



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

October 2, 2020

Addendum 2
Invitation to Bid # 20-33-208503
MP 52.14 Rockfall Mitigation

Addendum number 2 is issued for Questions and Clarifications

The Closing Date for this ITB has changed.
Bids will be received until October 13, 2020 @ 3:00 PM Alaska time.

Clarifications:

Please replace the following pages in the entirety with the pages attached herein.

Page 58 Appendix E- Supplemental Conditions

Page 66-69 Base Bid Items and Add Alternate Items

Pages 89-91 Appendix I; Cost Schedule

Additional Attachments:

Clearance diagram for equipment on the rail attached, Fish Habitat Permit,

Anchor Testing Memo, Construction Specifications,

Equipment Mover Specifications, Site Visit Sign in

Questions

All other terms and conditions remain unchanged.

If there are any questions regarding this addendum please let me know.

Thank you,

Greg C Goemer
Sr. Contract Administrator Alaska
Railroad Corporation

APPENDIX E – Supplemental Conditions

SC - 01 **Basis of Payment**: Payment will be made for work performed in accordance with project drawings and these specifications. Payment shall be made only for the actual quantity of work completed. Contractor shall provide invoices with sufficient detail to support progress payments and include ARRC assigned contract number. Final payment will be made upon final acceptance of the work by ARRC, receipt of warranties and Alaska Department of Labor Notice of Completion.

Monthly progress payments to the Contractor based on estimate of the value of work performed and materials on hand under subsection 109-1.07 of the 2020 edition of the Alaska Department of Transportation and Public Facilities **Standard Specifications for Highway Construction**. At the Owner's discretion, a progress payment may be made twice monthly if the value of the estimate exceeds \$10,000.00. Request for payments must be made to the Owner via an approved format and bi-monthly payment requests must be made in writing on, or before, the pre-construction meeting.

END OF SUPPLEMENTAL CONDITIONS

BASE BID ITEMS:

The Construction Specifications, as referenced below, are attached herein for the construction of the two retaining structures outlined below. As such, additional pay items are outlined in the above referenced attached document that are not referenced below.

Item No. 1.1 – Mobilization

Perform work and operations necessary to move personnel, equipment, supplies and incidentals to the project site; establish offices, buildings, and other facilities, except those provided by the Owner, perform other work and operations and pay costs incurred, before beginning construction; complete similar demobilization activities; and furnish required submittals such as as-builts, certificates, payrolls, civil rights reports, and equipment warranties as necessary. The Owner does not anticipate at this time providing the Contractor with utilities or support facilities. Therefore, the Contractor shall, anticipate providing their own utility and support facilities necessary to complete the work and/or provide for their employees. Contractor must comply with the Alaska Department of Labor and Workforce Development requirements as noted herein. Inclusive to this line item is the work outlined in the Construction Specifications attached herein for the two (2) retaining structures.

Method of measurement for payment will be in accordance with subsection 640-4.01 and Supplemental Condition SC-01.

Item No. 1.2 – ARRC Mobilization Support

Item includes all equipment, labor, materials, and supervision required by the Contractor to schedule and utilize ARRC Maintenance-of-Way forces in support of its construction activities at the project site. The Contractor shall forecast its needs for ARRC support activities that consist of, but not limited to, the following activities; equipment mobilization, and material mobilization (*both to and from the site*) utilizing the following as a basis:

Equipment Description	Unit
Train Consist with up-to 10 ¹ flats and 10 ³ air dumps	Train Day ²
Equipment Mover	Day ⁴

Notes:

¹ Specifications for cars available for use are provided in herein under Attachments and availability of requested cars is not guaranteed.

² Hours of service are limited to a maximum of twelve (12) hours per crew shift. By Federal Law the Consist may not operate past the maximum of 12 hours.

³ Quantity of Difco 50yd³ air dump cars is dependent upon availability at the time of request.

⁴ Days are limited to a maximum of twelve (12) hours to include the operator's travel time from the Portage Section.

This line item will not be measured for payment.

Item No. 2 – Ditch Line Excavation

Work includes all equipment, labor, materials, and supervision required to construct the ditch line to the lines and grades shown on the Plans. Work is to be completed in accordance with subsection 203-3.02(h) - *Ditch Line/Subgrade Blasting*.

Inclusive to this work are all costs associated with the excavation of any of the "Classified Excavation" materials encountered (*as defined in subsection 203-2.01 MATERIALS*), all work associated with pioneering access trails (*as identified herein above*), all necessary clearing and grubbing required in any area, and maintaining the excavation and embankment areas to keep them free draining at all times as the work progresses, and finishing of the same areas to a reasonably smooth and uniform surface.

Measurement for payment shall be calculated in accordance with subsection 109-1.02(3)(b) and Item No. 8 – Construction Surveying.

The accepted quantity will be paid for at the agreed upon unit price and in accordance with Section 109 and Supplemental Condition SC-01.

Item No. 3 – Finish Face Excavation

Work includes all equipment, labor, materials, and supervision required to excavate the finish rock face to the lines and grades shown on the Plans by excavating.

Inclusive to this work are all costs associated with the excavation of any of the “*Classified Excavation*” materials encountered (*as defined in subsection 203-2.01 MATERIALS*), all work associated with pioneering access trails (*as identified herein above*), all necessary clearing and grubbing required in any area, and maintaining the excavation and embankment areas to keep them free draining at all times as the work progresses.

