



May 11, 2015

TO: Derek Case
MS 47354

THRU: Julie Meredith/Tom Horkan *JM* *TH*
NB 82-99

FROM: *DB*
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SUBJECT: Contract 008066
SR 520, Floating Bridge and Landings Project
Federal Aid No. BR-0520(047)
Change Order No. 191 – November 13, 2014 Project Resolution

Attached for Headquarters Construction execution and further processing is Project Office recommended Change Order No. 191 – November 13, 2014 Project Resolution.

Description of the Change:

This change incorporates both Owner Initiated Changes (OICs) as well as Design-Builder Initiated Changes (DBICs). This change makes an equitable adjustment to the contract with the Design-Builder, Kiewit/General/Manson (KGM), to settle and resolve twenty outstanding issues.

The twenty outstanding issues are listed below:

1. PCO 142 D1 – OIC Tolling/ITS Infrastructure Changes Design
2. PCO 142 D2 – OIC Tolling/ITS Infrastructure Changes Construction
3. PCO 142 D3 – RFP to RFC Changes
4. PCO 265 – Grays Harbor Moorage
5. PCO 286 – OIC Gowdy Driveway
6. PCO 312 – OIC West Access Bridge Coordinated Design Items
7. PCO 312A – OIC West Access Bridge Construction Work Zone and Construction Costs
8. PCO 312B – OIC West Approach Grinding Construction Costs
9. PCO 336 - Bearing Plate Modifications at Fillets
10. PCO 362 – Pontoon Assembly Bolt Fabrication Tolerances
11. PCO 376 - Rebar 50% Tie
12. PCO 380 – WCB Mowat Signs Left in Place
13. PCO 400A - 400V – pontoons A-W Joint Issues
14. PCO 400.30 – Mating Keys Joining Issues
15. PCO 400.31 – R-S Joint Crack
16. PCO 480 – Zn Anchor Cable Replacement
17. NEW – Delete Existing Bridge Drainage Maintenance

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18. NEW – Temporary Moorage Location for WSDOT Maintenance Boat
19. NEW – Commemorative Plaques
20. NEW – Delete Tolling Vendor Impacts

WSDOT does not find full entitlement to all of these issues; however, WSDOT and the Design-Builder agreed that the settlement negotiated for this change order resolves and closes all of these issues regardless of the level of entitlement.

Additional details for these issues are provided as part of the back-up documentation for this change order.

This change order makes a number of revisions to the Contract Documents. These changes are described below and itemized by the individual issue:

CONTRACT REQUIREMENTS:

The following changes are made to the RFP Technical Sections:

1. **PCO's 142D, 142D2, 142D3 - OIC TOLLING / ITS INFRASTRUCTURE CHANGES,**

Contract Requirements:

Technical Requirements Section 2.18.3.4.2.5 Field Acceptance Testing shall be revised as follows:

Delete six (6) paragraphs, beginning with the paragraph:

“The field acceptance testing shall consist of two phases:”

Through the paragraph:

“If the floating bridge systems as required in Sections 2.17, 2.30, 2.32 and 2.35 require communication with the TMC through the ITS mainline cables, these systems shall be tested in accordance with the requirements in their respective section.”

And replace with:

“The field acceptance testing shall consist of two phases:

- * Phase I field acceptance testing through the Northup communication hub; and*
- * Phase II field acceptance testing through the Roanoke communication hub.*

The Design-Builder shall make the ITS communication network fully operational prior to each phase of the field acceptance testing. During the Phase I field acceptance testing, the ITS distribution network shall provide communications from every ITS field device

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between the east bridge abutment and the eastern Project limit to the TMC through the Northup communication hub. The Design-Builder shall perform the controller turn-on tests and all tests at the TMC through the Northup communication hub. During the Phase II field acceptance testing, the ITS distribution network shall provide communications from every ITS field device on the new floating bridge, westward of the east bridge abutment, to the TMC through the Roanoke communication hub. The Design-Builder shall design the Phase II field acceptance test for testing the ITS distribution network and associated communication equipment installed by the Design-Builder for the new floating bridge. The Design-Builder shall perform all tests at the TMC and both Northup and Roanoke communication hubs to demonstrate a fully operational ITS communication network.

The Design-Builder shall clearly document this two-phase field acceptance testing in its test plans, testing procedures, pass/fail requirements and test schedules for WSDOT review and comment.

If the floating bridge control systems as required in Sections 2.17, 2.30, 2.32 and 2.35 require communication with the TMC through the ITS mainline cables, these systems shall be tested in accordance with the additional requirements in their respective sections. At a minimum, the Design-Builder shall test the ITS mainline communication network for the floating bridge control system (including communication devices in all maintenance facilities) at the TMC and both Northup and Roanoke communication hubs and demonstrate a fully operational communication network.”

Technical Requirements Section 2.18.3.4.2.6 WSDOT System Acceptance Testing
shall be revised as follows:

Delete five (5) paragraphs, beginning with the paragraph:

“The system acceptance testing will consist of three phases:”

Through the paragraph:

“Upon successful completion of the Phase I field acceptance testing and WSDOT inspection, the Design-Builder may proceed with the Phase I system acceptance testing without completion of the Phase II field acceptance testing. However, the Phase II system acceptance testing shall not begin until successful completion of all field acceptance testing and Phase I system acceptance testing.”

And replace with:

“The system acceptance testing will consist of two phases:

** Phase I - 20-Calendar Day system acceptance testing through both Northup and Roanoke communication hubs before Substantial Completion; and*

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** Phase II - 30-Calendar Day live traffic testing within 90 Calendar days after Substantial Completion.*

Upon successful completion of the field acceptance testing and WSDOT inspection, the Design-Builder shall proceed with the Phase I system acceptance testing. However, the Phase II system acceptance testing shall not begin until successful completion of all field acceptance testing and Phase I system acceptance testing."

Delete six (6) paragraphs, beginning with the paragraph:

"When the three system acceptance testing phases are not scheduled consecutively, the ITS shall remain in operations between any two testing phases and after completion of the Phase III live traffic testing. The Design-Builder shall not disrupt the ITS unless the disruptions meet the requirements in these Technical Requirements and are approved by WSDOT."

Through the paragraph:

"For the purposes of all three system acceptance test periods, a failure is defined as any functional, software, hardware or communication failure of any ITS field equipment, communication cables and interface components, hub and TMC equipment, and any software including controller firmware, that the Design-Builder is responsible for installing. Any loss of communication between the TMC and field equipment shall be considered a failure unless it is caused by a failure outside the Design-Builder's responsible area as determined by WSDOT."

And replace with:

"During and after each phase of the system acceptance testing, all ITS shall remain in operation. The Design-Builder shall not disrupt the ITS unless the disruption meets the requirements in these Technical Requirements and is approved by WSDOT."

During the Phase I system acceptance test period, all ITS equipment shall be communicating with the TMC central system through its respective communication hub and shall be monitored for 20 consecutive Calendar Days by WSDOT TMC personnel. Upon successful completion of 20 consecutive Calendar Days of failure-free operation as determined by WSDOT, WSDOT will notify the Design-Builder that the ITS field equipment is operational. The Design-Builder shall not open the new floating bridge to traffic until the Phase I system acceptance testing is completed successfully.

The Phase II system acceptance testing will not begin until construction of six lanes on the new floating bridge is complete and all traffic is switched from the existing floating bridge to the new floating bridge in the permanent channelization. During the 30 Calendar Day test period, WSDOT will test the entire ITS in a live traffic environment such that the accuracy of the traffic data accumulation system can be validated. The Design-Builder shall not perform any construction activities that will disrupt the ITS operations or affect the traffic data accumulation system. Any system malfunction or

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reduced data accuracy under the "live traffic" condition as identified by WSDOT shall be considered a failure and cause for termination of the Phase II system acceptance testing.

For the purposes of all system acceptance test periods, a failure is defined as any functional, software, hardware or communication failure of any ITS field equipment, communication cables and interface components, hub and TMC equipment, and any software including controller firmware, that the Design-Builder is responsible for installing. Any loss of communication between the TMC and field equipment shall be considered a failure unless it is caused by a failure outside the Design-Builder's responsible area as determined by WSDOT."

Technical Requirements Section 2.18.4.10.2 Fiber Optic Cables for ITS shall be revised as follows:

After the paragraph:

"2) New floating bridge"

Delete seven (7) bulleted items, beginning with the bulleted item:

" The communication network must be able to provide a fail-over mechanism between the two communications hubs. At a minimum, the two distribution cables shall be able to be configured to the following network configurations for data and video communications by using patch cords in the westernmost shed on the pontoon deck and the fiber terminal cabinet:"*

Through the bulleted item that begins:

" For ITS data communications on the new floating bridge, the Design-Builder is highly encouraged to design and install an automated routing system in the westernmost shed and the fiber terminal cabinet to provide an automated fail-over mechanism between the two communication hubs."*

Technical Requirements Section 2.23.4.4 Permanent Roadside Toll Cabinet shall be revised as follows:

After the paragraph:

"The Design-Builder shall furnish and install the following roadside equipment cabinets and foundations in accordance with the Mandatory Standards:"

Delete the bulleted item:

" A single-phase, 480 V to 120 V transformer and cabinet (a minimum of 25 KVA for each toll zone);"*

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And replace with:

“ A single-phase, 480 V to 120 V transformer and cabinet (a minimum of 25 KVA for all toll zones at each site);”*

Delete the bulleted item:

“ A concrete pad on the shared foundation (a minimum of four feet in width by 10 feet in length) that WSDOT will use for installation of an emergency back-up generator.”*

And replace with:

“ A concrete pad on the shared foundation (see 008066 Change Order No. 180 for pad size), with interconnecting conduits to the toll cabinets and transformer cabinet, that WSDOT will use for installation of an emergency back-up generator.”*

In the paragraph that begins with the sentence:

“The Design-Builder shall co-locate all roadside cabinets for both toll zones on a shared foundation wherever possible.”

After that sentence, insert the sentence:

“The Design-Builder shall coordinate the layout of the interconnecting conduits between the generator pad, roadside toll cabinets, and the transformer cabinet with the WSDOT Toll Engineer.”

