- b. Proposer perceives no ambiguity in the RFP documents or the work as outlined in the Scope of Services and Specifications.
- c. Proposer has inspected the work site and is satisfied that no conditions exist that could affect the performance and/or cost of work outlined in the Scope of Services including, but not limited to, conditions related to the following:
 - i. Movement of personnel and materials on or off of the work site.
 - ii. Safety of personnel while on work site.

- iii. The availability and accessibility of communications systems, water, and electric power at the work site.
- iv. Environmental controls and/or protection from weather elements provided at the work site.
- v. Proposer is satisfied as to the character, quantity and quality of materials and services to be provided by the ARRC pursuant to this RFP.
- vi. Proposer confirms that the amount of time allowed for completion of the Scope of Services is adequate.
- vii. Proposer is familiar with and shall comply with all applicable Federal, State and local laws, ordinances and regulations that might affect the work associated with the Scope of Services and/or those engaged in activities related to the work.

Any failure of Proposer to take the actions described above to support the required acknowledgements associated with submission of a Proposal shall not relieve Proposer from the following responsibilities:

- a. Proposer is responsible for properly estimating the difficulty and cost of successfully performing the work required by the Scope of Services.
- b. Proposer is responsible for completing the work required by the Scope of Services without additional expense to ARRC.
- c. By submission of a Proposal, Proposer agrees that ARRC will not be liable for any claims whatsoever (including, but not limited to, claims for additional payments or time) resulting from the following:
 - i. Proposer's failure to investigate and become sufficiently knowledgeable of the Scope of Services and conditions under which the work is to be performed.
 - ii. Proposer's perception of ambiguity in this RFP document and/or the Scope of Services if:
 1. proposer discovers the ambiguity, but fails to notify ARRC; or,
 2. particular Proposer fails to discover any ambiguity that would be discovered by any reasonably prudent Proposer in preparing a Proposal.

Proposer's lack of familiarity with any Federal, State, and local laws, ordinances and regulations that may, in any manner, affect cost, progress or performance of activities required by the Scope of Services.

Section 6 – Selection Process/Award Criteria

The selection of a firm to perform the CM/GC services for the Project will be made by an ARRC Selection Committee that will evaluate and score the proposals in accordance with the criteria specified herein. ARRC may award a contract based solely on the initial scoring and proposals should be prepared with the intention of providing the best possible description of relevant experience, expertise, and Project approach. However, ARRC reserves the right to extend the evaluation process by selecting a short list of two or more of the highest ranked firms to provide oral presentations. In the event that oral presentations are required the selected firms will be provided with additional information about the format, length, content, and scoring to be used.

Section 6.1 – Evaluation Criteria **Technical Criteria**

Respondents will be evaluated based on their responses to the following criteria:

6.1.1 Project Approach

Weight: 15

Response must demonstrate your comprehension of the objectives and services for the proposed contract. Do not merely duplicate the Statement of Services provided with this RFP. State any assumptions made in formulating Criteria Responses.

Outline the methods for accomplishing the proposed contract during Stage 1 - Preconstruction Services, and Stage 2 - Construction. If methodology is contained in the proposed Statement of Services, address its adequacy.

For each Stage of services (as applicable),

- Describe what, when, where, how, and in what sequence the work will be done.
- Identify the amount and type of work to be self-performed and that which may be performed by Subcontractors.
- Identify the amount and type of services or interactions required from or with ARRC.
- Address any particular geographic familiarity, experience, and capabilities your firms have (i.e., the primary offeror and all proposed subcontractors), those of your proposed project staff, and how they might specifically contribute to the proposed methods.

Identify any **distinct and substantive qualifications** for undertaking the proposed contract such as the availability of specialized equipment or unique approaches or concepts relevant to the required services which you or your subcontractors may use. Focus on what sets you apart from others in doing the same work.

6.1.2 Risk Management

Weight: 5

Response must include the following two parts:

Overall Risk Management Strategy

Describe your approach toward managing risk, and the strategy you propose to utilize:

- Explain how you will identify, price, and mitigate risk
- Discuss how your risk management strategy will support the team, provide the best value to the project, and deliver the project on or ahead of schedule

Project Specific Risks

Identify major risks to achieving the Project and CM/GC goals, including:

- Potential impacts to cost and schedule
- How your team proposes to mitigate the risks identified

6.1.3 Innovation

Weight: 10

In conjunction with your team's Project Approach, you may have innovative ideas or creative efficiencies that may or may not meet the requirements of the RFP that could increase the likelihood for project success. Discuss your innovations as they relate to the Project and Contractor goals listed in Appendix B, Statement of Services.