When drilling and blasting activities are required, work shall be performed as indicated herein and in accordance with Section 203 EMBANKMENT AND BASE.

Once all material has been relieved from the final face (*as defined by the lines and grades on the Plans*), material identified during the final face inspection is to be scaled, along with material identified on the existing slopes within fifteen (15) feet of the cut limits. The limits of scaling may be extended beyond fifteen (15) feet by the Owner, or its representative, if disturbed or displaced blocks are observed as a result of the Contractor’s blasting activities. Scaling within design excavation limits of the newly exposed slopes and in the adjacent fifteen (15) foot zone, or the extended limits as defined above, is subsidiary to this work.

Measurement for payment will be calculated as the summation of the total drilling depth, to include a maximum of six (6) inches of sub-drill per hole, of the pre-split and buffer holes, from the Contractor provided drill logs. Production holes shall be incidental to the finish face excavation efforts.

Material generated by this activity will be calculated in accordance with subsection 109-1.02(3)(b) and Item No. 8 – Construction Surveying and paid under Item No. 4 – Unclassified Excavation

The accepted quantity will be paid for at the agreed upon unit price and in accordance with Section 109 and Supplemental Condition SC-01.

Item No. 4 – Unclassified Excavation

Work includes all equipment, labor, materials, and supervision required to excavate materials to the lines and grades shown on the Plans. All material removed, or generated as a result of construction activities in support of this project, shall be considered unclassified excavation; as defined by subsection 203-2.01(1).

Inclusive to this work are all costs associated with loading unclassified excavation into ARRC provided air dumps and stockpiling of the material, if necessary, at the stockpile location located at approximately ARRC MP 51.12.

Measurement for payment shall be calculated in accordance with subsection 109-1.02(3)(b) and Item No. 8 – Construction Surveying.

The accepted quantity will be paid for at the agreed upon unit price and in accordance with Section 109 and Supplemental Condition SC-01.

Item No. 5 – Drain Holes

Work includes all equipment, labor, materials, and supervision required to drill drain holes in rock slopes to relieve excess water pressure as specified or directed. The Engineer will determine the location and construction details of the drain holes, depending on the conditions encountered in each slope.

The accepted quantity will be paid for at the agreed upon lump unit price and in accordance with Section 109 and Supplemental Condition SC-01.

The Construction Specifications, as referenced below, are attached herein for the construction of the two retaining structures outlined below. As such, additional pay items for the lump sum bid items (Items No 6.1 and 6.2) are outlined in the above referenced attached document that are not referenced below.

Item No. 6.1 – MP 52.14 Retaining Structure

Work includes all equipment, labor, materials, and supervision required to complete all work associated with the construction of the retaining structure, and its components in accordance with the Plans and the Construction Specifications included herein.

The accepted quantity will be paid for at the agreed upon lump sum price and in accordance with Section 109 and Supplemental Condition SC-01.

Item No. 6.2 – MP 52.40 Retaining Structure

Work includes all equipment, labor, materials, and supervision required to complete all work associated with the construction of the retaining structure, and its components in accordance with the Plans and the Construction Specifications included herein.

The accepted quantity will be paid for at the agreed upon lump sum price and in accordance with Section 109 and Supplemental Condition SC-01.

Item No. 7 – 36"x0.500t Smoothwall Steel Culvert

Work includes all equipment, labor, materials, and supervision required to construct culverts, to the lines and grades shown on the Plans, and in accordance with Section 603 "*CULVERTS AND STORM DRAINS*". Culvert material shall be 36"Ø x 0.500"t pipe meeting the requirements set forth in subsection 716-2.06 "*STEEL PIPE*". Excavation, bedding, and backfill are subsidiary to this work and must conform to the requirements set forth in subsections 204-2.01 and 204-3.01, the Construction Specifications attached herein, and the details on the plans.

The accepted quantity will be paid for at the agreed upon unit price and in accordance with Section 109 and Supplemental Condition SC-01.

Item No. 8 – Construction Surveying

Provide a surveyor or third-party surveying firm to perform surveying and staking essential for the completion of the project and perform the necessary calculations required to accomplish the work in conformance with the Plans and Specifications in accordance standard engineering and survey practices. The surveyor may also be directed and/or required to perform any task outlined in Section 642 "*Construction Surveying and Monuments*".

All calculations used to determine final pay item quantities (e.g. *volumes*) must be signed and sealed by a Professional Land Surveyor registered in the State of Alaska.

The accepted quantity will be paid for at the agreed upon lump sum price, incrementally on an agreed upon breakdown, and in accordance with Section 109. Prior to the Contractor's first application for payment that includes this progress under this item, the Contractor is to submit a lump sum breakdown for approval based upon with the phases and/or segments of work outlined herein.

ADDITIVE ALTERNATE BID ITEMS:

Item No. A1 – MP 51.8 Rock Stabilization

Work includes all equipment, labor, materials, and supervision required to remove the loose rock mass located at approximately ARRC Milepost 51.8 on the Track LT, as outlined in the photos attached herein. Material is to be removed in such a manner that the neither the adjacent bridge superstructure and/or substructure are adversely affected by the Contractor's means and methods of removing the mass.

The accepted quantity will be paid for at the agreed upon lump sum price and in accordance with Section 109 and Supplemental Condition SC-01.

