Addendum Cover Page

Proposal Descr: CASCADE POINT FERRY TERMINAL STAGE 1 DESIGN BUILD

Program Number: HSHWY00015 Addendum No.: 04

Federal Number: Date Issued: June 04, 2025

Letting Date/Time: 06/27/2025 02:00 pm Number of Pages: 22

Previous Addenda Issued:

No.: ADD01 **Date Issued:** May 27, 2025

No.: ADD02 **Date Issued:** May 29, 2025

No.: ADD03 **Date Issued:** May 30, 2025

Issuing Officer: Christopher Goins, P.E., C.M. -

Southcoast Regional Director

Email: srdotpfcontracts@alaska.gov

Address: Department of Transportation &

Public Facilities

6860 Glacier Highway Juneau, AK, 99801

Bidders are required to acknowledge receipt of this addendum prior to the hour and date set for the bid letting by one of the following methods:

(a) By acknowledging receipt of this addendum on the bid submitted.

(b) By fax or email, listed above, which includes a reference to the project and addendum number.

The bid documents require acknowledgement individually of all addenda to the drawings and/or specifications. This is a mandatory requirement and any bid received without acknowledgement of receipt of addenda may be classified as not being a responsive bid. If, by virture of this addendum it is desired to modify a bid already submitted, such modification may be made by fax or email, provided such a fax or email, makes reference to this addendum and is received prior to the opening hour and date specified above. In the event of a bid delay, bidders submitting an electronic bid that have already submitted their bid prior to the bid delay must resubmit their bid utilizing all Bid Forms EBSX Files or their bid will not be received.

Addendum

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHCOAST REGION CONTRACTS SECTION 6860 GLACIER HIGHWAY

JUNEAU, ALASKA 99801-7999

TELEPHONE: (907) 465-4420

FAX: (907) 465-4238

TO ALL PROSPECTIVE BIDDERS AND OTHERS INTERESTED IN PROJECT NO. HSHWY00015; Cascade Point Ferry Terminal Stage 1 Design Build

ADDENDUM NO. 4 June 4, 2025

This transmittal consists of twenty-two (22) pages including this cover sheet. If any pages are missing or clarification is needed, contact the Southcoast Regional Contracts Office immediately.

The RFPs are modified as follows:

RFP Part I-Instructions to Proposers

Request for Proposals for a Design Build Construction Contract (Form 25D-7)). <u>Change</u> the Bid Due Date from 2:00 PM local time (per the Department's time source) on the 13th day of June, 2025 to 2:00 PM local time (per the Department's time source) on the 27th day of June, 2025.

RFP Part II-Contract Requirements

Page 16, SECTION 103-1.02 SUBCONTRACTOR LIST. Add Addendum 4, Attachment 1 (2 pages) under Section 103.1.02, which includes Subcontractor Form 25D-6.

Page 84, DIVISION 500. Replace with Addendum 4, Attachment 2 (10 pages).

Page 229, DIVISION 700. Replace with Addendum 4, Attachment 3 (6 pages).

RFP Part III-Scope of Work

Page 6, SECTION 2.1, Table 2-1.

Delete Reference for AASHTO Standard Specifications for Highway Bridges

Page 19, SECTION 3.5 Retaining Wall Work. Referenced Standards for Roadways, Approved Retaining Wall Systems. Delete The approved retaining wall systems are listed in RFP Part III, Section 4, Bridges and Structures and Replace with Design of retaining wall must comply with the Alaska Bridge and Structures Manual. MSE walls are not allowed at water crossings.

Page 23, SECTION 4 Bridges and Structures. 4.1 2 Bridge Design.

Line 2 after (ABSM) Add 2025 Edition.

<u>Paragraph 1, Add after last sentence, Waterproofing membrane and paving membrane must be placed over the bridge.</u>

Page 36, SECTION 6.2 Performance Requirements Bridges and Structures.

Paragraph 1, Add after last bullet, "Permit Submittal and Acceptance

The Design-Builder shall prepare and submit a complete application for the U.S. Army Corps of Engineers (USACE) permit.