After the paragraph:

“The Design-Builder shall furnish and install the ground-mounted Model 334 double-wide roadside toll cabinets in accordance with the following requirements:”

Delete the bulleted items:

“ The double-wide cabinet shall have the characteristics of the Model 334 cabinets as specified in Chapter 12 of FHWA IP-78-16.*

** The external dimensions of the double-wide cabinet shall be 67 inches high by 48.5 inches wide by 30-1/4 inches deep.*

** Cabinets shall be fabricated of 0.125 inches sheet aluminum, 5052 alloy, with mill finish, in accordance with Section 9-29.13(7)D, Item number 1 of the WSDOT Standard Specifications (Appendix D18). Painted or anodized aluminum is not allowed.”*

And replace with:

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“ The double-wide cabinet shall have the characteristics of the Model 334 cabinets as specified in Chapter 12 of FHWA IP-78-16, and shall be installed using a riser adapter base.*

** The external dimensions of the double-wide cabinet shall be 67 inches high by 48.5 inches wide by 30-1/4 inches deep. The external dimensions of the cabinet riser shall be 8 inches high, and the width and depth of the riser shall match the toll cabinet.*

** Cabinets and risers shall be fabricated of 0.125 inches sheet aluminum, 5052 alloy, with mill finish, in accordance with Section 9-29.13(7)D, Item number 1 of the WSDOT Standard Specifications (Appendix D18). Painted or anodized aluminum is not allowed. Installation of the riser shall not compromise the environmental rating of the toll cabinet.”*

Technical Requirements Section 2.23.4.8 Additional Junction Boxes and Conduits
shall be revised as follows:

After the paragraph:

“At a minimum, the Design-Builder shall furnish and install the following:”

Delete the five (5) bulleted items and replace with:

“ In each toll zone, adjacent to the outside shoulder, up to two junction boxes (Type 4 or larger) at the base of each monotube foundation;*

** Up to two three-inch conduits from every monotube foundation to the roadside toll cabinets;*

** Interconnecting conduits between the generator pad, each roadside toll cabinet, and the transformer cabinet;*

** In each toll zone, two one-inch conduit stub-outs per each travel lane, shall be installed near the exit gantry; and*

** Within the junction box north of the SR 520 westbound mainline, two additional one-inch conduit stub-outs shall be installed near the exit gantry.”*

2. PCO 286 – GOWDY DRIVEWAY RESTORATION:

Contract Requirements:

Add the following new Contract Requirements:

“The Design-Builder shall restore the driveway and drainage at the property near 2857 76th Ave NE, Medina (Gowdy Property) to pre-construction condition or similar. The

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design for the driveway and drainage restoration shall be submitted to WSDOT for review and approval."

3. PCO's 312, 312A – OIC WEST ACCESS BRIDGE COORDINATED DESIGN ITEMS AND OIC WEST ACCESS BRIDGE CONSTRUCTION WORK ZONE AND CONSTRUCTION COSTS:

Contract Requirements:

Technical Requirements Section 2.12.4.2.9.11 Conduits and Pipe Supports, as modified in 008066 Change Order No. 40, shall be revised as follows:

After the bulleted item:

"- Conduits shall be installed in the closure pour between the north and south lowrise bridge deck panels. Embedded conduits shall be at least two inches clear from any post-tensioning duct in the closure pour."

Add the bulleted item:

"- Conduit within the barriers shall have any stub-outs through the roadway deck installed in accordance with the requirements of Section 2.13.4.22."

Technical Requirements Section 2.12.4.2.9.14 West Transition Span and Pier 36N&S shall be revised as follows:

Delete the bulleted item:

" Traffic barrier, pedestrian barrier, and railing joint covers."*

And replace with:

" Traffic barrier, pedestrian barrier, temporary pedestrian barrier with scuppers, mechanical couplers for the installation of pedestrian barrier by others, and railing joint covers."*

Technical Requirements Section 2.12.5.17.5 West Transition Span and Pier 36N&S, as modified in 008066 Change Order No. 85, shall be revised as follows:

After the paragraph:

"The Design-Builder shall be responsible for the installation and construction of the elements as shown on the Conceptual Plans (Appendix M1), the West Connection Bridge Drawings (Appendix M3), and as indicated below:"

Delete the bulleted item:

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“ Traffic barriers, pedestrian barriers, and railings on the West Transition Spans.”*

And replace with:

“ Traffic barriers, pedestrian barriers, temporary pedestrian barriers with scuppers, mechanical couplers for the installation of pedestrian barriers by others, and anchor bolts with corresponding embedded steel plates for future installation of pedestrian railing on the West Transition Spans.”*

Technical Requirements Section 2.14.4.2 Collection and Conveyance Structures, as modified in 008066 Change Order Nos. 86 and 110, shall be revised as follows:

After the paragraph that begins with the sentence:

“Temporary bridge drainage elements for the traffic switch area conceptually consist of scuppers located within the median and southern perimeter barrier of the WCB, the floating bridge and a portion of the existing West Approach Bridge.”

Add the paragraph:

“Temporary bridge drainage elements shall also include scuppers within the single slope pedestrian barrier adjacent to the RSUP, eastward from the centerline of Pontoon A to a point defined based on the design need. The scupper openings shall not impact the structural integrity of the single slope pedestrian barrier.”

Technical Requirements Section 2.15.5.1.1.7 Conduits and Utilities shall be revised as follows:

Delete the sentence:

“Conduits shall not be mounted to any visible portion of the RSUP railing.”

And replace with:

“Conduits shall not be mounted to any visible portion of the RSUP railing, except at the West Transition Span where the railing will be installed by others.”

Add the Contract Requirements:

“ The Design-Builder will not be required to construct the 42-inch single slope barrier (including affected conduit and illumination fixtures) on the West Transition Span – North, eastward from the centerline of Pier 36 to a barrier termination point defined by the barrier expansion (or open construction) joint that is approximately 30 feet west of the centerline of Pontoon A, as shown on pages 18 through 23 of 008066 Change Order No. 191.*

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** The Design-Builder shall install mechanical couplers in the bridge deck and provide a construction joint with roughened surface as shown on pages 24 and 25 of 008066 Change Order No. 191, eastward from the centerline of Pier 36 to the barrier termination point, for future 42-inch single slope barrier construction. The Design-Builder shall account for the installation of barrier expansion (or open construction) joints, consistent with page 26 of 008066 Change Order No. 191. An estimated total of (140) #4 couplers and (322) #5 couplers will be required. Information regarding the type and number of mechanical couplers is provided on page 27 of 008066 Change Order No. 191.*

** The barrier expansion (or open construction) joints shall be as specified in Section 2.12.4.2.9.12.*

** The Design-Builder shall incorporate a total of (44) scuppers, as a temporary drainage element, within the 42-inch single slope barrier, eastward from the barrier termination point to approximate ML Station 142+10. The scupper openings shall be 2'-6", and shall be spaced at 7'-6" on center. The scuppers shall be shown in the Released for Construction documents.*

** The Design-Builder will not be required to construct the RSUP Railing between ML Stations 137+22.48 (47.33' LT) and 138+88.03 (51.18' LT). In lieu of the RSUP Railing, the Design-Builder shall install RSUP railing post anchorage assemblies as detailed on pages 28 and 29 of 008066 Change Order No. 191. The Design-Builder shall install (22) interior post assemblies and (23) end post assemblies. Estimated quantities for the assembly components are provided on page 30 of 008066 Change Order No. 191, with reference sheets A2.02 and BA554 included as pages 31 and 32 of 008066 Change Order No. 191. The Design-Builder shall design the edge reinforcing at the deck to accommodate anchor bolt installation, and for electrical continuity, bonding, and grounding requirements.*

** The Design-Builder will not be required to construct the concrete curb coincident with the affected segment of RSUP Railing; in addition, that portion of the bridge deck beyond the concrete curb shall not be constructed.*

** The Design-Builder shall install temporary precast concrete barrier Type 2 with scuppers, in lieu of the RSUP railing, between ML Stations 137+22.48 (47.33' LT) and 138+88.03 (51.18' LT); and, at the western extent of the RSUP, adjacent to Pier 36 as shown on pages 18 through 23 of 008066 Change Order No. 191. The centerline of Type 2 temporary barrier shall be located 3-feet from the edge of the bridge deck.*

** The Design-Builder shall place a temporary Type 2 barrier across the RSUP at ML Station 138+92.92 and ML Station 142+10.*

** The Design-Builder shall provide a 2-inch diameter electrical conduit stub-out below the roadway deck, at a location westward from the modular expansion joint and in the vicinity of the 42-inch barrier termination point."*

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4. PCO 312B – OIC WEST APPROACH GRINDING:

Contract Requirements:

Technical Requirements Section 2.7.3.3.1 Portland Cement Concrete and Hot Mix Asphalt shall be revised as follows:

Delete the third paragraph under subtitle “Surface Smoothness” in its entirety and replace with:

“The Project shall utilize the value of International Roughness Index (IRI) calculated by averaging the left and right wheel path IRI as the basis for incentive and disincentive payments for the smoothness of the roadway surface. The entire length of each through lane, auxiliary lane, passing lane, transit lane, bridge approach slabs, and bridge deck paved or constructed shall be profiled from the beginning to the end of the Project, unless otherwise noted. Span 35 of the West Connection Bridge as identified on pages 34 and 35 of 008066 Change Order No. 191, ramps, shoulders, tapers, and city streets will not be profiled and will not be subject to the IRI incentive/disincentive adjustments. The IRI rating for the new pavements, bridge approach slabs, and bridge decks including intervening joints shall be evaluated, and payment shall be adjusted according to the methods outlined in Section 1-08.11(1) of the General Provisions.”

Add the Contract Requirements:

“The Design-Builder shall grind the existing surface of Span 35 of the West Connection Bridge, as identified on pages 33 and 34 of 008066 Change Order No. 191. Grinding shall be in accordance with Section 2.7.5.3 Next Generation Concrete Surface.”

5. PCO 336 - BEARING PLATE MODIFICATIONS AT FILLETS:

Contract Requirements:

Add the following new Contract Requirements:

“At pontoons A and W, the deck slab bolt beam bearing plates that are located near an interior transverse wall may be chamfered where the corner of a plate conflicts with a wall fillet. The plate corner chamfer shall be no greater than a 3-inch chamfer at 45 degrees, and shall only remove the plate material as required to fit the plate to the wall fillet.”

6. PCO 362 – PONTOON ASSEMBLY BOLT FABRICATION TOLERANCES:

Contract Requirements:

Add the following new Contract Requirements:

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“008066 Change Order No. 191 resolves any and all past, current, and future impacts and/or schedule delays experienced by the Design-Builder related to the furnishing and installation of Pontoon joint Assembly Bolts in accordance with the Contract requirements, including the criteria for bolt thread tolerance, nut thread tolerance, and bolt tensioning.”