APPENDIX I – Cost Schedule

COST SCHEDULE: A Bidder's Failure to provide the information requested in this Appendix may be cause for rejection of the bid on the basis on non-responsiveness. Cost shall be bid in accordance to all specifications in Appendix C, and any Technical Specifications incorporated herein.

AWARD CRITERIA: A contract award resulting from this solicitation may be made to the low, responsive, responsible bidder who meets the requirements as set forth in the plans and specifications and compliance thereof. An award may be made in the aggregate of Base Bid and or any combination of Base Bid and Add Alternates, whichever is deemed by the Contract Administrator to be in the best interest of the ARRC. The successful bidder shall hold unit prices of all additives firm for a period of thirty (30) days from the date of bid opening. Award is contingent on the availability of ARRC funds

BASE BID ITEMS					
Item No.	Item Description	Unit	Quantity ³	Unit Bid Price	Amount Bid
1.1	Mobilization	Lump Sum	1		
1.2.1	ARRC Train Consist	Day			
1.2.2	ARRC Equipment Mover	Day			
2	Ditch Line Excavation	Cubic Yard	1,055		
3	Finish Face Excavation	Cubic Yard	12,709		
4	Unclassified Excavation	Cubic Yard	13,764		
5	Drain Holes	Linear Feet	300		
6.1	MP 52.14 Retaining Structure	Lump Sum			
6.1.2	Soil Erosion and Sediment Control	Lump Sum	1		
6.1.3	Structures Excavation	Lump Sum	1		
6.1.4	Porous Granular Backfill with Filter	Lump Sum	1		
6.1.5	Soldier Pipe Socket – 24"Ø	Lump Sum	1		
6.1.6	Structural Steel	Lump Sum	1		
6.1.7	Rock Anchors	Lump Sum	1		

6.1.8	Sheet Pile Lagging	Lump Sum	1		
6.1.10	Rolled Erosion Control Products and Cellular	Contingent Sum	1		
6.2	MP 52.40 Retaining Structure	Lump Sum			
6.2.2	Soil Erosion and Sediment Control	Lump Sum	1		
6.2.3	Structures Excavation	Lump Sum	1		
6.2.4	Porous Granular Backfill with Filter	Lump Sum	1		
6.2.5	Soldier Pipe Socket – 24"Ø	Lump Sum	1		
6.2.6	Structural Steel	Lump Sum	1		
6.2.7	Rock Anchors	Lump Sum	1		
6.2.8	Sheet Pile Lagging	Lump Sum	1		
6.2.10	Rolled Erosion Control Products and Cellular	Contingent Sum	1		
7	36"Ø x 0.500t Steel Pipe	Linear Foot	120		
8	Construction Surveying	Lump Sum	1		
Total Base Bid :					

ADDITIVE ALTERNATE BID ITEMS ¹					
Item No.	Item Description	Unit	Quantity ³	Unit Bid Price	Amount Bid
A1	MP 51.8 Rock Stabilization	Lump Sum	1		

Notes:

¹ Award of Additive Alternate Bid items is dependent on Owner finances. The successful bidder will be notified of the Owner's intent to award additional work prior to receiving a Contract or Notice to Proceed (NTP).

³ Bid quantities are approximate. Contractor is responsible for their own quantity take-offs using the information within the Contract Documents to verify the quantities in the Cost Schedule.

NON-COLLUSION AFFIDAVIT: The Undersigned declares, under penalty of perjury under the laws of the United States, that neither he/she nor the firm, association, or corporation of which he/she is a member, has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this Bid.

The Undersigned has read the foregoing proposal and hereby agrees to the conditions stated therein by affixing his/her signature below:

BIDDERS NAME AND ADDRESS

COMPANY NAME

SIGNATURE BY AND FOR THE BIDDER

COMPANY MAILING ADDRESS

PRINTED NAME OF ABOVE BIDDER

CITY, STATE ZIP CODE

DATE OF BID

CONTACT PHONE NUMBER

CONTACT E-MAIL

1. Will ARRC provide a list of attendees & drone photos taken on 9/28 site visit?
 - A list of attendees is attached. The ARRC however did not collect any drone imagery during the site visit. If footage was collected, it was by another party.

Plans and Specifications

2. Page 64 of the specs Controlled Blasting item 1 states “Error! Referenced source not found..” Can a ARRC clarify?
 - Link referenced an outdated Cost Schedule. Revised the line item it referenced and the broken reference identified above.
3. Will ARRC provide track ballast as required for pipe cover & track repairs?
 - The ARRC will provide ballast as required to resurface the track. Materials required for pipe cover are subsidiary to Item No. 7. ARRC will provide transportation of materials required to complete the work with the limitations outlined under Item No. 1.2.
 - Ballast is to be provided for a maximum of 1.0’ below bottom of tie for the width prism.
4. Will ARRC require seismic monitoring of blasts near tunnels? What are the PPV limitations?
 - Yes. Parameters have been added to the ITB document.
5. What if any are the testing requirements for the rock anchors?
 - Testing requirements for the rock anchors are outlined in the Construction Specifications included with the attachments.
6. Rock Anchors, Plan sheet 13 of 15: Will ARRC allow the use of alternate rock anchor systems that meet design criteria. The system shown in plans will require specialized drilling/casing equipment from lower 48 at a very high cost. There are alternate rock anchor systems that will meet ARRC’s design load, unbonded length & corrosion protection requirements.
 - The ARRC is amenable to alternate systems as long as the Contractor can verify that their proposed alternatives meets the intent of the design. The verification will need to come from a Professional Engineer registered in, and in good standing with, the State of Alaska. Engineers registered in another State may, with the approval of the Owner, provide the abovementioned verification.
7. ITB page 61 of 92 states contractor will perform all track repairs. Plan sheet 2, Note 6 says ARRC will perform all track repairs. Please clarify.
 - All track repairs performed on the mainline are to be completed by qualified ARRC and will be at the Contractor’s expense. The Contractor will be required to assist the ARRC with the repairs as much as practicable.
8. Is it necessary to encase the H-beams in concrete after drilling the 24” sockets at each retaining wall? If so, what is the required PSI? If so, what testing is required by contractor?
 - Minimum required strength of cast-in-place concrete is 4,000 psi. Required testing is outlined in the Construction Specifications.
9. What testing is required of the tension anchors?
 - Anchors will be tensioned as outlined in the Construction Specifications.