Provide examples of cost reductions, improvements in schedule, or other benefits to requested services that may be used to augment your team's Project Approach.

Provide up to five (5) proposed innovations and for each one, address the following elements:

Innovation Description	Estimated Cost (\$) or Time Savings (days)	Methods	Assumptions
Describe what the innovation is and how it relates to design or construction that may further improve reaching the Project Goals.	Provide a total estimated cost or time savings produced by implementing the innovation.	Describe the methods your team will utilize for implementing the innovation and how they are an improvement over traditional methods.	State all assumptions made, including unit costs used for comparison (e.g. traditional method cost of borrow = \$10/ton, innovative method cost of borrow = \$8/ton).

Additionally, describe the methods your team will use for developing, tracking, and proposing innovations to the Project Team.

6.1.4 Methods of Partnering and Claims Mitigation

Weight: 5

Response must describe your experience utilizing partnering methods and other techniques used to avoid claims. For partnering, ARRC is not simply interested in one day workshops but in how partnering techniques were executed throughout the design and/or construction process.

- Provide up to five (5) specific examples of partnering and claims mitigation from your Firm's past.
- Explain how these techniques improved project elements such as schedule, cost control, and customer satisfaction
- Explain how the practiced methods avoided claims and/or helped facilitate agreements between Owner and Contractor on construction contracts
- Describe your firm's approach to claim avoidance or mitigation

6.1.5 Proposed Project Staff

Weight: 15

Response must name the individuals to perform the following essential **FUNCTIONS** plus any other professional/technical functions you deem essential to perform the services:

- | |
|--|
| <ol style="list-style-type: none">1. Contract Manager2. Project Manager3. Project Superintendent4. Project Cost Estimator |
|--|

For each individual identified to perform an essential function,

- Provide at least 3 professional references (contact persons and telephone numbers).
- Describe the work they will perform, and their contributions to the project
- Detail their specific qualifications and substantive **experience directly related to the proposed contract.**
- Identify their:
 - employer,
 - professional discipline or job classification,
 - amount of experience in the stated discipline or job classification, and
 - state of residency.

A response prepared specifically for this proposal is required. Marketing resumes often include non-relevant information which may detract from the evaluation of proposal. Lists of projects are not useful. Focus on the individual's specific duties and responsibilities and how their experience is relevant to the proposed contract.

6.1.6 Management

Weight: 5

Response must address the following:

Describe the administrative and operational structures that will be used for performing the proposed contract for Stage 1 - Preconstruction Services, and Stage 2 - Construction:

- Identify who will have overall responsibility for the contract.
- Identify the lines of authority and provide an organization chart including pre-construction and construction personnel.
- Identify the location(s) where the various contract services will be performed, and how communications will be maintained between your Project Staff, ARRC, and (as applicable) any other government agencies or the public.
- Briefly address your Firm's capability to provide additional services and/or services under an accelerated schedule. Also address your Firm's capability to reassign personnel, equipment and facilities should the proposed contract either not require them or be delayed.
- Describe your proposed cost controls, and your managerial approach toward maintaining budgets negotiated with ARRC. Identify who will be responsible for managing costs and how potential cost issues will be communicated and addressed with ARRC.
- Describe how individuals on your management team will interact with ARRC and Engineer(s) of Record during performance of the contract.

6.1.7 Proposed Project Staff

Weight: 15

Response must describe previous projects the proposed project team completed (or are substantially complete) that are related in size and scope to this project. **For each previous project,**

- Provide the project name and location
- Provide the name of the Project Manager or Project Engineer
- Provide the project duration (dates of Contract Award and Completion)
- Identify the client and provide a current reference contact name and phone number
- Describe the project

- List the firm(s) and staff involved as they relate to your Proposed Project Staff
- Provide cost performance – the initial Bid, final cost, and reasons for substantial change in cost
- Describe performance related to schedule; provide reasons for contract extensions (if any)
- Provide a brief narrative of the successes of the projects; include innovations implemented, and risks mitigated
- Identify specific experience gained from the described project that will help your team perform under this contract
- Describe any material changes, unresolved changes, claims, lawsuits, or litigation relating to the project

ARRC reserves the right to investigate referenced projects, other projects that the respondent has worked on, and contact references.