The application shall be submitted to the Department for review of completeness. The Department will, in writing, confirm acceptance of the application as complete within fifteen (15) calendar days of submittal. If revisions are required, the application will be returned with comments. The Design-Builder shall revise and resubmit until the Department issues written confirmation that the application is complete.

<u>Review Timeframe</u>

<u>A period of nine (9) months from the date of the Department's written acceptance of the complete USACE</u> permit application is considered a reasonable timeframe for permit review and issuance by the USACE. <u>Contract Time Adjustment</u>

If the USACE has not issued the required permit(s) within the nine (9) month review period, the Department will equitably extend the Contract performance period to account for the delay, provided that the delay is not attributable to the Design-Builder's actions or omissions, including but not limited to failure to respond to USACE information requests in a timely or adequate manner.

Design-Builder Cooperation

The Design-Builder shall provide timely responses to all USACE and Department requests for additional information, revisions, or clarifications related to the permit application. Failure to do so may affect the Department's determination regarding responsibility for delays.

Notification Requirement

The Design-Builder shall notify the Department in writing of any indication that the USACE review may exceed the nine (9) month period. The Department will, at its discretion, coordinate with the USACE and the Design-Builder to expedite resolution."

SPECIAL NOTICE TO PROPOSERS

Environmental Information has been uploaded as a part of this addendum, as supplemental information 4.

You can download this addendum from the following website: https://www.bidx.com/ak/main

Bidders are required to acknowledge this addendum on the proposal form or by FAX prior to the bid opening.

Addendum Number four (4) received. HSHWY00015; Cascade Point Ferry Terminal Stage 1 Design Build	
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Name/Title	Date
Name/Title	Date

103-1.02 SUBCONTRACTOR LIST. The apparent low bidder shall submit a completed Subcontractor List, Form 25D-5, within five working days following receipt of written notification by the Department that it is the low bidder.

An apparent low bidder who fails to submit a completed Subcontractor List form within the time allowed will be declared nonresponsible and may be required to forfeit the bid security. The Department will then consider the next lowest bidder for award of the Contract.

If a bidder fails to list a subcontractor, or lists more than one subcontractor for the same portion of work, and the value of that work is in excess of one-half of one percent of the total bid amount, the bidder agrees to perform that portion of work without a subcontractor and represents that it is qualified to perform that work.

A bidder who lists as a subcontractor another contractor who, in turn, sublets the majority of the work required under the Contract, violates this subsection.

On federal-aid projects, subcontractors must obtain an Alaska business license and certificate of contractor registration prior to award of the Contract.

On wholly state-funded projects, all subcontractors listed by the Contractor shall have a valid Alaska business license and a valid certificate of registration as a contractor, as defined in AS 08.18, at the time the bid is opened. If a subcontractor listed by the Contractor does not have a valid business license and certificate of registration at the time the bid is opened, the Contractor shall replace the subcontractor with a subcontractor that had a valid Alaska business license and a valid certificate of registration as a contractor under AS 08.18 at the time the bid was opened.

A bidder or Contractor may, without penalty, replace a listed subcontractor who:

- 1. Fails to comply with licensing and registration requirements of AS 08.18;
- 2. Fails to obtain a valid Alaska business license;
- 3. Files for bankruptcy or becomes insolvent;
- 4. Fails to execute a subcontract for performance of the work for which the subcontractor was listed, and the bidder acted in good faith;
- 5. Fails to obtain bonding acceptable to the Department;
- 6. Fails to obtain insurance acceptable to the Department;
- 7. Fails to perform the subcontract work for which the subcontractor was listed;
- 8. Must be replaced to meet the bidder's required state or federal affirmative action requirements;
- 9. Refuses to agree or abide with the bidder's labor agreement; or
- 10. Is determined by the Department to be not responsible.

In addition to the circumstances described above, a Contractor may in writing request permission from the Department to add a new subcontractor or replace a listed subcontractor. The Department will approve the request if it determines in writing that allowing the addition or replacement is in the best interest of the State.