10. It is recommended by DSI that all testing be performed at the face of rock, which will require the addition of a coupler and rod extensions through the wall after testing. Please advise if this is ARRC's preference.
 - This is acceptable. Contractor will be required to leave a length that is sufficient enough to lock off the anchor rods to the specified load with all the required ancillary items (e.g. nuts, washers, etc.)
11. Pages 6, 7 and 8 are missing from the Site Survey attachment. Is this intentional, or shall they be forwarded to the bidders?
 - This is intentional. The aforementioned pages depicted a preliminary wall design that was not utilized.
12. Plan sheet 2 of 15, Note 22: Concrete surface sealer requires 50-degree ambient temperature. Will this requirement be relaxed as construction is planned for winter months?
 - Yes as long as the product utilized is in accordance with the manufacture's recommendations.
13. What is to be used as soldier pile backfill?
 - Concrete, see the Construction Specifications.
14. Turf reinforcement mat (sheet 14 of 15) cannot be installed in frozen ground.
 - ARRC concurs. If bedrock is encountered in the area where the enhancement is proposed to be placed, turf mat will not be required.
15. Are there additional specifications available for tie-back anchors that stipulate all requirements for installation? These are not addressed in the Alaska Department of Transportation' 2017 Edition.
 - Yes. They are provided in the Construction Specifications provided as an attachment to the ITB. Also note that the specifications referenced the 2020 edition of AKDOT&PF's Standard Specifications for Highway Construction.
16. Sheet 13 of 15 detail A indicates the cutoff C12x30x14" exist across the PS31 face and the two get welded. There would be a gap here equal to the HP14x89 flange thickness. Please confirm the C12x30x14" exist at all waler/HP14x89 intersections only and the walers to not get welded to the PS31 sheets.
 - Based on the question, it appears they've assumed that the C12x30x14" with the leg cutoff is a continuous member, which would result in a gap at the sheeting equal to the HP14x89 flange thickness. However, the C12x30x14" with the leg cutoff is a discrete member, similar to the fill plates, and is 14" in length at both the sheeting and HP14x89 locations and can be welded at both locations.
17. Sheet 9 of the plans delineates the limits of a recent slide event downslope of the railbed at station 2544+50. Does ARRC have additional information about this event that can be shared? Of particular interest would be a known triggering event such as rockfall, heavy rain, construction, or maintenance activity, or a seismic event. Was a post slide investigation performed?
 - There is not additional information regarding this event with the exception of the photos shared via the DropBox. In the past rockfall has been a result of seismic activity, heavy rain, freeze-thaw cycles, and icing.

18. Appendix F, Special Conditions Pg. 61 Flyrock control states “or entering the Placer River”. Can a contractor assume that this requirements is specific to flyrock as defined under this section? Is rock entering the Placer River as a result of actions by the contractor other than flyrock acceptable? It is reasonable to assume that despite industry standard precautions some portion of the project excavation quantity will enter the Placer River as a result of excavation for wall install and blasted material exceeding the catchment capability of the ditch and railbed. Can ARRC provide bidders with greater clarity on their expectations regarding material entering the Placer River?
- Construction activities are meant mitigate the placement of rock within the Placer River. Material will inherently will enter the Placer River as a result of this work. However, if material is placed within the river that alters its natural course, the material will be required to be removed. Material currently enters the river from the project site as an indirect result of maintenance activities and via natural causes.
 - Contractor is responsible for following all stipulation of permits, regardless of any differing direction stated herein.
19. Galvanizing – Not done in AK? Spray metalizing OK? Hot dip galvanizing will require all structural steel to come from lower 48.
- All major components (piling, sheet pile, wale, anchor rod, etc.) shall be galvanized. Ancillary items may be spray metalized. Mil thickness, material compositions, and QA/QC testing requirements are to be approved by the Owner prior to the application of spray metalizing on any component used in this work.
20. Does detail “Backfill Detail” on page 13 of 15, where it shows fabric wrapped porous backfill apply if the wall is backfilled with 10” minus shot rock as shown on other drawings?
- The fabric and porous backfill is intended to be placed between the wall and the 10” minus shot rock.

Project Limits, Right-of-Way, Staging Areas, and Access

21. Explosive magazines – Limited area available for explosive magazines. Will contractor be allowed to set up explosive magazines at MP51 staging area?
- Yes. Any ATF requirements to do so are to be incurred by the Contractor for the temporary placement of the magazines on ARRC RoW. The nearest explosive magazine will be the magazine by the Howitzer Tent at Tunnel. The information for the aforementioned will be provided to the perspective Contractor to complete the required ATF paperwork.
22. Will the contractor be allowed to set up travel trailers at Portage? How many sewer/water hookups are available for contractors use at Portage? Cost to contractor?
- No.
23. Will the contractor be allowed to set up a man camp at MP51 Staging Area? What infrastructure (water/sewer) is available at this location?
- No.