6.1.8 Approach to Fee and Price

Weight: 5

Explain how your approach to pricing work during this contract will be transparent and competitive, and how it will validate a fair price for the public's trust.

Describe the estimating process and tools you will use to communicate the cost of each bid item, the innovation cost savings, and the cost of any risk.

Identify the primary elements of cost for this project as you see them (e.g., labor, materials, indirect costs, etc.). Identify major temporary cost elements, such as haul roads, detours, temporary access, traffic control, and material site development. Specific numerical values are not required for your response, only identification of the elements.

Discuss your approach to schedule including hours of work, double or triple shifts, weather and winter considerations, and in general, duration of estimated work.

COST CRITERIA

CAUTION: Submittal of Offeror's or Subcontractor's "standard" rate schedules or other pricing documents which are not in required format will be non-responsive if they do not allow direct comparison with other responsive proposals.

Rates and costs proposed by the Offeror selected for contract negotiations may be investigated for reasonableness and allocability in accordance with the contract cost principles in 48 CFR Part 31. Unsupported rates and costs may be disallowed or result in termination of negotiations, or contract award. All proposed rates and the negotiated contract rates will be public information.

6.1.9 Labor Billing Rates (Required Format)

Weight: 5

Provide a proposed total hourly Billing Rate (i.e. inclusive of Direct Cost of Direct Labor, all Indirect Costs, and Fee) only for each of the job **FUNCTIONS** listed below. Note: Some of these functions may be performed by one or more employees of the Offeror or Subcontractors; consequently, an individual might be billed under the contract at different rates appropriate to the functions performed. **Only the maximum rate paid to any individual for each listed job function** - regardless of employer (Offeror or Subcontractor) - **must be provided and will be considered for this response**. Rates for lower paid individuals or for other job functions, if any, will be addressed during contract negotiations.

1. Contract Management	(Estimated at 10% of total labor effort)
2. Project Management	(Estimated at 25% of total labor effort)
3. Project Superintendent	(Estimated at 25% of total labor effort)
4. Cost Estimating	(Estimated at 25% of total labor effort)
5. Scheduling	(Estimated at 15% of total labor effort)

Billing Rates must be signed and dated by the person who prepares it (may be different signatures for each Subcontractor)

Response will be scored as follows: The maximum hourly rates proposed for the job functions listed above will be multiplied by the percentage of total labor effort (estimated above) and then summed to obtain an aggregate rate for each Offeror. If more than one rate is provided for any job function, only the highest rate will be used. Each Offeror's score will be calculated using the following equation - except that the **score will be zero if a rate for each listed function is not provided by an Offeror**.

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

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

6.1.10 Construction Fee Proposal (Required Format)

Weight: 10

Provide a separate price proposal for the fee portion of Stage 2 - Construction.

- Fee must be expressed as a percentage and consists of overhead, profit, and any other applicable indirect costs. Profit does not need to be identified separately; all three components should be combined to form a single percentage fee.
- This fee will be applied to all work directly performed by the prime contractor. The prime contractor will be permitted to a 5% fee (not the proposed fee) for subcontractor work or subcontractor-supplied materials.
- Joint ventures or prime/subcontractor partnerships identified as the proposal team will be treated as one entity and entitled to the proposed fee.

Response will be scored as follows:

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

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

Section 6.2 – Evaluation of Proposals

6.2.1. Competitive Sealed Proposals will be evaluated by a committee. Evaluation of responses to criteria set forth in Section 6.1 results in a numerical score for each proposal. Each criterion has an assigned weight for this RFP which demonstrates its relative importance. The total of all weights is 100 (100%). Each one- percent weight equates to a range of 0-5 points per Evaluator. The maximum points (score) obtainable for any proposal is equal to the product of 500 multiplied by the number of Evaluators.