A bidder or Contractor shall submit a written request to add a new subcontractor or replace a listed subcontractor to the Contracting Officer a minimum of five working days before the date the new subcontractor is scheduled to begin work on the construction site. The request must state the basis for the request and include supporting documentation acceptable to the Contracting Officer.

If a bidder violates this subsection, the Contracting Officer may:

- 1. Cancel the Contract after Award without any damages accruing to the Department; or
- 2. After notice and a hearing, assess a penalty on the bidder in an amount not exceeding 10 percent of the value of the subcontract at issue.



STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SUBCONTRACTOR LIST

Cascade Point Ferry Terminal - Stage 1 Design Build, Project No. HSHWY00015

Project Name and Number

The apparent low bidder shall complete this form and submit it so as to be received by the Contracting Officer prior to the close of business on the fifth working day after receipt of written notice from the Department.

Failure to submit this form and may result in the forfer			the due date will resu	alt in the bidder being declared nonresponsive
Scope of work must be copercent of work to be done		an item of work	is to be performed b	y more than one firm, indicate the portion or
Check as applicable:	greate	er than ½ of 1% of or	f the contract amount.	will be accomplished without subcontracts
	[] Subc	ontractor List is as	s follows:	
LIST FIRST TIER SUBC				
FIRM NAM ADDRESS PHONE NO	S ,	CONTR	S LICENSE NO., RACTOR'S RATION NO.	SCOPE OF WORK TO BE PERFORMED
	CONTINU	E SUDCONTDACT	OR INFORMATION C	NI DEVIEDCE
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I hereby certify the were opened for this		isiness licenses a	nd Contractor's reg	gistrations were valid at the time bids
Signature of Authorized Co	mpany Representa	itive	Title	
Company Name			Company Address (S	Street or PO Box, City, State, Zip)
			()	
Date			Phone Number	

Form 25D-5 (10/09) Page 1 of 2

FIRM NAME, ADDRESS, PHONE NO.	AK BUSINESS LICENSE NO., CONTRACTOR'S REGISTRATION NO.	SCOPE OF WORK TO BE PERFORMED

Form 25D-5 (10/09) Page 2 of 2

State of Alaska Standard Specifications for Highway Construction February 2020 Edition Modified as Follows:

DIVISION 500 - STRUCTURES

SECTION 501 CONCRETE FOR STRUCTURES

501-1.02 DEFINITIONS. Replace "COMPRESSIVE STRENGTH TEST" with the following:

COMPRESSIVE STRENGTH TEST. The average strength test of concrete, from at least two 6.0×12.0 inch or at least three 4.0×8.0 inch compressive strength test cylinders sampled according to AASHTO R 60 or ATM 501, cured according to AASHTO R 39 or ATM 506, and tested according to AASHTO T 22 or sampled, cured, and tested to equivalent ASTM test methods. Or the average strength test of grout, from at least three specimens sampled and tested according to ATM 507, AASHTO T 106, or ASTM C 109. Unless otherwise noted, tested at an age of 28 days.

501-2.02 COMPOSITION OF MIXTURE - JOB MIX DESIGN. Replace the first paragraph with the following: Provide a Job Mix Design, for each required class of concrete and Specified Compressive Strength (f'c), which meets the requirements of this Subsection and provides workability and consistency so the concrete can be worked readily into the forms and around reinforcement without segregation or bleeding. Determine proportions using the absolute volume method according to ACI PRC-211.1.

501-3.01 BATCHING. Replace the first paragraph of 1a Plant Certification by the National Ready Mix Concrete Association with the following: Certification may be obtained from the National Ready Mix Concrete Association (NRMCA). Information concerning NRMCA certification may be obtained online at www.nrmca.org. The NRMCA certification is valid for 2 years from the date of inspection.

Replace the first paragraph of 1c Plant Certification by Precast/Prestressed Concrete Institute with the following: Certification may be obtained from the Precast/Prestressed Concrete Institute (PCI) for fabrication of precast and prestressed concrete if the batching plant is located at the concrete casting facility. Information concerning PCI certification may be obtained online at www.pci.org.