7. PCO 376 - REBAR 50% TIE:

Contract Requirements:

WSDOT Standard Specifications (Appendix D18) Section 6-02.3(24)C Placing and Fastening shall be revised as follows:

In the second paragraph, delete the sentence:

“All epoxy-coated bars in the top mat of the roadway slab shall be tied at all intersections.”

And replace with:

“All epoxy-coated bars in the top mat of the roadway slab shall be tied at all intersections, except that epoxy-coated bars in the top mat of bridge roadway slabs where epoxy-coated metal chair supports are used between top and bottom reinforcing steel mats may be tied at alternating intersections.”

8. PCO 380 – WCB MOWAT SIGNS LEFT IN PLACE:

Contract Requirements:

Technical Requirements Section 2.22.1 General, related to the Maintenance of Traffic (MOT), shall be revised as follows:

Delete the paragraph:

“The Design-Builder shall prepare a Transportation Management Plan (TMP), Traffic Incident Management Plan (TIMP) and MOT Plans, and shall conduct all on-site activities relating to traffic maintenance in accordance with this section.”

And replace with:

“The Design-Builder shall prepare a Transportation Management Plan (TMP), Traffic Incident Management Plan (TIMP) and MOT Plans, and shall conduct all on-site activities relating to traffic maintenance in accordance with this section. In order to provide consistent traffic control after the completion of the SR 520 West Connection Bridge and Shared Use Path (WCB) Project, the Design-Builder may elect to adopt MOT Plans that were developed and approved under the WCB Project.”

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9. PCO's 400A through 400V – PONTOONS A-W JOINT ISSUES:

Contract Requirements:

Add the following new Contract Requirements:

“The Design-Builder shall core drill the Pontoon joint bolt sleeves in Pontoons V and W, as required to provide for the installation of the Pontoon joint Assembly Bolts that join these Pontoons. Core drilling locations and procedures shall be submitted to WSDOT for review and approval, and shall not cause damage to any reinforcing steel or other embedded items in these Pontoons. 008066 Change Order No. 191 resolves any and all past, current, and future impacts and/or schedule delays experienced by the Design-Builder related to aligning the Pontoon joint bolt sleeves in adjacent Pontoons for the installation of Pontoon joint Assembly Bolts, except that future measures that may be required for the alignment of adjacent Pontoon joint bolt sleeves in Pontoons A through L will be addressed under separate change order, as necessary.”

10. PCO 400.30 - MATING KEYS JOINING ISSUE:

Contract Requirements:

Appendix M23 Outfitting and Assembly Minimum Technical Requirements, Bridge Sheet No. A9 “Pontoon Assembly Details 7”, as modified in 008066 Change Order No. 141, shall be revised as follows:

In the sheet notes, delete note:

**** 1” GAP BETWEEN KEY AND RECESS FRAME TO BE GROUTED SIMULTANEOUSLY WITH PONTOON JOINT (TYP.)**

And replace with:

**** 1” GAP BETWEEN KEY AND RECESS FRAME TO BE GROUTED SIMULTANEOUSLY WITH PONTOON JOINT; ALL VOIDS IN THE GROUT BETWEEN THE KEY AND RECESS FRAME SHALL BE FILLED UTILIZING MATERIALS AND PROCEDURES SUBMITTED TO WSDOT FOR REVIEW AND APPROVAL (TYP.)**

11. PCO 400.31 - R-S JOINT CRACK:

Contract Requirements:

Add the following new Contract Requirements:

“The Design-Builder shall repair the crack(s) observed in the top surface of the Pontoon joint grout between Pontoons R and S. Repair materials and procedures shall be

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submitted to WSDOT for review and approval, and shall be performed following final tensioning of the Pontoon joint Assembly Bolts that join pontoons R and S."

12. PCO 480 - ZN ANCHOR CABLE REPLACEMENT:

Contract Requirements:

Add the following new Contract Requirements:

"The Design-Builder shall perform work to replace the existing anchor cable at the north face of existing bridge Pontoon Z (anchor cable ZN) utilizing the new anchor cable material provided for in 008066 Change Order No. 163. WSDOT will furnish the necessary anchor cable, sockets, and support from the WSDOT Bridge Maintenance Group. Replacement of anchor cable ZN shall be completed by November 2, 2014."

13. NEW - DELETE EXISTING BRIDGE DRAINAGE MAINTENANCE:

Contract Requirements:

Technical Requirements Section 2.29.8.1 Existing Bridges shall be modified as follows:

Delete the paragraph:

"The Design-Builder shall maintain drainage structures on and off the bridges within the Project. The Design-Builder shall be required to clean-out drains on the existing floating bridge on an as needed basis but not less than once per month. Free draining of water through any drainage structure shall be maintained at all times. Refer to section 2.14 (Stormwater Management)."

And replace with:

Free draining of water through any drainage structure shall be maintained at all times. Refer to section 2.14 (Stormwater Management). The Design-Builder is not required to inspect, clean, or maintain the drainage structures on the existing floating bridge."

**14. NEW- TEMPORARY MOORAGE LOCATION FOR WSDOT
MAINTENANCE BOAT,**

Contract Requirements:

Add the following new Contract Requirements:

"The Design-Builder shall provide a temporary moorage site for a WSDOT Bridge Maintenance Group workboat. The temporary moorage site shall be accessible from the east shore of Lake Washington, north of the existing SR 520 Bridge, within the limits of construction, and shall be provided with a single phase, 30amp 120v power supply. Two

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vehicle parking spaces shall be provided near the site. The Design-Builder shall coordinate the design and location of the temporary moorage site with the WSDOT Bridge Maintenance Group."

15. NEW - COMMEMORATIVE PLAQUES:

Contract Requirements:

Add the following new Contract Requirements:

"The Design-Builder shall furnish and install two metal plaques commemorating the completed construction of the Pontoons Furnished by the State (PFS) and the Pontoons Provided by the Design-Builder (PPDB). The size of the plaques shall be 12-inches wide by 18-inches high. The plaque designs, material type, and installation methods shall be submitted to WSDOT for approval prior to plaque fabrication. The installation location of the plaques shall be coordinated with WSDOT."

16. NEW - DELETE TOLLING VENDOR IMPACTS:

Contract Requirements:

Add the following new Contract Requirements:

"008066 Change Order No. 191 resolves any impacts and/or schedule delays experienced by the WSDOT All Electronic Tolling (AET) system vendor related to WSDOT's request for early completion and advancement of the temporary AET system infrastructure."

Evolution of the Change:

This change order resolved twenty issues which have occurred during the project. Some of these issues date back to 2012 and are associated with design changes. Other issues are ones which have recently occurred. All of these issues have been extensively discussed between WSDOT and the Design-Builder. WSDOT and KGM were often in disagreement over the level of entitlement for these issues.

Each of the issues addressed in this change order are briefly described in the pages that follow. More information, including all of the WSDOT and KGM serial letters for these issues is attached as part of the back-up documentation.

PCO 142 D1 – OIC Tolling/ITS Infrastructure Changes - Design

WSDOT Serial Letter 0227 (dated December 26, 2012) alerted KGM to an OIC to modify various All Electronic Tolling (AET) and Intelligent Transportation Systems (ITS) requirements from the RFP Sections 2.18 and 2.23. Over the following months, meetings took place between WSDOT and KGM representatives to identify changes and clarifications to the RFP to ensure compatibility between the systems designed and constructed on the FB&L project and the future Tolling Systems to be designed and

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constructed by the tolling vendor, Telvent. After multiple meetings and design reviews, the changes required to the FB&L contract were finalized. In May 2014, WSDOT Serial Letter 0618 was sent to KGM with a complete list of all of the RFP changes to be made to the contract. These changes included physical system changes such as different sizes junction boxes or cabinets as well as changes to testing requirements. WSDOT Serial Letter 0656, dated July 23, 2014, advised KGM that the costs associated with these changes would be negotiated separately between design and construction costs. PCO 142 D1 covers the design costs associated with these changes.

All of these design changes were directed by WSDOT, and KGM is entitled to additional compensation for this work. WSDOT requested that KGM put together a single price proposal to cover all of the design changes included for these systems.

KGM estimated the cost of these changes to be \$335,546. WSDOT agreed that there was entitlement for these changes, but WSDOT disputed the dollar value of this added work. WSDOT estimated that these additional costs were in the \$270,000 range.

This portion of the change order only addresses the cost of the additional design work associated with these changes. Construction costs associated with these changes will be addressed in a separate section of this change order.

Associated Serial Letters (Copies attached to this change order package):

KGM – 0467 and 0573
WSDOT – 0227, 0618, and 0656

Entitlement:

WSDOT acknowledged entitlement to additional compensation for this work; however, our estimate of \$270,000 for this added work was lower than the KGM proposal of \$335,546. This issue is resolved as part of this change order settlement.

PCO 142 D2 – OIC Tolling/ITS Infrastructure Changes – Construction WSDOT Serial Letter 0227 (dated December 26, 2012) alerted KGM to an OIC to modify various All Electronic Tolling (AET) and Intelligent Transportation Systems (ITS) requirements from the RFP Sections 2.18 and 2.23. Over the following months, meetings took place between WSDOT and KGM representatives to identify changes and clarifications to the RFP to ensure compatibility between the systems designed and constructed on the FB&L project and the future Tolling Systems to be designed and constructed by Telvent. After multiple meetings and design reviews, the changes to be made were finalized. In May 2014, WSDOT Serial Letter 0618 was sent to KGM with a complete list of all of the RFP changes to be made to the contract. These changes included physical system changes such as different sizes junction boxes or cabinets as well as changes to testing requirements. WSDOT Serial Letter 0656, dated July 23, 2014, advised KGM that the

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costs associated with these changes would be negotiated separately between design and construction costs. PCO 142 D2 covers the construction costs associated with these changes.

KGM estimated the cost of these changes to be \$66,249. WSDOT agreed that there was entitlement for these changes, but WSDOT disputed the dollar value of this added work. WSDOT estimated that these additional costs were in the \$25,000 range.

This portion of the change order only addresses the cost of the additional construction work associated with these changes. Design costs associated with these changes will be addressed in a separate section of this change order.