24. The Specifications require Contractor to stay within ARRC R/W when constructing access for blasting. Please provide a drawing or define ARRC R/W limits.
- ARRW RoW is approximately 100' from the centerline of track, to each side. The intent is to keep blasting activities to within the ARRC's RoW and minimize impacts to the adjacent land Owner.
 - Any access or utilization of property outside the ARRC RoW is to be the responsibility of the Contractor. Contractor is to provide any permits necessary to access or utilize the aforementioned property(ies).
25. Please define the project right-of-way including any work boundaries or exclusion zones.
- ARRW RoW is approximately 100' from the centerline of track, to each side. The intent is to keep blasting activities to within the ARRC's RoW and minimize impacts to the adjacent land Owner. There are no exclusion zones within the project limits. Should Contractor activities permanently impact the adjacent land Owner's property negatively, additional permits may be required to allow the impact to occur.
26. What areas are available for Contractor staging?
- Contractor will be able to stage equipment at the Portage Station, railroad south of the loading ramp and on-site; to the south of the project at Tunnel Section (MP≈51). Materials generated from the work are to be stockpiled and at ≈MP, 80 that is directly adjunct and accessible from the Seward Highway and within the ARRC's RoW at Tunnel Section. Aggregate materials cannot be stockpiled within the Portage Station limits.
 - ARRC will provide any permits required for the stockpiling of material at the MP 80 stockpile location.
27. Will the ARRC allow Contractors to utilize either the Portage Section or Tunnel Section locations and their facilities for Contractor housing?
- No. The only facility of notable use to perspective Contractor's is the RoW.
28. Will the ARRC consider using the Moose Pass facility as the access point to the project for the Contractor's daily operations?
- No. The travel time and terrain obstacles between Moose Pass and the project limits do not make this option feasible for providing ARRC support to prospective Contractor's.
29. Please provide a drawing showing ROW limits, or limits of access around the top of the rock cut.
- ARRW RoW is approximately 100' from the centerline of track, to each side. The intent is to keep blasting activities to within the ARRC's RoW and minimize impacts to the adjacent land Owner. There are no exclusion zones within the project limits. Should Contractor activities permanently impact the adjacent land Owner's property negatively, additional permits may be required to allow the impact to occur.
 - Access is allowed via any ARRC RoW that is reasonably adjacent to the project limits. Contractor's means and methods must not leave the ARRC's RoW in a state that adversely affect the integrity of the track structure or redirect the flow of precipitation towards the track structure.

Geotechnical and Existing Site Conditions

30. A water well casing was observed during the site visit at the Southern staging area. Would this well be made available for contractor use if the contractor provides electricity for its operation?
- If there is a well point within the Project limits perspective Contractor's may utilize it.
31. Can ARRC provide bidders with surface/subsurface geotechnical data gained historically within the project limits? If not available within project limits, data within a broader area would still be of interest. Was geotechnical investigation performed pre or post project during the daylighting of tunnel number 5 in 1984 (paper attached for reference) and if so can it be provided to bidders?
- All the information relevant to the project and the tunnels that is currently available will be shared via DropBox.
32. See attached picture believed to have been taken of the Seward end of tunnel 3. It appears the rail was once supported by a bridge between the two tunnels and has since been filled with aggregate. This raises concern regarding construction equipment ground loads. Can ARRC confirm?
- The area shown in the photo is not within the Project limits. The image in questions is more likely the south end of Tunnel 2 where there is currently a bridge structure.
33. Is there topographical data that can be supplied for existing slopes above & below tracks in work area?
- The survey data that is provided in the ITB as a .pdf can be supplied in an AutoDesk Civil3D format and will be shared via DropBox.
34. Please provide tunnel & bridge openings / envelopes for transportation contractors equipment to site.
- The limiting opening between Portage and Tunnel Sections is provided in the clearance diagram.
35. Does ARRC have any drone footage of the work location that you can make available?
- The only drone footage that the ARRC has of the work location is what is provided in the survey .PDF attachment. The individual images utilized to generate this survey may be shared upon request.
36. Please provide test boring logs drilled in vicinity of retaining walls (Existing Site Conditions, sheet 1).
- See attached document from the work completed in 2020. Additionally, all information regarding the surrounding area that is currently available will be shared via DropBox.
37. Does ARRC have as-built for the Seward portal of tunnel #3? If so, can they be provided to bidders?
- All the information relevant to the project and the tunnels that is currently available will be shared via DropBox.
38. Are there utilities located within the project limits? If present, what is their approximate location, who is the owner, and what type are they?

- Yes. AT&T's fiber optic cable runs adjacent to the tracks and unknown copper cable on the opposite side.
39. It appears that the Seward portal of tunnel 3 was modified for increased strength and also lengthened to the South sometime after original construction. Is this correct?
- Yes, see documents that are shared within DropBox.
40. Is tunnel #3 fortified with mechanical means such as rock bolts, dowels, wire mesh or split sets? The area between 2544+75 and 2545+50 is of particular interest.
- Yes, see documents that are shared within DropBox. Rock bolts, rock dowels, split sets, mesh with shotcrete have all been utilized to fortify the tunnels and their associated portal structures.
41. Please provide geotechnical data as referenced in the 2nd paragraph of the Special Conditions.
- Said data is attached. All other data for this area that is currently available will be shared via DropBox.