Replace the first paragraph of 1d Plant Certification by National Precast Association with the following: Certification may be obtained from the National Precast Association (NPCA) for fabrication of non-prestressed precast concrete if the batching plant is located at the concrete casting facility. Information concerning NPCA certification may be obtained from the National Precast Concrete Association online at http://precast.org.

Replace the 2. Measuring Materials with the following:

a. <u>Cementitious Materials</u>. Use cementitious materials of the same brand, type, and from the same plant of manufacture as the cementitious materials used to verify the approved Job Mix Design according to Subsection 501-2.02.7. Ensure the quantity of the Portland cement and the cumulative quantity of Portland cement plus other cementitious materials is proportioned in amounts required by the Job Mix Design and meets the mix acceptance requirements.

Measure cementitious materials by weight. When other cementitious materials, including fly ash, ground granulated blast-furnace slag, or silica fume, are specified in the concrete proportions, the material may be cumulatively weighed with the Portland cement. Weigh cementitious materials on a weighing device that is separate and distinct from those used for other materials. Weigh the Portland cement before other cementitious materials.

- Portland cement is permitted to be measured in bags of standard weight (94 pounds). Do not use a fraction of a bag of cementitious materials unless its weight has been determined by calibrated weighting devices.
- b. <u>Aggregates</u>. Use aggregates from the same sources and gradations as the aggregates used in the trial mixtures or field test records used to verify the required average compressive strength. Ensure the quantity of the aggregates is proportioned in amounts required by the Job Mix Design.
 - Measure aggregates by weight. Establish batch weight measurements on dry materials and adjust the actual scaled weight for the required dry materials weight plus the total weight of moisture, both absorbed and surface, contained in the aggregate.
- c. Water. The total quantity of mixing water includes water added to the batch, ice added to the batch, and water occurring as surface moisture on the aggregates. Measure the added water by weight or volume. Measure added ice by weight. Discharge the flush water (wash water) prior to loading the next batch of concrete. Do not use flush water (wash water) as a portion of the mixing water.
- d. Admixtures. Use concrete admixtures according to the manufacturer's instructions and as approved in the Job Mix Design. Measure powdered admixtures by weight. Measure paste or liquid admixtures by weight or volume.

SECTION 503 REINFORCING STEEL

503-3.01 PLACING DRAWINGS. <u>Replace the 1st paragraph with the following:</u> Submit placing drawings, detailed according to ACI 315.

503-3.02 PROTECTION OF MATERIALS. <u>Replace the 2nd sentence of the 1st paragraph with the following:</u> Before placing reinforcing steel in the work, ensure that the reinforcing steel is free of salt, rust, and foreign substances that may affect the performance of the reinforcing steel.

503-3.05 SPLICING. Replace "c. Testing/Inspection" under Item 2. Electric Resistance Butt Welded Joints with the following:

c. Testing/Inspection.

Perform job control tests using a testing laboratory with experience with ASTM A370 and California Test Method 670. A job control test consists of the fabrication, under the same conditions used to produce the splice, and the physical testing of 4 sample splices for each lot of splices. An authorized Department representative will designate when samples for job control tests are to be fabricated and will determine the limits of the lot represented by each job control test.

A lot of shop produced resistance welded butt joints is defined as no more than 150 splices of the same type of welds used for each combination of bar size and bar deformation pattern that is used in the work.

The Engineer or the Engineer's authorized representative shall witness the job control tests performed by the testing laboratory. Give the Engineer at least 7 working days' notice before beginning control tests.

Identify sample splices with tamper proof and weatherproof markings prior to shipment to the testing laboratory.

The sample shall consist of a resistance welded butt splice bar and a control bar that are identified and marked as a set. The same reinforcing bar (hoop) may be used to provide the test weld and control bar.

Test each sample to failure in accordance with ASTM A706, ASTM A370 and California Test Method 670. Determine the ultimate tensile strength for all control bars by testing the bars to failure.