Associated Serial Letters (Copies attached to this change order package):

KGM – 0468 and 0612
WSDOT – 0227, 0618, and 0656

Entitlement:

WSDOT acknowledged entitlement to additional compensation for this work; however, our estimate of \$25,000 for this added work was lower than the KGM proposal of \$66,249. This issue is resolved as part of this change order settlement.

PCO 142 D3 – RFP to RFC Changes

During the discussions and cost negotiations associated with the design and construction changes (PCO 142 D1 and D2) to the AET systems installed on the FB&L contract, KGM indicated that there were additional contractor costs associated with researching and comparing the WSDOT requested changes to the RFP requirements. KGM argued that the extent of the changes resulted in significant additional costs which were not covered under the design/construction cost proposals. KGM estimated the cost of these impacts to be approximately \$80,000.

WSDOT investigated this issue, and the Department's position is that these costs were covered by the contractor's cost proposals for PCO 142 D1 and D2. WSDOT found no entitlement to additional compensation for this issue.

Associated Serial Letters (Copies attached to this change order package):

None

Entitlement:

WSDOT does not find any final KGM entitlement for this issue. This issue is resolved by this change order.

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PCO 265 – Grays Harbor Moorage

In June 2013, KGM notified WSDOT (KGM Serial Letter 0421) that they had concerns with the design of the Grays Harbor moorage shackle connections. KGM requested in this letter that WSDOT review and modify these shackle connections and provide direction to KGM on the modifications. KGM also noted that they considered this extra work which would require compensation and disagreed with WSDOT's determination that KGM was responsible for the maintenance and any modifications to the moorage system. WSDOT responded to this letter with WSDOT Serial Letter 0454, dated July 2013. In this letter, WSDOT noted that Change Order 30 added the Grays Harbor moorage system and responsibilities to KGM. As a result, it was KGM's cost responsibility to perform maintenance and any other modifications to the moorage system as necessary. Additional discussions and letters were exchanged on this subject as KGM and WSDOT could not come to agreement on this issue.

KGM did not provide an official estimate for the costs associated with this work. However, a KGM cost in the range of \$50,000 would be expected. WSDOT believes that this cost is the responsibility of KGM.

Associated Serial Letters (Copies attached to this change order package):

KGM – 0421, 0458, and 0502
WSDOT – 0454 and 0537

Entitlement:

WSDOT does not find any final KGM entitlement for this issue. This issue is resolved by this change order.

PCO 286 – OIC Gowdy Fire Truck Turnaround

The driveway for the Gowdy property (south side of the existing bridge) extended across WSDOT limited access and included a gravel fire truck run out (turnaround). KGM negotiated a private agreement with the Gowdy property owners to re-align this driveway during construction to allow KGM to build an access road to the Lakefront. KGM is responsible for reconstructing this driveway upon completion of the project. WSDOT advised KGM that they also needed to restore the fire truck run out (turnaround) for this property. KGM disputed whether they were financially responsible for restoring the fire truck run out. The area where the driveway and fire truck run out is located in a very congested and will include a large drainage/storm water treatment facility. KGM expressed their concern that large retaining walls might be required to build this driveway and fire truck run out. KGM estimated that the additional costs could exceed \$100,000.

WSDOT worked with KGM to develop a design which will restore the driveway for the Gowdy property which is equivalent to the driveway in place prior to the start of

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construction. KGM agreed to construct this new driveway and fire truck run out at no additional cost.

Associated Serial Letters (Copies attached to this change order package):

None

Entitlement:

WSDOT does not find any final KGM entitlement for this issue. This issue is resolved by this change order.

PCO 312 – OIC West Access Bridge Coordinated Design Items

WSDOT and KGM have been in discussions since 2012 coordinating various design changes at the interface of the FB&L and West Access Bridges (both WCB and WABN). In May 2014, WSDOT sent Serial Letter 0613 to KGM which outlined a number of design changes to address the interface at the west end of the project. These design changes included changes to the termination of barrier and railing, changes to the bridge railing system in the vicinity of the West Sentinel, electrical detail changes, etc. These design changes were closely coordinated with the designers of the WABN project to ensure compatibility with this project. KGM assigned PCO 312 to document the design changes and track the impacts and costs associated with this change.

After review of the proposed changes, KGM estimated the cost for all of these changes (both design and construction) to be \$210,589. WSDOT agreed that there was entitlement for these changes. After numerous meetings and discussions, WSDOT concurred that this estimate was a fair and reasonable estimate for the added work – including design and construction changes.

PCO 312 only addresses the design costs; however, the \$210,589 estimate includes the design changes and added construction (including the grinding work to complete the WCB structure).

Associated Serial Letters (Copies attached to this change order package):

KGM – 0429 and 0609
WSDOT – 0192 and 0613

Entitlement:

WSDOT accepts KGM's estimate for this work of \$210,589. This issue is resolved as part of this change order settlement.

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PCO 312A – OIC West Access Bridge Construction Work Zone and Construction Costs

WSDOT and KGM have been in discussions since 2012 coordinating various design changes at the interface of the FB&L and West Access Bridges (both WCB and WABN). In May 2014, WSDOT sent Serial Letter 0613 to KGM which outlined a number of design changes to address the interface at the west end of the project. KGM assigned PCO 312A to document the construction costs associated with this change.

After review of the proposed changes, KGM estimated the cost for all of these changes (both design and construction) to be \$210,589. WSDOT agreed that there was entitlement for these changes. After numerous meetings and discussions, WSDOT concurred that this estimate was a fair and reasonable estimate for the added work – including design and construction changes.

PCO 312A only addresses the construction costs; however, the \$210,589 estimate includes the design changes and added construction (including the grinding work to complete the WCB structure).

Associated Serial Letters (Copies attached to this change order package):

KGM – 0429 and 0609
WSDOT – 0192 and 0613

Entitlement:

WSDOT accepts KGM's estimate for this work of \$210,589. This issue is resolved as part of this change order settlement.

PCO 312B – OIC West Approach Grinding

WSDOT and KGM have been in discussions since 2012 coordinating various design changes at the interface of the FB&L and West Access Bridges (both WCB and WABN). WSDOT requested that KGM price the addition of Next Generation Grinding for the last span built on the WCB project to improve the interface between the two projects. KGM assigned PCO 312B to document the construction costs associated with this change.

After review of the proposed changes, KGM estimated the cost of all of these changes (both design and construction) to be \$210,589. WSDOT agreed that there was entitlement for these changes. After numerous meetings and discussions, WSDOT concurred that this estimate was a fair and reasonable estimate for the added work – including design and construction changes.

PCO 312B only addresses the construction costs associated with adding the grinding; however, the \$210,589 estimate for PCO 312 includes the design changes and added construction (including the grinding work to complete the WCB structure).

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Associated Serial Letters (Copies attached to this change order package):

KGM – 0609
WSDOT - 0705

Entitlement:

WSDOT accepts KGM's estimate for this work of \$210,589. This issue is resolved as part of this change order settlement.

PCO 336 – Bearing Plate Modifications at Fillets

In August 2014, KGM notified WSDOT by Serial Letter 0593 of a field installation issue associated with the bearing plates at the E-W wall corner fillets for pontoons A and W. The bearing plates as designed by WSDOT could not be installed, and they needed to be modified to fit into place. KGM estimated the cost for the plate modification to be \$5609.

WSDOT investigated this issue, and we concurred that this was a compensable issue. We agreed that the KGM estimate for this work was a fair and reasonable price.

Associated Serial Letters (Copies attached to this change order package):

KGM – 0593

Entitlement:

WSDOT accepts KGM's estimate for this work of \$5609. This issue is resolved as part of this change order settlement.

PCO 362 – Pontoon Assembly Bolt Fabrication Tolerances

As the Design-Builder began preparing for pontoon joining operations, they expressed concerns about being able to tension the 3.5" assembly bolts used for the longitudinal joining operations. Due to the extremely tight (small - confined) installation area, the hydraulic rams used for the bolt tensioning operations required the nuts and bolts to fit precisely to allow the bolts to be tensioned to 750 ksi. KGM developed a mock-up testing apparatus to check bolt tensioning procedures. They quickly discovered that many of the assembly bolts could not be completely tensioned to 750 ksi. KGM indicated that as the bolts stretched (elongated) under tensioning, the threads began to bind with the nuts at certain thread tolerances. KGM argued that the bolts began to bind at tolerances which were allowed by the RFP. As KGM continued with their mock-up testing of the bolts, they realized that a substantial quantity of the fabricated assembly bolts could not be tensioned to the required 750 ksi level. As a result, KGM ordered additional 3.5" assembly bolts from the fabricator, Dyson Corporation. KGM placed WSDOT on notice that this was a design issue associated with the pitch and thread

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tolerance specified in the RFP. WSDOT disagreed with this analysis and asserted that the RFP provided guidance on the thread tolerance and how it was critical to have compatible bolts/nuts to prevent binding of the bolts during tensioning. Multiple letters and dozens of verbal conversations were exchanged on this issue.

WSDOT Project Staff and our SMEs reviewed the bolts in the field (storage), RFP, contract plans, testing procedures, and KGM's "means and methods" of storage and construction. After careful review of all the pertinent information, WSDOT could agree that there was some entitlement to KGM's request for additional compensation. The primary basis used by WSDOT was the discussion on the bolt thread tolerance in the RFP. WSDOT could have more clearly outlined the thread tolerance boundaries in the RFP. However WSDOT and KGM disagreed on the scope and magnitude of the compensable costs. WSDOT did not agree that every "tensioning" issue was a WSDOT problem as there clearly appeared to be fabrication, storage and handling issues which resulted in out of tolerance bolts being delivered and/or bolt threads being damaged on site. Numerous discussions and meetings (involving HQ and Bridge Experts) were held to discuss this issue; however, a complete and final resolution could not be reached with KGM.

KGM's cost request for this work was \$3,759,123.

Associated Serial Letters (Copies attached to this change order package):

KGM – 0577, 0600, 0611, and 0617
WSDOT – 0635 and 0706

Entitlement:

WSDOT acknowledged entitlement to additional compensation for a portion of this work and impacts; however, our estimate of \$1,000,000 for this added work was lower than the KGM proposal of \$3,759,123. This issue is resolved as part of this change order settlement.