Bid Items

42. How is 24-inch pipe removal & trench backfill paid? STA 2544+55
- The 24"Ø pipe is to be paid for under Item No. 7 - 36"Ø x 0.500t Steel Pipe. In addition, the diameter of the pipe is to be increased to 36"Ø.
43. 24-inch pipe, added thaw wire – How is added thaw wire paid? Overhang Area Plan & Details, sheet 9 of 13.
- Thaw wire, if required, will be provided and installed by the ARRC. As such, it will not be inclusive to the work that perspective Contractors are bidding.
44. 18-inch steel pipe & thaw wire – How is this work paid? Plan sheet 15 of 15
- The 24"Ø pipe is to be paid for under Item No. 7 - 36"Ø x 0.500t Steel Pipe. In addition, the diameter of the pipe is to be increased to 36"Ø.
 - Thaw wire, if required, will be provided and installed by the ARRC. As such, it will not be inclusive to the work that perspective Contractors are bidding.
45. Bid Items 6.1 and 6.2 appear to indicate a Lump Sum amount should be accounted for but the Bid Form is blacked out. Page 68 of 92 discusses payment for these Bid Items as being an agreed amount based on survey quantity. Please clarify if a lump sum dollar amount is to be paid under these bid items.
- Bid items are to be lump sum. An updated Cost Schedule will be provided. The breakdown shown in the Cost Schedule is the basic lump sum breakdown that will be utilized for payment purposes (i.e. for the Pay Requests).
46. Can you more clearly explain the difference between Bid Item 1.2.1 (ARRC Train Consist) and Bid Item 1.2.2 (ARRC Equipment Mover)? We assume the equipment and excavated material disposal would be in the ARRC Train Consist category. Where would the Contractor expect to use the ARRC Equipment Mover Bid Item?

- The train consist is intended to be utilized for mobilization and demobilization efforts, and for the removal of the shot rock generated by the product. The equipment mover would be utilized for moving equipment ahead of the mobilization efforts (e.g. an excavator to setup a ramp or an earthen ramp) to allow items to be safely removed from the rail cars provided with the train consist. The equipment mover would also be utilized to transport equipment that may become necessary at a later stage in the work where it is not practical to utilize a full train consist.
 - The Contractor is to provide 14 days' notice for use of the consist when it is not indicated on the Contractor's approved schedule. Scheduling of ARRC assets is critical to the success of this project.
47. Please clarify what is getting paid under item No. 3 – Finished Face Excavation, vs. item No. 4 – Unclassified Excavation? Under item No. 3, 5th paragraph talks about measurement being done based on drill depth, but the unit for this bid item is in Cubic Yards. Additionally under No. 3 it states that material generated from this shall be paid under item No. 4.
- Wording under Item No. 3 has been revised.
 - Finish Face Excavation shall be paid for a surveyed neat line quantity (cubic yards) under its respective Pay Item. Inclusive to this work would be the drilling of presplit, buffer, and production holes; provision of all explosive materials (to include presplit specific products), loading of said holes, all costs associated with monitoring and inspecting of critical structures, and scaling (as required).
 - Unclassified excavation is quantified as the Finish Face Excavation added to the Ditch Line Excavation. The quantity is based on the neat line quantities generated by the perspective Contractor's surveyor for the two lines items. The work under this item is to load the material generated by the two aforementioned tasks into the ARRC consist and to manage the stockpiles at the stockpile location.
48. Unclassified Excavation & Finish Face Excavation – Please clarify Measurement & Payment for Items 3 & 4 (ITB page 67 of 92). Is Finish Face Excavation paid by the LF of drilled pre-split & buffer holes? Is all excavation volume paid under B.I. 4? How was Unclassified Excavation qty of 13,704 CY's calculated versus 12,709 CY's of Finish Face Excavation?
- Finish Face Excavation shall be paid for a surveyed neat line quantity under its respective Pay Item. Inclusive to this work would be the drilling of presplit, buffer, and production holes; provision of all explosive materials (to include presplit specific products), loading of said holes, all costs associated with monitoring and inspecting of critical structures, and scaling (as required).
 - Unclassified excavation is quantified as the Finish Face Excavation added to the Ditch Line Excavation. The quantity is based on the neat line quantities generated by the perspective Contractor's surveyor for the two lines items. The work under this item is to load the material generated by the two aforementioned tasks into the ARRC consist and to manage the stockpiles at the stockpile location.
49. Turf Reinforcement Mat & Soil Anchors - How is this work paid? Plan sheets 14 & 15.
- If the site conditions warrant the use of the turf reinforcement mat, (i.e. if bedrock is not encountered) they will be paid for under the Lump Sum Items for their respective locations, as the Contingent Sum Items 6.1.10 and 6.2.10.

Permits

50. Page 35 of 92 7. ARTICLE 7 — LAWS AND REGULATIONS: 7.2 PERMITS, LICENSES AND TAXES indicates the Contractor is to procure all permits. What permits will the Contractor be responsible to procure?
- Prospective Contractor's will be required to obtain any permits required to complete the work that are not provided by the Owner. An AKDF&G Permit is expected to be required, is provided as an attachment.
51. SWPPP & SPCC plans required?
- It is in the Contractor's shall adhere to the Alaska DEC's Construction General Permit. As such, assume that a SWPPP is required for the work within the limits of the project and the staging area at Tunnel Section (MP ~51). The amount of fuel, and size and type of the vessel it is contained within, dictates whether a SPCC is required. Therefore, the Contractor's means and methods will dictate whether a SPCC is required or not.