6.2.2. Scoring of proposals will be accomplished as follows:

6.2.2.1 Each Evaluator will individually read and rate each Offeror's response to each criterion described in Section 6.1 - Technical Proposal. Ratings will be based solely on contents of proposal and in compliance with the ARRC's Instructions for Evaluation Committee. Except as may be stated within any criterion description, a rating of "5" = Best Response from all Offerors; "4" to "1" = Progressively Less Responsive; "0" = Non-Responsive. Ratings are multiplied by the assigned weights for each criterion to obtain criteria scores.

6.2.2.2 After completion of individual ratings, the Evaluation Committee will meet to discuss proposals. Evaluators may then alter their ratings; however, any changes shall be based solely on the criteria set forth in Section 6.1.

6.2.2.3 After scoring Section 6.1 - Technical Proposal, criteria scores - Cost (if applicable), will be calculated based on criteria descriptions.

6.2.2.4 The total score for each Offeror will be obtained by summing the scores determined for each criterion in Section 6.1. The order of ranking for negotiations shall be as follows: highest scored Offeror will be ranked first, next highest scored second, and etcetera.

6.2.3. Evaluators may discuss factual knowledge of, and may investigate Offerors' and proposed Subcontractors' prior work experience and performance, including projects referenced in proposal, available written evaluations, etcetera, and may contact listed references or other persons knowledgeable of a Contractor's and/or a Subcontractor's past performance. Factors such as overall experience relative to the proposed contract, quality of work, control of cost, and ability to meet schedules may be addressed. If any issues of significant concern to the proposed contract are discovered, the Committee may:

6.2.3.1 Provide written recommendations for consideration during contract negotiations;

6.2.3.2 Conduct discussions in accordance with paragraph 6.2.4, below.

6.2.4. The Committee may decide to conduct discussions (or "interviews") with responsible Offerors whose proposals are determined to be reasonably susceptible of being selected for award for the purpose of clarification to assure full understanding of, and responsiveness to, the solicitation requirements. Offerors selected by the Committee for discussions may be permitted to submit Best and Final Offers (BAFO) for final Committee Evaluation. After discussions and any BAFO's, Evaluators will determine the final scoring and ranking for contract negotiations by evaluating written and oral responses using only the criteria set forth in Section 6.1.

6.2.5. All Offerors will be advised of the Offeror selected for negotiation and, after completion of negotiations, a Notice of Intent to Award will be provided to all Offerors. If contract negotiations are unsuccessful with Offeror(s) selected for negotiation, the Contracting Agency may either cancel the solicitation or negotiate with other Offerors in the order of ranking.

6.2.6 Award under this RFP is anticipated to be announced within 30 calendar days of the submission date; all offers must be complete and irrevocable for 60 days following the submission date.

6.2.7 ARRC reserves the right to award a CM/GC contract solely on the basis of written proposal responses and reserves the right to award a contract to the successful firm without further communication.

The form of Agreement between ARRC and the selected CM/GC will be substantially equivalent to the sample GM/GC Contract form provided in Section 8 of this RFP. A contract or any subsequent agreement resulting from this RFP is not valid until executed by ARRC.

Section 7 – Pre-Construction Services Fee and Termination

Section 7.1 – Pre-Construction Fee

The selected Offeror will be notified after the RFPs have been reviewed and scored. The selected Offeror will be required to attend a scope verification meeting at a location determined by the ARRC PM and then submit a Pre-Construction Services Fee. This fee should include all direct costs, overhead and profit required to complete the scope of work outlined in Section 3.2 – Pre-Construction (Phase 1). The Offeror should include a work plan and a description of their intended level of effort to review and assist in the development of plans and specifications during the Pre-Construction phase. Pre-Construction costs must be supported by a derivation of cost and back-up documentation. In general, two methods of documentation for the derivation of cost and back-up information are acceptable:

Hourly rates with an overhead rate, direct expenses, and fixed fee:

The rates for each individual employee or classification included in the priced proposal must be submitted separately in a letter, certified by the company's financial officer.

Overhead Rate Option: Use an audited overhead rate. Provide an audit report for the company's Indirect Cost Rate Schedule for the most recent fiscal year to confirm the audited rate. If the audited overhead rate has been accepted by AKDOT&PF, other State, or Federal entities, include the acceptance letter and the corresponding audit report for the company's indirect cost rate schedule for the most recent fiscal year.

The fixed fee for profit allowed for this Project is 10.0% or less of the cost of direct labor and overhead.