PCO 376 – Rebar 50% Tie

In October 2014, KGM submitted a Category 2 DBIC (KGM Serial Letter 0613) to reduce the 100% intersection tie for the top mat of the roadway slab to 50% when epoxy-coated meal bolsters are used between the top and bottom bar mats. The roadway decks which would be included in this DBIC are for the East and West high-rises. This DBIC included a note from the Engineer of Record (KPF) which endorsed this proposal.

WSDOT reviewed this Category 2 DBIC, and our SMEs concurred that the proposal met the equal to or better requirements.

Associated Serial Letters (Copies attached to this change order package):

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KGM – 0613

Entitlement:

WSDOT accepts this KGM Category 2 DBIC. This issue is resolved as part of this change order settlement.

PCO 376 – WCB Mowat Signs Left in Place

In September 2014, KGM requested direction from WSDOT (KGM Serial Letter 0604) regarding on-going monitoring, inspection and maintenance of traffic control signs left in place by the WCB contractor at the west end of the Lake. KGM notified WSDOT that they considered any of these operations to be extra work and compensable. KGM estimated the cost of this effort to be \$200,000.

WSDOT and KGM discussed this issue on several occasions. While there was some merit for additional compensation, the dollar value requested by KGM was excessive. WSDOT's estimate was closer to \$50,000. We were not able to reach resolution over entitlement during these discussions.

Associated Serial Letters (Copies attached to this change order package):

KGM – 0604 and 0619
WSDOT – 0699

Entitlement:

WSDOT's value for this work was in the \$50,000 range. This issue is resolved as part of this change order settlement.

PCO 400A - 400V – pontoons A-W Joint Issues

During pontoon joining operations (primarily longitudinal joining), KGM would intermittently run into alignment issues and difficulties installing the 3.5" assembly bolts. There were instances where bolts could not be installed in the Pontoon V to W joint, and KGM was required to core out four bolt sleeves. More common were situations where the contractor experienced difficulties installing assembly bolts and tensioning the bolts to the RFP requirements of 750 ksi. KGM would be required to remove and replace assembly bolts and change nuts until they were able to tension the bolts to the 750 ksi level. KGM indicated that this was a design issue associated with the pitch and thread tolerance specified in the RFP. WSDOT disagreed with this analysis and asserted that the bolt problems were more likely associated with fabrication (threads out of tolerance) and installation (damaged threads). Multiple letters were exchanged on this issue, starting with KGM Serial Letter 0544, dated April 30, 2014.

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WSDOT Project Staff and our SMEs reviewed the field conditions, RFP, contract plans and KGM's "means and methods" of construction. WSDOT agreed that there was some entitlement to KGM's request for additional compensation; however WSDOT and KGM disagreed on the scope and magnitude of the compensable costs. WSDOT did not agree that every "tensioning" issue was a WSDOT problem. Numerous discussions and meetings were held to discuss this issue; however, a complete and final resolution could not be reached.

KGM's cost request for this work was \$640,359.

Associated Serial Letters (Copies attached to this change order package):

KGM – 0544, 0569, 0577, 0600, and 0611
WSDOT – 0596, 0614, 0657, and 0706

Entitlement:

WSDOT acknowledged entitlement to additional compensation for a portion of this work and impacts; however, our estimate of \$100,000 for this added work was lower than the KGM proposal of \$640,359. This issue is resolved as part of this change order settlement.

PCO 400.30 – Mating Keys Joining Issue

During longitudinal pontoon joining operations in 2014, KGM advised WSDOT of their concerns associated with the "tight" fit of the pontoon mating keys. KGM indicated that the "tight" fit of the mating keys made it difficult for them to efficiently and effectively place the concrete at these locations. While KGM was able to place the concrete and make suitable joints, they advised WSDOT that they considered this a design issue which entitled them to additional compensation.

WSDOT reviewed the field conditions as well as the RFP and discussed with our SMEs. WSDOT concluded that this was not a compensable issue and was associated with KGM's "means and methods" of construction. KGM disagreed with the WSDOT position. After several discussions between WSDOT and KGM on this issue, a resolution could not be reached.

KGM did not estimate the cost for this repair work, but a range of \$25,000 would be expected for this work.

Associated Serial Letters (Copies attached to this change order package):

None

Entitlement:

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WSDOT finds no entitlement for additional compensation. This issue is resolved by this change order.

PCO 400.31 – R-S Joint Crack

After the joint was made (concrete placed), for the Pontoon R-S joint, a crack developed in the upper portion of the concrete joint. The joint was investigated and the concrete was found to be sound with the crack only apparent in the upper portion of the joint. The joint crack was repaired with epoxy injection. KGM advised WSDOT that they felt that this crack was the result of a WSDOT design issue. They indicated that the repair work and any delays were compensable.

WSDOT Project Staff and our SMES reviewed the field conditions as well as the conditions of the pontoons (ballasting, construction activities, etc.) when the joint was made. WSDOT concluded that this was not a compensable issue and was associated with KGM's "means and methods" for constructing this joint. KGM disagreed with the WSDOT position. After several discussions between WSDOT and KGM on this issue, a resolution could not be reached.

KGM did not estimate the cost for this repair work, but a range of \$100,000 would be expected for this work.

Associated Serial Letters (Copies attached to this change order package):

None

Entitlement:

WSDOT finds no entitlement for additional compensation. This issue is resolved by this change order.

PCO 480 – Zn Anchor Cable Replacement

In October of 2014, during anchor cable inspections it was discovered that cable Zn had multiple broken strands on the wire rope cable. On-going monitoring and inspection of this cable determined that this cable needed to be replaced before further damage occurred during wind storms. KGM performed the replacement work in early November using spare anchor cable that WSDOT had previously purchased. WSDOT maintenance crews also assisted with de-tensioning and tensioning operations and provided cable sockets.

The Zn anchor cable had been deviated by KGM to avoid a conflict with the new floating bridge. KGM had designed the deviation frame being used, and WSDOT considered the damage to this cable to be caused by the deviation frame and thus the responsibility of KGM. KGM disagreed with this position and believed that the deviation frame was

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designed within the parameters of the RFP. KGM requested compensation for the cable replacement.

KGM did not estimate the cost for this repair work, but a range of \$100,000 would be expected for this work.

Associated Serial Letters (Copies attached to this change order package):

None

Entitlement:

WSDOT finds no entitlement for additional compensation. This issue is resolved by this change order.

NEW – Delete Existing Bridge Drainage Maintenance

The RFP required KGM to perform the maintenance (cleaning and repair) to the existing bridge drainage system. KGM requested relief from performing these maintenance operations since they were not utilizing the existing bridge for access or working on this structure until it will be closed to traffic. WSDOT agreed that we could continue to perform these maintenance operations, but a credit to the contract would be required for this RFP change.

WSDOT and KGM discussed this maintenance responsibility on several occasions. KGM agreed that they were contractually responsible for this work and that a credit would be appropriate for this change. WSDOT estimated the value of this maintenance work to be in the \$50,000 range.

Associated Serial Letters (Copies attached to this change order package):

None

Entitlement:

WSDOT believed that a \$50,000 credit was associated with this issue. This issue is resolved by this change order.

NEW – Temporary Moorage Location for WSDOT Maintenance Boat

WSDOT requested that KGM provide temporary moorage for the WSDOT maintenance boats assigned to the 520 Bridge. Once the drawspan for the existing bridge is blocked by the new bridge, access to the maintenance boat moorage area will become difficult. Maintenance has worked with the Project Team and KGM to develop options for temporarily mooring their boats. The temporary moorage sites must include 24/7 access, parking, and electrical power. KGM indicated that there were some added costs

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associated with providing this access. KGM didn't provide an estimate for these costs, but WSDOT expected the cost range to be approximately \$30,000.

WSDOT concurred that there were likely compensable costs associated with KGM's efforts.

Associated Serial Letters (Copies attached to this change order package):

None

Entitlement:

WSDOT estimated the cost of this temporary moorage to be \$30,000. This issue is resolved by this change order.

NEW – Commemorative Plaques

WSDOT requested that KGM work with the Department to design, fabricate and install two commemorative plaques recognizing the construction of the pontoons in Aberdeen and Tacoma Washington. WSDOT provided the design criteria to KGM for these two plaques.

WSDOT acknowledged that this was added work to the contract and compensable.

Associated Serial Letters (Copies attached to this change order package):

None

Entitlement:

WSDOT estimated the cost of these two plaques to be \$1500. This issue is resolved by this change order.

NEW – Delete Tolling Vendor Impacts

As part of the FB&L project, KGM is responsible for installing portions of the infrastructure needed for both the temporary and permanent tolling systems. The KGM work includes installing foundations, sign bridges, toll cabinets and toll rate signs. WSDOT worked with both KGM and the tolling contractor, Telvent, to schedule the work. However, KGM fabrication and equipment procurement issues resulted in delays to the installation of the KGM infrastructure which impacted Telvent. WSDOT considered some of these impacts to be KGM's responsibility. WSDOT verbally notified KGM that they would be responsible for these impact costs. KGM disagreed with this analysis.

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WSDOT and KGM discussed these impacts on several occasions. WSDOT estimated the impact costs which were KGM's responsibility to be in the \$50,000 range. KGM disagreed with this determination.

Associated Serial Letters (Copies attached to this change order package):

None

Entitlement:

WSDOT believed that a \$50,000 credit was associated with this issue. This issue is resolved by this change order.

Negotiations with KGM for these various cost impacts occurred primarily in the summer/fall of 2014 but some of these issues were discussed as early as 2012. All of these issues have been extensively discussed and negotiations over cost and price proposals have occurred with KGM. As noted earlier in this memorandum, WSDOT did not find full entitlement for all of these issues, and the value of the equitable adjustment was often in dispute. However, regardless of the level or value of the entitlement, this change order closes and resolves all twenty of these issues.

WSDOT and KGM both agreed that the issues addressed in this change order did not impact contract time, so no adjustment to the contract completion date is made by this change order.

During the development of this change order, coordination and discussions were also held with the WABN WSDOT Project Team, the Toll Division, Headquarters Construction, the Bridge and Structures Office, Project Subject Matter Experts, the SR 520 Program Office and the FHWA. These discussions included technical discussions concerning the contract schedule, the changes proposed as well as the cost of the impacts.