Schedule

52. Are there any work hour restrictions? Except for Holidays, can the contractor work double shifts, 12 hours/shift & count on ARRC support 24-hours/day if needed? (Crew & materials transport with bus, explosive delivery from magazines, etc.).
- The Contractor may work as much as they'd like. If ARRC support and transportation is required for a 24-hour shift, then the Contractor may need to request additional flaggers to support their operation.
 - Crews will be provided transportation to the site via Hyrail vehicles provided by the ARRC. The bus utilized for the site visit may not be available.
 - Explosives are to be delivered to the site in accordance with all applicable Local, Federal, State and Tribal laws and regulations. In the past the ARRC has mobilized explosives to projects via a train consist. Transportation from the magazine to the project site would be via either Hyrail pickup truck or other equipment as long as the Contractor provides the required measures to maintain separation of explosive types, placards, and an employee possessor to travel with the cargo.
53. Please provide an approximate schedule for allowable track closure windows. Besides the bi-weekly track inspection & ARRC work crew equipment, what other ARRC train traffic occurs during winter months?
- Train traffic during the winter months is solely based on customer necessity. At this time train, traffic between Portage and Seward is limited to the trains supporting this project. The perspective Contractor will be provided 72 hours' notice before it requires the track to be put back in service should it be required to be removed from service. The track will need to be returned to a serviceable state prior to the beginning of Passenger Service in the spring or if a natural disaster requires Maintenance-of-Way to mobilize via rail from north of the project limits (i.e. from Anchorage or Portage).

54. Plan sheet 2 of 15, Project Note 5: Indicates a 3-week window is available for construction. What is this window in reference to? .
- The 3-week window is not in reference to anything relevant to this project. The sheet will be updated and the window note will be removed.
55. What is the longest period of time that a contractor can eliminate the possibility of rail service through the project limits?
- The longest period that a Contractor can eliminate the possibility of rail service through the project limits is based on train traffic, avalanche and slide zone conditions, and the Contractor's needs for the ARRC Train Consist to assist with its activities (e.g. shot rock removal, etc.). The perspective Contractor will be provided 72 hours' notice before it requires the track to be put back in service should it be required to be removed from service. The track will need to be returned to a serviceable state prior to the beginning of Passenger Service in the spring or if a natural disaster requires Maintenance-of-Way to mobilize via rail from north of the project limits (i.e. from Anchorage or Portage).
56. The project documents indicate contractors have three weeks to complete this project. Is this correct?
- No. The Contractor has until the substantial and final completion dates indicated in the ITB package to complete the project.
57. On Page 2 of the retaining wall drawings note 8. States that "Construction activities shall not disrupt railroad operations and shall be in accordance with the specifications. All work to be scheduled with accordance with the construction schedule and construction staging plan." What is the expected rail operations between October and May 1 on this section of rail?
- Train traffic during the winter months is solely based on customer necessity. At this time train, traffic between Portage and Seward is limited to the trains supporting this project. The perspective Contractor will be provided 72 hours' notice before it requires the track to be put back in service should it be required to be removed from service. The track will need to be returned to a serviceable state prior to the beginning of Passenger Service in the spring or if a natural disaster requires Maintenance-of-Way to mobilize via rail from north of the project limits (i.e. from Anchorage or Portage).

ARRC Support / Transportation / Snow Removal

58. What is typical snow accumulation at MP51 staging area over winter months
- Our 20-year average is a 2' snowpack by January, 5' peak snowpack for the season. The average for the last 10 years has been a 1.5' snowpack around Jan 1, 4' peak height for the season. (This would be our educated guess for what is typical.) We have seen years with no snow on the ground by Jan 1 to our highest pack of 5' by Jan 1. In 2015, the peak height of snow topped out at 1' for the season. In 2012 the peak height of snowpack was 9'.
59. Please provide specs on ARRC's equipment mover.
- Attached is a drawing of the equipment mower. Given the gradient of the track, the maximum load is approximately 100,000 pounds. The ARRC typically utilizes said

equipment to transport its CAT 988 wheel loader, CAT 345 excavator, and its CAT D8 track dozer.

- The Contractor is to provide 14 days' notice for use of equipment not indicated on the Contractor has approved schedule. Scheduling of ARRC assets is critical to the success of this project.

60. Does ARRC foresee any restrictions on transporting explosive materials to work area on ARRC equipment from Portage or MP 51 staging area?

- No. Explosives are to be delivered to the site in accordance with all applicable Local, Federal, State and Tribal laws and regulations. In the past the ARRC has mobilized explosives to projects via a train consist. Transportation from the magazine to the project site would be via either Hyrail pickup truck or other equipment as long as the Contractor provides the required measures to maintain separation of explosives.
- Vehicles transporting explosives are to be placarded in accordance with all Federal, Local, State, and Tribal laws and regulations and accompanied by an employee possessor that is traveling within the transport vehicle.