The production lot will be rejected if:

- (1) a sample fails within one bar diameter of the splice at less than 95 percent of the ultimate tensile strength of the associated control bar
- (2) necking of the bar prior to rupture, as defined in California Test Method 670, is not observed
- (3) a sample does not meet the mechanical requirements of ASTM A706 Grade 60

Replace "a. General" under Item 3. Welded Lap Splicing with the following:

a. <u>General.</u> Use direct lap joint welds conforming to the requirements of AWS D1.4 except as noted below.

Use the joint details and dimensions as shown in Figure 5.4(A), "Direct Lap Joint with Bars in Contact" of AWS D1.4.

Use electrodes classified as "Nickel-Steel" as referenced in AWS A5.5, A5.28, or A5.29.

Replace "c. Qualifications and Submittals." and "d. Testing/Inspection." under Item 4. Mechanical Butt Splices with the following:

c. Qualifications and Submittals. A splice will be considered qualified if the splice can develop a minimum tensile strength of 80000 psi, based on the nominal bar area, and the bars within the splice do not exceed a total slip shown in Table 503-3, when tested according to the relevant material ASTM, ASTM A370 and California Test Method 670.

TABLE 503-3
ALLOWABLE TOTAL SLIP LENGTH

Reinforcing Bar No.	Total Slip (inch)
4	0.020
5	0.020
6	0.020
7	0.028
8	0.028
9	0.028
10	0.036
11	0.036
14	0.048
18	0.060

Submit the following information:

- (1) the manufacturer's name;
- (2) the name of the product or assembly;
- (3) the lot, heat, or batch number that identifies the splice;
- (4) the bar grade and size number to be spliced by the material;
- (5) a complete description of the splice and installation procedure; and,
- (6) Tensile Test results including:
 - (a) bar nominal area;
 - (b) ultimate load at failure;
 - (c) ultimate tensile strength;
 - (d) necking results (either visually or through strain values); and,
 - (e) failure mechanism and location.
- (7) Slip Test results including:
 - (f) initial length measurements;
 - (g) final length measurements; and,
 - (h) calculated slip.
- d. <u>Testing/Inspection</u>. Perform job control tests consisting of the fabrication, under conditions used to produce the splice. For each lot of splices perform 6 slip tests and 6 tensile tests using different sample splices for each test. The Engineer will designate when samples for job control tests are to be fabricated and will determine the limits of the lot represented by each job control test.

A lot of mechanical butt joints is defined as no more than 150 splices of the same type of mechanical butt splice used for each combination of bar size and bar deformation pattern that is used in the work.

Make splice samples using the same splice materials, position, equipment, and following the same procedures as used to make splices in the work. Make splice samples at least 5 feet long with the splice at mid-length. Shorter sample splice bars may be used if approved by the Engineer.

Perform job control tests in the presence of the Engineer. Splices tested in the absence of the Engineer may be rejected. Notify the Engineer, in writing, at least 7 working days prior to performing testing.

Identify sample splices with weatherproof markings prior to shipment to the testing laboratory.

Test each sample according to the relevant material ASTM, ASTM A370 and California Test Method 670. Perform tensile testing until partial or total fracture of the parent bar material, mechanical splice material, or bar-to-splice connection.

The production lot will be rejected if:

- (1) the minimum individual tensile strength of the sampled splices is less than 80000 psi based on the nominal bar area
- (2) the maximum individual slip length of the sampled splices is greater than the limits in Table 503-3

Replace "b. Qualifications" and "c. Testing/Inspection." under Item 5. Mechanical Lap Splices. with the following:

b. <u>Qualifications</u>. A splice will be considered qualified if the splice can develop a minimum tensile strength of 75000 psi, based on the nominal bar area, when tested according to the relevant material ASTM. ASTM A370 and California Test Method 670.