As the dollar value of this change order exceeds the approval authority of the Project Office, the following approvals were secured:

Approvals Provided:

- Project Level – Dave Becher on November 13, 2014
- Region/Program Level – Tom Horkan on February 27, 2015
- Region/Program Funding Concurrence – Sherry Felke on March 19, 2015
- Headquarters Construction Level – Derek Case on March 19, 2015
- FHWA Level – Anthony Sarhan on April 10, 2015

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Note – the FHWA has indicated that they will not participate in the funding for the costs associated with procurement of two plaques to be installed on the new floating bridge. WSDOT estimated the costs associated with these two plaques to be \$1500.

Entitlement:

This change order resolves both OICs and DBICs and provides an equitable adjustment settlement to the Design-Builder to settle these twenty issues.

Price:

WSDOT and KGM negotiated an equitable adjustment which increases the contract amount by \$1,500,000.00 to settle these issues.

Attached to this change order package is a copy of the Engineer's Estimate prepared by WSDOT.

Contract Time:

This change order does not impact contract time and no time is added to the contract.

Memorandum Attachments:

- Change Order 191 (approved by Engineering Manager)
- Change Order Checklist
- Engineer's Estimate
- Approval Documentation
- Appendix M23 – Outfitting and Assembly Minimum Technical Requirements, Bridge Sheet No. A9 “Pontoon Assembly Details 7”.
- Standard Specifications – 6-02.3(24)C – Placing and Fastening
- Change Orders 40, 85, 86, 110, 141, 163, and 180
- KGM Serial Letters 0421, 0429, 0458, 0467, 0468, 0502, 0544, 0557, 0569, 0573, 0577, 0593, 0600, 0604, 0609, 0611, 0612, 0613, 0617, and 0619
- WSDOT Serial Letters 0192, 0227, 0454, 0537, 0596, 0613, 0614, 0618, 0635, 0656, 0657, 0699, 0705, and 0706

DPB: DB
Attachments
PW File: 17.02.CO-191

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CONTRACT NO: 008066 FEDERAL AID NO: BR-0520 (047)
 CONTRACT TITLE: SR 520 / I-5 TO MEDINA - EVERGREEN POINT FLOATING
 CHANGE ORDER NO: 191 11/13/2014 PROJECT RESOLUTION

PRIME CONTRACTOR: SW0106139 KIEWIT/GENERAL/MANSON, A JOINT
 33455 6TH AVE S
 FEDERAL WAY WA 98003-6335

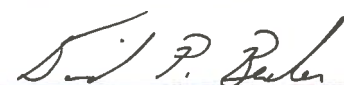
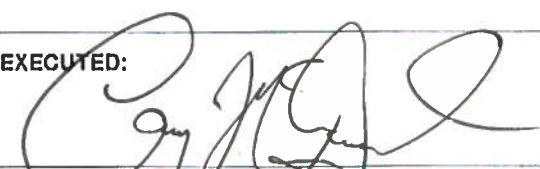
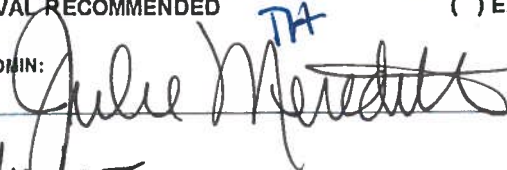
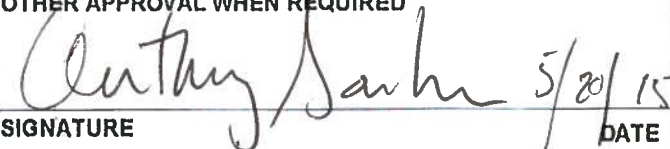
(X) Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications

(X) Change proposed by Contractor

ENDORSED BY:  _____ CONTRACTOR DATE <u>3/18/15</u>	SURETY CONSENT: _____ ATTORNEY IN FACT _____ DATE
---	---

ORIGINAL CONTRACT AMOUNT: 586,561,000.00
 CURRENT CONTRACT AMOUNT: 756,205,977.93
 ESTIMATED NET CHANGE THIS ORDER: 1,500,000.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 757,705,977.93

Approval Required: () Region () Olympia Service Center () Local Agency

<input checked="" type="checkbox"/> APPROVAL RECOMMENDED () EXECUTED  PROJECT ENGINEER <i>Engineering Manager</i> DATE <u>May 11, 2015</u>	EXECUTED:  STATE CONSTRUCTION ENGINEER DATE <u>5/18/15</u>
() APPROVAL RECOMMENDED () EXECUTED REGIONAL ADMIN: ^{TA}  BY: <u>5/11/15</u> DATE	OTHER APPROVAL WHEN REQUIRED  SIGNATURE <u>5/20/15</u> DATE REPRESENTING <u>PHWA</u>

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CONTRACT NO: 008066

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All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The first paragraph above is revised to read:

All work, materials, and measurements to be in accordance with the request for proposal (RFP) and the contract documents for this project.

DESCRIPTION:

This change order incorporates both WSDOT-Initiated Changes and Design-Builder Initiated Changes in accordance with General Provisions Section 1-04.4 to provide for the settlement of potential change orders (PCO's) associated with Contract No. 008066 as agreed to on 11/13/2014 and as described in this change order.

CONTRACT REQUIREMENTS:

* PCO's 142D, 142D.1, 142D.2 - OIC TOLLING / ITS INFRASTRUCTURE CHANGES,
Contract Requirements:

Technical Requirements Section 2.18.3.4.2.5 Field Acceptance Testing shall be revised as follows:

Delete six (6) paragraphs, beginning with the paragraph:
"The field acceptance testing shall consist of two phases:"

Through the paragraph:
"If the floating bridge systems as required in Sections 2.17, 2.30, 2.32 and 2.35 require communication with the TMC through the ITS mainline cables, these systems shall be tested in accordance with the requirements in their respective section."

And replace with:
"The field acceptance testing shall consist of two phases:

- * Phase I field acceptance testing through the Northrup communication hub; and
- * Phase II field acceptance testing through the Roanoke communication hub.

The Design-Builder shall make the ITS communication network fully operational prior to each phase of the field acceptance testing. During the Phase I field acceptance testing, the ITS distribution network shall provide communications from every ITS field device between the east bridge abutment and the eastern Project limit to the TMC through the Northrup communication hub. The Design-Builder shall perform the controller turn-on tests and all tests at the TMC

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through the Northup communication hub. During the Phase II field acceptance testing, the ITS distribution network shall provide communications from every ITS field device on the new floating bridge, westward of the east bridge abutment, to the TMC through the Roanoke communication hub. The Design-Builder shall design the Phase II field acceptance test for testing the ITS distribution network and associated communication equipment installed by the Design-Builder for the new floating bridge. The Design-Builder shall perform all tests at the TMC and both Northup and Roanoke communication hubs to demonstrate a fully operational ITS communication network.

The Design-Builder shall clearly document this two-phase field acceptance testing in its test plans, testing procedures, pass/fail requirements and test schedules for WSDOT review and comment.

If the floating bridge control systems as required in Sections 2.17, 2.30, 2.32 and 2.35 require communication with the TMC through the ITS mainline cables, these systems shall be tested in accordance with the additional requirements in their respective sections. At a minimum, the Design-Builder shall test the ITS mainline communication network for the floating bridge control system (including communication devices in all maintenance facilities) at the TMC and both Northup and Roanoke communication hubs and demonstrate a fully operational communication network."

Technical Requirements Section 2.18.3.4.2.6 WSDOT System Acceptance Testing shall be revised as follows:

Delete five (5) paragraphs, beginning with the paragraph:
"The system acceptance testing will consist of three phases:"

Through the paragraph:
"Upon successful completion of the Phase I field acceptance testing and WSDOT inspection, the Design-Builder may proceed with the Phase I system acceptance testing without completion of the Phase II field acceptance testing. However, the Phase II system acceptance testing shall not begin until successful completion of all field acceptance testing and Phase I system acceptance testing."

And replace with:
"The system acceptance testing will consist of two phases:

- * Phase I - 20-Calendar Day system acceptance testing through both Northup and Roanoke communication hubs before Substantial Completion; and
- * Phase II - 30-Calendar Day live traffic testing within 90 Calendar days after Substantial Completion.

Upon successful completion of the field acceptance testing and WSDOT

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inspection, the Design-Builder shall proceed with the Phase I system acceptance testing. However, the Phase II system acceptance testing shall not begin until successful completion of all field acceptance testing and Phase I system acceptance testing."

Delete six (6) paragraphs, beginning with the paragraph:

"When the three system acceptance testing phases are not scheduled consecutively, the ITS shall remain in operations between any two testing phases and after completion of the Phase III live traffic testing. The Design-Builder shall not disrupt the ITS unless the disruptions meet the requirements in these Technical Requirements and are approved by WSDOT."

Through the paragraph:

"For the purposes of all three system acceptance test periods, a failure is defined as any functional, software, hardware or communication failure of any ITS field equipment, communication cables and interface components, hub and TMC equipment, and any software including controller firmware, that the Design-Builder is responsible for installing. Any loss of communication between the TMC and field equipment shall be considered a failure unless it is caused by a failure outside the Design-Builder's responsible area as determined by WSDOT."

And replace with:

"During and after each phase of the system acceptance testing, all ITS shall remain in operation. The Design-Builder shall not disrupt the ITS unless the disruption meets the requirements in these Technical Requirements and is approved by WSDOT."

During the Phase I system acceptance test period, all ITS equipment shall be communicating with the TMC central system through its respective communication hub and shall be monitored for 20 consecutive Calendar Days by WSDOT TMC personnel. Upon successful completion of 20 consecutive Calendar Days of failure-free operation as determined by WSDOT, WSDOT will notify the Design-Builder that the ITS field equipment is operational. The Design-Builder shall not open the new floating bridge to traffic until the Phase I system acceptance testing is completed successfully.

The Phase II system acceptance testing will not begin until construction of six lanes on the new floating bridge is complete and all traffic is switched from the existing floating bridge to the new floating bridge in the permanent channelization. During the 30 Calendar Day test period, WSDOT will test the entire ITS in a live traffic environment such that the accuracy of the traffic data accumulation system can be validated. The Design-Builder shall not perform any construction activities that will disrupt the ITS operations or affect the traffic data accumulation system. Any system malfunction or reduced data accuracy under the "live traffic" condition as identified by WSDOT shall be considered a failure and cause for termination of the Phase II system acceptance testing.

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For the purposes of all system acceptance test periods, a failure is defined as any functional, software, hardware or communication failure of any ITS field equipment, communication cables and interface components, hub and TMC equipment, and any software including controller firmware, that the Design-Builder is responsible for installing. Any loss of communication between the TMC and field equipment shall be considered a failure unless it is caused by a failure outside the Design-Builder's responsible area as determined by WSDOT."