61. Will ARRC operate, maintain & fuel ARRC equipment provided to contractor?

- ARRC equipment supporting this project will be fueled, maintained, and only operated by ARRC personnel.
- Qualified ARRC personnel can only operate ARRC equipment; Contractor's may not operate ARRC assets.

62. School bus – Will the bus used to transport contractors on site visit be available during construction?

- If the school bus utilized during the site visit is not available, a smaller version of it may be.

63. Will other ARRC equipment be available for contractor's use? 2 dozers staged at MP54 bridge, backhoe at Portage & rail-mounted pickup trucks.

- No with the exception of utilizing the Hyrail trucks operated by the ARRC supporting the project.

64. Will the ARRC bus be made available with ARRC operator to shuttle crew to/from the jobsite each day? Is it reasonable to assume snow removal will be completed as necessary ahead of bus departure such that crews can be scheduled to depart from the Portage depot at 6:30 AM each morning without impact? Are there any work hour limitations?

- Transportation will be provided to the site from the Portage Section each day. Snow removal would be completed as necessary ahead of the transportation's departure to a reasonable extent. Larger snow events may require additional time for ARRC provided snow removal as the equipment staged at Portage Section might not be able to efficiently or safely remove snow in a timely manner. Departure at a specific time will be solely dependent on the amount of snow and/or precipitation witnessed this upcoming winter.
- Should the Contractor require working 24-hours a day, a second flagger may be required. During scheduled and approved outages that do not require ARRC support, the Contractor may work between the sole flagger's work windows.
- When large storm events occur, the ARRC's focus is to ensure transportation between Anchorage and Whittier is maintained with the corridor from Portage south being

secondary to the ARRC's freight operations. *See note about the dedicated ARRC ballast regulator and operator.

- Once snow accumulation occurs along the corridor to the project location, the ARRC will assess the known slide zones for safety purposes. Once the level has been increased to Level 2, all employees will be required to attend a half-day avalanche safety course (either provided and/or coordinated by the ARRC). Employees are required to wear avalanche beacons and have rescue gear while traversing through (Level 2) or working in a known slide zone (both Level 2 and Level 3.) At Level 3 work is permissible with approval from the ARRC Manager – Avalanche Program and/or the respective ARRC District Roadmaster. At Level 4 the section of track is closed to all but avalanche mitigation crews.
- Depending on the weather, or snow accumulation, there may be days where work will not be permitted to occur or work may occur later than expected.

65. Who performs snow removal from ARRC tracks & how frequently?

- The ARRC removes the snow. Snow removal within the project limits and the staging areas is to be performed by the Contractor. The frequency of ARRC performed snow removal is determined by the amount of snow received and is constrained by avalanche and slide zone activity to the north of the project limits. ARRC snow removal is only performed within the track prism, not within the project limits or within the stockpile/staging areas.
- Depending on the Contractor's schedule, the ARRC may assign a ballast regulator and an operator to the Project for snow removal purposes.

66. Will ARRC remove the rail between both tunnels prior to contractor mobilization and re-install upon project completion?

- No. Should prospective Contractors need to remove the rail, said Contractor will be responsible for supporting the ARRC in its removal. Only ARRC personnel will make cuts to the rail between with the Project limits. The Contractor will be responsible for removing the track panel lengths that are prepared for removal. The Contractor will assist the ARRC with the replacement of any removed panels, to include lifting the panels in place and placing/replacing the ballast within the affected section.

67. Will ARRC's equipment mover be made available to contractors?

- Yes. However, it may not be available every day and only an ARRC Operator can operate it. The intent of Line Item No. 1.2 – ARRC Mobilization Support is to determine the amount of support that prospective Contractor is will require so that the ARRC can ensure that it can support the Contractor. Additionally, Contractor's may provide their own rail equipment for use by the approved Operators under the direction of ARRC Flagger. Note that prior to any outside equipment travelling on ARRC track infrastructure, it shall be inspected by ARRC to ensure that it meets both its and Federal requirements. Equipment not inspected and approved by the ARRC will not be allowed to traverse the rail.

68. Please clarify ARRC provided services to include use of rail cars, high rail, bus, staging?

- Item No 1.2 outlines what is available for use in regards to rail cars. The ARRC provided drawings for the flat cars that are available and specifications for the side dump cars that are also available.

- Hyrail vehicles (bus, short bus, pickup trucks) will be provided and operated by the ARRC to support the project.
- Staging within the ARRC's RoW as indicated above and herein.

Fuel

69. Will ARRC sell fuel to contractor from tanks at MP51 staging area and for what cost?
- The tanks are currently empty and slated to be removed.
 - Fuel can be scheduled to be delivered with one of the work train consists supporting the project.
70. The storage area at MP51.12 has two fuel storage tanks, are these available for use?
- No. The tanks in question have been drained and are slated for removal. Rust scale was noted when they were pumped out.

Contractual

71. Is this project Federally funded?
- No.
72. Section 5.4.10 states "Aircraft Liability insurance covering all owned and non-owned aircraft with a per occurrence limit of not less than \$5,000,000." Would ARRC change this requirement from 5,000,000 to 2,000,000? No, the ARRC requires the 5M limit in place for aircraft liability if the successful bidder will be accessing the jobsite via any type of aircraft.
73. Can contractor utilize Primary & Excess insurance policies to meet the GL and P&I limits? Given the potential for conflicting provisions between CGL and Excess liability policies we cannot accept the proposed combination. CGL policies should have endorsements that delete any restrictions for indemnity or work performed within 50 feet of our ROW.