Loaded hourly rates and direct expenses:

- The loaded hourly rates will include costs for overhead and profit and must be supported by invoices to other clients.
- The invoices must be for similar Pre-Construction services that have been provided to other clients.
- The rates submitted to ARRC for each employee or classification must be supported by a minimum of three invoices.
- The rates submitted to ARRC for each employee or classification must not be higher than the corresponding rate on any of the three supporting invoices.
- The invoices must be stamped "approved" by the client, or other documentation must be provided to verify that the client paid the invoices.

ARRC reserves the right to negotiate the cost of the Pre-Construction Services Fee. If ARRC and the selected CM/GC Contractor cannot agree on a price, hours of effort or number of employees providing these Pre-Construction services, ARRC will begin negotiations with the next highest-ranking Offeror from the RFP scoring process.

Pre-Construction costs must comply with the Federal cost principles to be eligible for participation. In compliance with 23 CFR Section 635.507, if a CM/GC Contractor provides an indirect cost rate, it must be in accordance with the Federal cost principles (as specified in 2 CFR part 200 subpart E) and a letter from an executive or financial officer of the company certifying it was prepared accordingly. Per 23 CFR Section 635.507, the certification of final indirect costs will read as follows:

This is to certify that I have reviewed this proposal to establish final indirect cost rates and to the best of my knowledge and belief:

All costs included in this proposal (identify proposal and date) to establish final indirect cost rates for (identify period covered by rate) are allowable in accordance with the cost principles in 2 CFR part 200 subpart E; and

This proposal does not include any cost which are expressly unallowable under application cost principles of 2 CFR part 200 subpart E.

Compensation for this Project shall be on a **milestone** basis (as shown in Figure 6 – Pre-Construction Services Fee: Milestones. below). Compensation shall be divided into payments for the completion of a portion of the services (*deliverables*) as outlined below:

Milestone	Percentage for Compensation
Preliminary Plan Comments	20%
Preliminary Plan Estimate	20%
Pre-Final Plan Comments	20%
Pre-Final Plan Estimate	20%
Construction Services Cost Proposal	20%

Figure 6 – Pre-Construction Services Fee: Milestones.

All billings for services must be directed to ARRC and follow the current guidelines outlined herein.

Payment to the CM/GC Contractor for services rendered shall not exceed the maximum lump sum amount unless an increase is approved in accordance with the Contract with the CM/GC Contractor.

Section 7.2 – Termination of Pre-Construction Services

ARRC may terminate the contract with the CM/GC Contractor if Pre-Construction services and coordination are not provided as negotiated and/or expected, or for convenience. A written fifteen (15) day notice will be sent to the CM/GC Contractor before the services are completed. If the Contract is terminated for any reason during the Pre-Construction phase, ARRC will determine if partial compensation for services rendered shall be paid to the CM/GC Contractor.

Section 7.3 – Pre-NEPA Approval Procurement and Requirements

As the CM/GC Contractor is to be procured prior to completing the NEPA approval process, ARRC must abide by and include the following provisions in the Pre-Construction services Contract:

1. A provision allowing unilateral termination by ARRC if the environmental review process does not result in a selecting a build alternative.
2. A provision that the scope of services in the Pre-Construction phase shall include all alternatives identified and considered in the NEPA process.
3. A provision ensuring that no commitments are made to any alternatives during the NEPA approval process and that the comparative merits of all alternatives identified and considered during the NEPA approval process, including the no-build alternative, will be evaluated and fairly considered.
4. A provision that the CM/GC Contractor must not prepare NEPA documentation or have any decision-making responsibility with respect to the NEPA approval process. However, the CM/GC Contractor may be requested to provide information about the Project and possible mitigation actions, including constructability information, and its work product may be considered in the NEPA analysis.
5. A provision that ARRC will not proceed, or permit any consultant or Contractor to proceed, with the development of shop drawings and fabrication plans before the completion of the NEPA approval process. However, the ARRC may elect to waive this provision for procurement of the 125' TPG superstructure as it is a known quantity.
6. A provision that ARRC will not proceed with the award of a construction Contract (*including early work packages such as advanced material acquisition or site work*) and will not proceed, or permit any consultant or contractor to proceed, with construction until the completion of the NEPA approval process for the Project. However, the ARRC may elect to waive this provision for procurement of the 125' TPG superstructure as it is a known quantity.