Technical Requirements Section 2.18.4.10.2 Fiber Optic Cables for ITS shall be revised as follows:

After the paragraph:

"2) New floating bridge"

Delete seven (7) bulleted items, beginning with the bulleted item:

"* The communication network must be able to provide a fail-over mechanism between the two communications hubs. At a minimum, the two distribution cables shall be able to be configured to the following network configurations for data and video communications by using patch cords in the westernmost shed on the pontoon deck and the fiber terminal cabinet:"

Through the bulleted item that begins:

"* For ITS data communications on the new floating bridge, the Design-Builder is highly encouraged to design and install an automated routing system in the westernmost shed and the fiber terminal cabinet to provide an automated fail-over mechanism between the two communication hubs."

Technical Requirements Section 2.23.4.4 Permanent Roadside Toll Cabinet shall be revised as follows:

After the paragraph:

"The Design-Builder shall furnish and install the following roadside equipment cabinets and foundations in accordance with the Mandatory Standards:"

Delete the bulleted item:

"* A single-phase, 480 V to 120 V transformer and cabinet (a minimum of 25 KVA for each toll zone);"

And replace with:

"* A single-phase, 480 V to 120 V transformer and cabinet (a minimum of 25 KVA for all toll zones at each site);"

Delete the bulleted item:

"* A concrete pad on the shared foundation (a minimum of four feet in width by 10 feet in length) that WSDOT will use for installation of

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an emergency back-up generator."

And replace with:

"* A concrete pad on the shared foundation (see 008066 Change Order No. 180 for pad size), with interconnecting conduits to the toll cabinets and transformer cabinet, that WSDOT will use for installation of an emergency back-up generator."

In the paragraph that begins with the sentence:

"The Design-Builder shall co-locate all roadside cabinets for both toll zones on a shared foundation wherever possible."

After that sentence, insert the sentence:

"The Design-Builder shall coordinate the layout of the interconnecting conduits between the generator pad, roadside toll cabinets, and the transformer cabinet with the WSDOT Toll Engineer."

After the paragraph:

"The Design-Builder shall furnish and install the ground-mounted Model 334 double-wide roadside toll cabinets in accordance with the following requirements:"

Delete the bulleted items:

- "* The double-wide cabinet shall have the characteristics of the Model 334 cabinets as specified in Chapter 12 of FHWA IP-78-16.
- * The external dimensions of the double-wide cabinet shall be 67 inches high by 48.5 inches wide by 30-1/4 inches deep.
- * Cabinets shall be fabricated of 0.125 inches sheet aluminum, 5052 alloy, with mill finish, in accordance with Section 9-29.13(7)D, Item number 1 of the WSDOT Standard Specifications (Appendix D18). Painted or anodized aluminum is not allowed."

And replace with:

- "* The double-wide cabinet shall have the characteristics of the Model 334 cabinets as specified in Chapter 12 of FHWA IP-78-16, and shall be installed using a riser adapter base.
- * The external dimensions of the double-wide cabinet shall be 67 inches high by 48.5 inches wide by 30-1/4 inches deep. The external dimensions of the cabinet riser shall be 8 inches high, and the width and depth of the riser shall match the toll cabinet.
- * Cabinets and risers shall be fabricated of 0.125 inches sheet aluminum, 5052 alloy, with mill finish, in accordance with Section 9-29.13(7)D, Item number 1 of the WSDOT Standard Specifications (Appendix D18). Painted or anodized aluminum is not allowed. Installation of the riser shall not compromise the environmental rating of the toll cabinet."

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Technical Requirements Section 2.23.4.8 Additional Junction Boxes and Conduits shall be revised as follows:

After the paragraph:

"At a minimum, the Design-Builder shall furnish and install the following:"

Delete the five (5) bulleted items and replace with:

- "* In each toll zone, adjacent to the outside shoulder, up to two junction boxes (Type 4 or larger) at the base of each monotube foundation;
- * Up to two three-inch conduits from every monotube foundation to the roadside toll cabinets;
- * Interconnecting conduits between the generator pad, each roadside toll cabinet, and the transformer cabinet;
- * In each toll zone, two one-inch conduit stub-outs per each travel lane, shall be installed near the exit gantry; and
- * Within the junction box north of the SR 520 westbound mainline, two additional one-inch conduit stub-outs shall be installed near the exit gantry."

* PCO 286 - GOWDY DRIVEWAY RESTORATION, Contract Requirements:

Add the Contract Requirements:

"The Design-Builder shall restore the driveway and drainage at the property near 2857 76th Ave NE, Medina (Gowdy Property) to pre-construction condition or similar. The design for the driveway and drainage restoration shall be submitted to WSDOT for review and approval."

* PCO's 312, 312A, 164 - OIC WEST ACCESS BRIDGE COORDINATED DESIGN ITEMS AND OIC WEST ACCESS BRIDGE CONSTRUCTION WORK ZONE AND CONSTRUCTION COSTS, Contract Requirements:

Technical Requirements Section 2.12.4.2.9.11 Conduits and Pipe Supports, as modified in 008066 Change Order No. 40, shall be revised as follows:

After the bulleted item:

"- Conduits shall be installed in the closure pour between the north and south lowrise bridge deck panels. Embedded conduits shall be at least two inches clear from any post-tensioning duct in the closure pour."

Add the bulleted item:

"- Conduit within the barriers shall have any stub-outs through the roadway deck installed in accordance with the requirements of Section

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2.13.4.22."

Technical Requirements Section 2.12.4.2.9.14 West Transition Span and Pier 36N&S shall be revised as follows:

Delete the bulleted item:

"* Traffic barrier, pedestrian barrier, and railing joint covers."

And replace with:

"* Traffic barrier, pedestrian barrier, temporary pedestrian barrier with scuppers, mechanical couplers for the installation of pedestrian barrier by others, and railing joint covers."

Technical Requirements Section 2.12.5.17.5 West Transition Span and Pier 36N&S, as modified in 008066 Change Order No. 85, shall be revised as follows:

After the paragraph:

"The Design-Builder shall be responsible for the installation and construction of the elements as shown on the Conceptual Plans (Appendix M1), the West Connection Bridge Drawings (Appendix M3), and as indicated below:"

Delete the bulleted item:

"* Traffic barriers, pedestrian barriers, and railings on the West Transition Spans."

And replace with:

"* Traffic barriers, pedestrian barriers, temporary pedestrian barriers with scuppers, mechanical couplers for the installation of pedestrian barriers by others, and anchor bolts with corresponding embedded steel plates for future installation of pedestrian railing on the West Transition Spans."

Technical Requirements Section 2.14.4.2 Collection and Conveyance Structures, as modified in 008066 Change Order Nos. 86 and 110, shall be revised as follows:

After the paragraph that begins with the sentence:

"Temporary bridge drainage elements for the traffic switch area conceptually consist of scuppers located within the median and southern perimeter barrier of the WCB, the floating bridge and a portion of the existing West Approach Bridge."

Add the paragraph:

"Temporary bridge drainage elements shall also include scuppers within the single slope pedestrian barrier adjacent to the RSUP, eastward from the centerline of Pontoon A to a point defined based on the design need. The scupper openings shall not impact the structural integrity of the single slope pedestrian barrier."

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Technical Requirements Section 2.15.5.1.1.7 Conduits and Utilities shall be revised as follows:

Delete the sentence:

"Conduits shall not be mounted to any visible portion of the RSUP railing."

And replace with:

"Conduits shall not be mounted to any visible portion of the RSUP railing, except at the West Transition Span where the railing will be installed by others."

Add the Contract Requirements:

- "* The Design-Builder will not be required to construct the 42-inch single slope barrier (including affected conduit and illumination fixtures) on the West Transition Span - North, eastward from the centerline of Pier 36 to a barrier termination point defined by the barrier expansion (or open construction) joint that is approximately 30 feet west of the centerline of Pontoon A, as shown on pages 18 through 23 of 008066 Change Order No. 191.
- * The Design-Builder shall install mechanical couplers in the bridge deck and provide a construction joint with roughened surface as shown on pages 24 and 25 of 008066 Change Order No. 191, eastward from the centerline of Pier 36 to the barrier termination point, for future 42-inch single slope barrier construction. The Design-Builder shall account for the installation of barrier expansion (or open construction) joints, consistent with page 26 of 008066 Change Order No. 191. An estimated total of (140) #4 couplers and (322) #5 couplers will be required. Information regarding the type and number of mechanical couplers is provided on page 27 of 008066 Change Order No. 191.
- * The barrier expansion (or open construction) joints shall be as specified in Section 2.12.4.2.9.12.
- * The Design-Builder shall incorporate a total of (44) scuppers, as a temporary drainage element, within the 42-inch single slope barrier, eastward from the barrier termination point to approximate ML Station 142+10. The scupper openings shall be 2'-6", and shall be spaced at 7'-6" on center. The scuppers shall be shown in the Released for Construction documents.
- * The Design-Builder will not be required to construct the RSUP Railing between ML Stations 137+22.48 (47.33' LT) and 138+88.03 (51.18' LT). In lieu of the RSUP Railing, the Design-Builder shall install RSUP Railing post anchorage assemblies as detailed on pages 28 and 29 of 008066 Change Order No. 191. The Design-Builder shall install (22) interior post assemblies and (23) end post assemblies. Estimated quantities for the assembly components are provided on page 30 of 008066 Change Order No. 191, with reference sheets A2.02 and BA554 included as pages 31 and 32 of 008066 Change Order No. 191. The Design-Builder shall design the edge reinforcing at the deck to accommodate anchor bolt installation, and for electrical continuity,

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bonding, and grounding requirements.

- * The Design-Builder will not be required to construct the concrete curb coincident with the affected segment of RSUP Railing; in addition, that portion of the bridge deck beyond the concrete curb shall not be constructed.
- * The Design-Builder shall install temporary precast concrete barrier Type 2 with scuppers, in lieu of the RSUP Railing, between ML Stations 137+22.48 (47.33' LT) and 138+88.03 (51.18' LT); and, at the western extent of the RSUP, adjacent to Pier 36 as shown on pages 18 through 23 of 008066 Change Order No. 191. The centerline of the Type 2 temporary barrier shall be located 3-feet from the edge of the bridge deck.
- * The Design-Builder shall place a temporary Type 2 barrier across the RSUP at ML Station 138+92.92 and ML Station 142+10.
- * The Design-Builder shall provide a 2-inch diameter electrical conduit stub-out below the roadway deck, at a location westward from the modular expansion joint and in the vicinity of the 42-inch barrier termination point."