Submit the following information:

- (1) the manufacturer's name;
- (2) the name of the product or assembly;
- (3) the lot, heat, or batch number that identifies the splice;
- (4) the bar grade and size number to be spliced by the material;
- (5) a complete description of the splice and installation procedure; and,
- (6) test results indicating the splice, used according to the manufacturer's procedures, complies with the minimum tensile strength requirements.
- c. <u>Testing/Inspection</u>. Perform job control tests consisting of the fabrication, under conditions used to produce the splice, and tensile testing of 6 sample splices for each lot of splices. The Engineer will designate when samples for job control tests are to be fabricated and will determine the limits of the lot represented by each job control test.

A lot of mechanical butt joints is defined as no more than 150 splices of the same type of mechanical butt splice used for each combination of bar size and bar deformation pattern that is used in the work.

Make splice samples using the same splice materials, position, equipment, and following the same procedures as used to make splices in the work. Make splice samples at least 5 feet long with the splice at mid-length. Shorter sample splice bars may be used if approved by the Engineer.

Perform job control tests in the presence of the Engineer. Splices tested in the absence of the Engineer may be rejected. Notify the Engineer, in writing, at least 7 working days prior to performing testing.

Identify sample splices with weatherproof markings prior to shipment to the testing laboratory.

Test each sample according to the relevant material ASTM, ASTM A370 and California Test Method 670. Tensile test each sample until partial or total fracture of the parent bar material, mechanical splice material, or bar-to-splice connection.

All splices in the lot represented by a test will be considered to meet the tensile strength requirements when the minimum individual tensile strength of the sampled splices is not less than 75000 psi, based on the nominal bar area.

SECTION 504 STEEL STRUCTURES

504-1.01 DESCRIPTION. <u>Add the following</u>: Meet the requirements of the AASHTO *LRFD Steel Bridge Fabrication Specifications*, except where modified herein.

504-3.01 FABRICATION. <u>Under Item 2 add the following to the 1st paragraph:</u> Fabricate rolled shape steel bridge members at a plant certified under the American Institute of Steel Construction (AISC) Certification Program for Steel Bridge Fabricators at the "Intermediate Bridge" level.

Under Item 2 replace the 7th paragraph and sub requirements with the following:

Surfaces of bearing and base plates and other steel surfaces that contact each other or concrete surfaces must be flat to within 1/32 inch in 12 inches and 1/16 inch overall.

Surfaces of bearing and base plates and other steel bearing surfaces that contract grout, preformed fabric pads, or elastomeric bearing pads must be flat to withing 1/8 inch in 12 inches and 3/16 inch overall.

<u>Under Item 2 replace the 10th paragraph and subparagraphs after "Cold bend load-carrying rolled-steel plates as follows" with the following:</u>

Cold bend at room temperature cross-frame or diaphragm connection plates up to 0.75 inches thick with minimum bending radii of 2.25 times the plate thickness in inches. Cold bend all other steel plates and bars with minimum bend radii of 5 times the plate thickness in inches measured to the concave face of the plate.

Before bending, round the edges of the plate to a radius of 1/16 inch throughout the portion of the plate to be bent.

SECTION 507 BRIDGE BARRIERS AND RAILING

507-1.01 DESCRIPTION. Delete this Subsection and substitute the following:

Construct concrete barrier, concrete median barrier, timber railing, steel bridge railing, pedestrian railing, and safety railing as shown on the Plans. Furnish and install bridge number plates as shown on the Plans.

507-2.01 Materials. *Delete this Subsection and substitute the following:*

Concrete Section 501
Timber Railing Section 506

Grout Subsection 701-2.03
Reinforcing Bars Subsection 709-2.01
Epoxy-Coated Reinforcing Bars Subsection 709-2.01

Steel RailingSection 722Cable Safety RailingSection 722Bronze Bridge Number PlateSection 722

507-3.01 CONSTRUCTION REQUIREMENTS.

1. General. Add the following to the end of the first paragraph:

Place grout underneath rail post base plates monolithically.

2. Steel. Add the following:

Submit shop drawings for final approval. Do not fabricate or install steel bridge railing until the Engineer approves the shop drawing submittal.

SECTION 508 WATERPROOFING MEMBRANE

508-1.01 DESCRIPTION. <u>Replace the first paragraph with the following</u>: Furnish and install waterproofing membrane systems on concrete bridge decks and approach slabs. Remove and dispose of waterproofing membrane systems on existing concrete bridge decks and approach slabs. The spray-applied waterproofing membrane system consists of a primer, a membrane and a tack coat.