Prior to completing the NEPA approval process, ARRC may proceed, solely at the risk and expense of ARRC, with design activities at any level of detail (*including final design and Pre-Construction services associated with final design*) for a CM/GC Project before completion of the NEPA approval process without affecting subsequent approvals required for the Project.

The FRA, however, may not authorize final design activities and Pre-Construction services associated with final design, and such activities will not be eligible for federal funding until after the completion of the NEPA approval process. ARRC may use a CM/GC Contractor for Pre-Construction services associated with at-risk final design provided the costs of the CM/GC Contractor's at-risk work are segregated from Pre-Construction services eligible for reimbursement during the NEPA approval process. If ARRC decides to perform at-risk final design, it must notify FRA of its decision to do so before undertaking such activities. It should be noted that contracting for construction activities such as the acquisition or fabrication of materials, excluding the 125' TPG

superstructure, (*including shop drawings and fabrication plans*) is not allowed, even on an at-risk basis, before the conclusion of the NEPA approval process.

Section 8 – CM/GC Procurement Documents

Section 8.1 - ARRC Sample CM/GC Contract

The sample CM/GC contract is provided within Appendix B - ARRC Sample CM/GC Contract and includes the following:

1. General Contract Provisions; Defined Terms
 2. Contract Documents
 3. Work of This Contract
 4. Relationship and Role of the Parties
 5. Date of Commencement; Substantial and Final Completion
 6. Contract Price
 7. Changes in the Work
 8. Discounts, Rebates and Refunds
 9. Subcontracts and other Contracts
 10. Accounting Records
 11. Progress Payments
 12. Final Payment
 13. Termination or Suspension
 14. Representations and Warranties
 15. Miscellaneous
 16. Federal Terms & Conditions
- Schedule 1. CM/GC Key Persons
 - Schedule 2. Pre-construction Phase Services Fees
 - Exhibit A. Form of Fixed Price Amendment

Section 8.2 - CM/GC General Conditions and Supplemental Conditions

The CM/GC General Conditions and Supplemental Conditions are provided within Appendix C - CM/GC General Conditions and Supplemental Conditions and include the following:

1. Drug and Alcohol Free Workplace and Wage & Hour Requirements
2. CMGC General Conditions for Construction
3. Supplemental Conditions (*Not Used*)
4. Construction Quality Control Plan (CQC)

Section 8.3 - Required Contract Provisions for Federal-Aid Contracts

The CM/GC Required Contract Provisions for Federal-Aid Contracts are provided within Appendix D - Required Contract Provisions for Federal-Aid Contracts.

Section 8.4 - Federal and State Wage Provisions

Federal and Stage Wage Provisions in support of this Work shall be utilized in accordance with the following, when applicable:

1. Davis-Bacon Act WD, Federal General Decision Number AK20190001, Building and Heavy Construction Project Wages, 12/27/2019
2. Laborers' & Mechanics' Minimum Rates of Pay, Title 36. Public Contracts, AS 36.05 & AS36.10, Wage and Hour Administration Pamphlet No. 600 Issue 42 April 1, 2021. (https://labor.alaska.gov/lss/forms/Pamphlet_600_Issue_42.pdf)

Section 8.5 - Forms

The forms noted below are provided within Appendix E - ARRC Forms:

- List of Required Forms
- Price Proposal Fixed Fee Form
- Contractor's Questionnaire
- Performance Bond
- Payment Bond
- Sub-Contractors List

Appendices

A - ARRC CM-GC Acronyms and Definitions

B - ARRC Sample CM/GC Contract

C - CM/GC General Conditions and Supplemental Conditions

D - Required Contract Provisions for Federal-Aid Contracts

E - ARRC Forms

Attachments

1 - ARRC Risk Register Template

2 - ARRC Pre-Construction Phase Flowchart

3 - Pre-Construction Roles of Responsibility Matrix

Reference Information Documents

1 - ARRC – Bridge 086.6: Bird Creek Site Plan

2 - ARRC – 125’ Standard T.P.G. Bridge Replacement Standard Drawing

3 - ARRC – Existing Bridge Record Drawings

4 - NCHRP – Guidebook on Risk Analysis Tools and Management Practices to Control Transportation Project Costs