508-3.01 CONSTRUCTION. Replace the first paragraph in 1. General with the following: Install the waterproofing membrane system in accordance with the manufacturer's installation procedure and the approved submittal. Use the primer and tack coat listed in the approved submittal. Do not apply primers or membranes until the end of the curing period and until concrete and grout has reached at least 80 percent of the specified 28-day compressive strength (f'c). Apply the membrane system vertically at curb faces up to the pavement thickness shown on the Plans. Protect adjacent surfaces not to be covered with the membrane from splatter or coating. Ensure the surface of the membrane is dry when applying tack coat. Use pavement overlay material within the membrane manufacturer's temperature limitations.

<u>Replace the first paragraph in 2. Deck Preparation with the following</u>: Remove existing pavement and membrane systems by methods that do not damage the concrete deck. Do not use a mechanical milling machine such as a reclaimer or planer. Meet the requirements of Subsection 105-1.12. Prepare the concrete surfaces that are to receive the waterproofing membrane system as required by the manufacturer.

508-3.02 QUALITY CONTROL. Replace the first paragraph in 2. Spray-Applied Waterproofing Membrane with the following: Perform tensile adhesion bond testing of the waterproofing membrane system, at locations determined by the Engineer, in accordance with ASTM D7234 at least once every 2000 square feet of coated area.

508-3.03 ACCEPTANCE TESTING. Replace the first paragraph in 1. Flood Testing with the following: Perform flood testing of spray-applied waterproofing membrane prior to placement of tack coat or asphalt. With the written approval of the manufacturer's on-site representative, perform flood testing of sheet waterproofing membrane prior to asphalt overlay, otherwise perform flood testing after asphalt overlay.

508-3.04 MEMBRANE REPAIRS. Replace the first paragraph in 3. Sheet Waterproofing Membrane with the following: If flood test acceptance testing is used after placement of asphalt and breaches in the membrane system are found, repairs may be attempted with the written approval of the manufacturer's onsite representative. Patch areas where asphalt overlay is removed to the satisfaction of the Engineer.

SECTION 512 FORMS AND FALSEWORK

512-3.02 FALSEWORK DESIGN. Replace the first paragraph with the following: Design falsework according to the AASHTO Guide Design Specifications for Bridge Temporary Works and these specifications. When the structure is supported by falsework and is open to traffic, also design the falsework for highway loads according to the AASHTO LRFD Bridge Design Specifications.

State of Alaska Standard Specifications for Highway Construction February 2020 Edition Modified as Follows:

DIVISION 700 - MATERIALS

SECTION 705 JOINT MATERIALS

705-2.03 BRIDGE SEALS. Replace Table 705-1 with the following:

TABLE 705-1 SELF-LEVELING SEALANT REQUIREMENTS

Property	Requirements	Test Method
Extrusion Rate	Min, 50 mL/minute	ASTM C1183
Specific Gravity	Min. 1.25	ASTM D1475
	Max. 1.35	
Ultimate Elongation	Min. 1,200%	ASTM D412
Tensile Stress at	Max. 45 psi	ASTM D412
150% Elongation		

SECTION 709 REINFORCING STEEL AND STEEL WIRE

709-2.01 REINFORCING STEEL. Replace Item 4. Steel Wire with the following:

4. <u>Steel Wire.</u> Furnish plain steel wire of the size specified that meets the requirements of AASHTO MP30

SECTION 711 CONCRETE CURING MATERIALS AND ADMIXTURES

711-2.02 CHEMICAL ADMIXTURES. Replace this subsection with the following:

Air-Entraining Admixtures	AASHTO M 154
Water-Reducing Admixtures	AASHTO M 194, Type A
Set-Retarding Admixtures	AASHTO M 194, Type B
Set-Accelerating Admixtures	AASHTO M 194, Type C
Water-Reducing and Set-Retarding Admixtures	AASHTO M 194, Type D
Water-Reducing and Set-Accelerating Admixtures	AASHTO M 194, Type E
Water-Reducing Admixtures	AASHTO M 194, Type F
High Range Water-Reducing and Set-Retarding Admixtures	AASHTO M 194, Type G
Specific Performance Admixtures	AASHTO M 194, Type S

SECTION 716 STRUCTURAL STEEL

Replace the 5th and 6th paragraphs with the following:

716-2.07 GALVANIZING.

Prepare surfaces before galvanizing according to Steel Structures Painting Council's surface preparation guide SSPC-SP 5/NACE No. 1, White Metal Blast Cleaning.

In lieu of hot-dip galvanizing, steel bridge members may be spray-metallized. Apply between 10 mils and 15 mils of zinc galvanizing by the spray-metalizing process according to Steel Structures Painting Council's coating system guide SSPC-CS 23.00 including surface preparation.

Repair damaged coatings according to ASTM A780 Annex A1 or Annex A3, except as modified herein. Clean the damaged area according to SSPC-SP 3, Power Tool Cleaning for repairs meeting Annex A1 and SSPC-SP 5/NACE No. 1, White Metal Blast Cleaning for repairs meeting Annex A3. Extend the cleaned area 1/2 inch to 3/4 inch into the undamaged section of the coating. Keep the cleaned area dry and free of rust and soiling. Within 24 hours of cleaning, coat the cleaned section with zinc to a thickness of not less than 10 mils when using the method in Annex A3 and not less than 3 mils when using the method in Annex A1. Taper the thickness of the repair coating to match the original coating thickness at the edges of the cleaned section. Apply two coats of zinc rich paint containing a minimum of 65% zinc dust following repairs made in accordance with Annex A1. Where repairs are made in accordance with Annex A3, use zinc wire containing not less than 99.98 percent zinc.

SECTION 722 BRIDGE RAILING

722-2.01 BRIDGE RAILING. Replace with the following:

Steel Tube Bridge Rail Elements ASTM A500, Grade B or Grade C

Thrie-Beam Bridge Rail Elements AASHTO M 180, Class B, Type II

Bridge Rail Posts ASTM A709, Grade 50

ASTM B98, UNS Alloys C65100 or C65500 or Bronze Bridge Number Plate

ASTM B584, UNS Alloy C92200

Cable Safety Railing Posts and Braces AASHTO M181, Grade 1 or Grade 2, or ASTM A53 for

members with welds

Cable Safety Railing Cable 1/4 inch galvanized wire rope with a minimum breaking

force of 7,000 pounds.

Machine Bolts, Cap Screws, Nuts and Washers ASTM A307

High Strength Bolts, Nuts and Washers Subsection 716-2.03

Anchor Bolts and Rods ASTM F3125, Grade A325 or ASTM A449, Type 1

Welded Studs AASHTO M 169, Grade 1015 or Grade 1020

Bent Anchor Rods ASTM A709, Grade 36 or Grade 50

Shims, Plates, Rail Caps, Plate Washers,

Angles, Sleeves, and Scuppers ASTM A709, Grade 50

Guardrail Connection Plate ASTM A709, Grade 50

Beveled Washers and Tapered Plate Washers ASTM F436

AASHTO M 111 or AASHTO M 232 and Subsection 716-Galvanize steel portions of railing 2.07

after fabrication.

SECTION 731 WATERPROOFING MEMBRANE

731-2.01 SPRAY-APPLIED WATERPROOFING MEMBRANE. <u>Replace Table 731-1 SPRAY-APPLIED WATERPROOFING MEMBRANE with the following</u>:

Test	Requirements	Test Method
Adhesion to Concrete	100 psi min., with failure in concrete	ASTM D7234
Tensile Strength at Break	1500 psi min.	ASTM D638
Elongation at Break	130% min.	ASTM D638
Crack Bridging	Pass at 10 cycles of 1/8 inch when tested at -15°F	ASTM C1305
Interlayer Shear Strength	30 psi min.	AASHTO TP-114