* PCO 312B - OIC WEST APPROACH GRINDING, Contract Requirements:

Technical Requirements Section 2.7.3.3.1 Portland Cement Concrete and Hot Mix Asphalt shall be revised as follows:

Delete the third paragraph under subtitle "Surface Smoothness" in its entirety and replace with:

"The Project shall utilize the value of International Roughness Index (IRI) calculated by averaging the left and right wheel path IRI as the basis for incentive and disincentive payments for the smoothness of the roadway surface. The entire length of each through lane, auxiliary lane, passing lane, transit lane, bridge approach slab, and bridge deck paved or constructed shall be profiled from the beginning to the end of the Project, unless otherwise noted. Span 35 of the West Connection Bridge as identified on pages 33 and 34 of 008066 Change Order No. 191, ramps, shoulders, tapers, and city streets will not be profiled and will not be subject to the IRI incentive/disincentive adjustments. The IRI rating for the new pavements, bridge approach slabs, and bridge decks including intervening joints shall be evaluated, and payment shall be adjusted according to the methods outlined in Section 1-08.11(1) of the General Provisions."

Add the Contract Requirements:

"The Design-Builder shall grind the existing surface of Span 35 of the West Connection Bridge, as identified on pages 33 and 34 of 008066 Change Order No. 191. Grinding shall be in accordance with Section 2.7.5.3 Next Generation Concrete Surface."

* PCO 336 - BEARING PLATE MODIFICATIONS AT FILLETS, Contract Requirements:

Add the Contract Requirements:

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"At pontoons A and W, the deck slab bolt beam bearing plates that are located near an interior transverse wall may be chamfered where the corner of a plate conflicts with a wall fillet. The plate corner chamfer shall be no greater than a 3-inch chamfer at 45 degrees, and shall only remove the plate material as required to fit the plate to the wall fillet."

- * PCO 362 - PONTOON ASSEMBLY BOLT FABRICATION TOLERANCES, Contract Requirements:

Add the Contract Requirements:

"008066 Change Order No. 191 resolves any and all past, current, and future impacts and/or schedule delays experienced by the Design-Builder related to the furnishing and installation of Pontoon joint Assembly Bolts in accordance with the Contract requirements, including the criteria for bolt thread tolerance, nut thread tolerance, and bolt tensioning."

- * PCO 376 - REBAR 50% TIE, Contract Requirements:

WSDOT Standard Specifications (Appendix D18) Section 6-02.3(24)C Placing and Fastening shall be revised as follows:

In the second paragraph, delete the sentence:

"All epoxy-coated bars in the top mat of the roadway slab shall be tied at all intersections."

And replace with:

"All epoxy-coated bars in the top mat of the roadway slab shall be tied at all intersections, except that epoxy-coated bars in the top mat of bridge roadway slabs where epoxy-coated metal chair supports are used between top and bottom reinforcing steel mats may be tied at alternating intersections."

- * PCO 380 - WCB MOWAT SIGNS LEFT IN PLACE, Contract Requirements:

Technical Requirements Section 2.22.1 General, related to the Maintenance of Traffic (MOT), shall be revised as follows:

Delete the paragraph:

"The Design-Builder shall prepare a Transportation Management Plan (TMP), Traffic Incident Management Plan (TIMP) and MOT Plans, and shall conduct all on-site activities relating to traffic maintenance in accordance with this section."

And replace with:

"The Design-Builder shall prepare a Transportation Management Plan (TMP), Traffic Incident Management Plan (TIMP) and MOT Plans, and shall conduct all on-site activities relating to traffic maintenance in accordance with this section. In order to provide consistent traffic control after the

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completion of the SR 520 West Connection Bridge and Shared Use Path (WCB) Project, the Design-Builder may elect to adopt MOT Plans that were developed and approved under the WCB Project."

- * PCO's 400, 400A through 400V - PONTOONS A-W JOINT ISSUES, Contract Requirements:

Add the Contract Requirements:

"The Design-Builder shall core drill the Pontoon joint bolt sleeves in Pontoons V and W, as required to provide for the installation of the Pontoon joint Assembly Bolts that join these Pontoons. Core drilling locations and procedures shall be submitted to WSDOT for review and approval, and shall not cause damage to any reinforcing steel or other embedded items in these Pontoons.

008066 Change Order No. 191 resolves any and all past, current, and future impacts and/or schedule delays experienced by the Design-Builder related to aligning the Pontoon joint bolt sleeves in adjacent Pontoons for the installation of Pontoon joint Assembly Bolts, except that future measures that may be required for the alignment of adjacent Pontoon joint bolt sleeves in Pontoons A through L will be addressed under separate change order, as necessary."

- * PCO 400.30 - MATING KEYS JOINING ISSUE, Contract Requirements:

Appendix M23 Outfitting and Assembly Minimum Technical Requirements, Bridge Sheet No. A9 "Pontoon Assembly Details 7", as modified in 008066 Change Order No. 141, shall be revised as follows:

In the sheet notes, delete note:

- ** 1" GAP BETWEEN KEY AND RECESS FRAME TO BE GROUTED SIMULTANEOUSLY WITH PONTOON JOINT (TYP.)

And replace with:

- ** 1" GAP BETWEEN KEY AND RECESS FRAME TO BE GROUTED SIMULTANEOUSLY WITH PONTOON JOINT; ALL VOIDS IN THE GROUT BETWEEN THE KEY AND RECESS FRAME SHALL BE FILLED UTILIZING MATERIALS AND PROCEDURES SUBMITTED TO WSDOT FOR REVIEW AND APPROVAL (TYP.)

- * PCO 400.31 - R-S JOINT CRACK, Contract Requirements:

Add the Contract Requirements:

"The Design-Builder shall repair the crack(s) observed in the top surface of the Pontoon joint grout between Pontoons R and S. Repair materials and procedures shall be submitted to WSDOT for review and approval, and shall be performed following final tensioning of the Pontoon joint Assembly Bolts that join Pontoons R and S."

- * PCO 480 - ZN ANCHOR CABLE REPLACEMENT, Contract Requirements:

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Add the Contract Requirements:

"The Design-Builder shall perform work to replace the existing anchor cable at the north face of existing bridge Pontoon Z (anchor cable ZN) utilizing the new anchor cable material provided for in 008066 Change Order No. 163. WSDOT will furnish the necessary anchor cable, sockets, and support from the WSDOT Bridge Maintenance Group. Replacement of anchor cable ZN shall be completed by November 2, 2014."

- * PCO xxx - DELETE EXISTING BRIDGE DRAINAGE MAINTENANCE, Contract Requirements:

Technical Requirements Section 2.29.8.1 Existing Bridges shall be modified as follows:

Delete the paragraph:

"The Design-Builder shall maintain drainage structures on and off the bridges within the Project. The Design-Builder shall be required to clean-out drains on the existing floating bridge on an as needed basis but not less than once per month. Free draining of water through any drainage structure shall be maintained at all times. Refer to section 2.14 (Stormwater Management)."

And replace with:

"Free draining of water through any drainage structure shall be maintained at all times. Refer to section 2.14 (Stormwater Management). The Design-Builder is not required to inspect, clean, or maintain the drainage structures on the existing floating bridge."

- * PCO xxx - TEMPORARY MOORAGE LOCATION FOR WSDOT MAINTENANCE BOAT, Contract Requirements:

Add the Contract Requirements:

"The Design-Builder shall provide a temporary moorage site for a WSDOT Bridge Maintenance Group workboat. The temporary moorage site shall be accessible from the east shore of Lake Washington, north of the existing SR 520 Bridge, within the limits of construction, and shall be provided with a single phase, 30amp 120v power supply. Two vehicle parking spaces shall be provided near the site. The Design-Builder shall coordinate the design and location of the temporary moorage site with the WSDOT Bridge Maintenance Group."

- * PCO xxx - COMMEMORATIVE PLAQUES, Contract Requirements:

Add the Contract Requirements:

"The Design-Builder shall furnish and install two metal plaques commemorating the completed construction of the pontoons furnished by the State (PFS) and the pontoons provided by the Design-Builder (PPDB). The size of the plaques shall be 12-inches wide by 18-inches high. The plaque designs, material type, and installation methods shall be submitted to WSDOT for approval prior to plaque fabrication."

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The installation location of the plaques shall be coordinated with WSDOT."

* PCO xxx - DELETE TOLLING VENDOR IMPACTS, Contract Requirements:

Add the Contract Requirements:

"008066 Change Order No. 191 resolves any impacts and/or schedule delays experienced by the WSDOT All Electronic Tolling (AET) system vendor related to WSDOT's request for early completion and advancement of the temporary AET system infrastructure."

PAYMENT:

As mutually agreed for the Work as described in this change order, WSDOT will reimburse the Design-Builder under the new lump sum item "11/13/2014 Project Resolution" in the amount of \$1,500,000. The lump sum amount shall be full compensation for all direct and indirect costs related to Work addressed under this change order.

TIME:

There shall be no extension of Contract Time as a result of this change order.

RELEASE:

The Design-Builder, Kiewit/General/Manson, A Joint Venture (KGM), by the signing of this change order agrees and certifies that:

Upon payment of this change order in the amount of \$1,500,000, any and all requests for compensation for direct and indirect costs or additional time set forth in the following Potential Change Order (PCO) issues and associated documents including, but not limited to, those documents listed herein, arising out of or pertaining to Contract No. 008066, have been satisfied in full and the State of Washington is discharged and released from any additional requests for extra compensation or time related to the listed PCO issues:

* PCO 142D, 142D.1, 142D.2 - OIC TOLLING / ITS INFRASTRUCTURE CHANGES:

- KGM Serial Letter 0467 dated October 23, 2013
- KGM Serial Letter 0468 dated October 23, 2013
- KGM Serial Letter 0573 dated July 8, 2014
- KGM Serial Letter 0612 dated October 10, 2014
- WSDOT Letter 0227 dated December 26, 2012
- WSDOT Letter 0618 dated May 12, 2014
- WSDOT Letter 0656 dated July 23, 2014

* PCO 142D.3 - RFP TO RFC CHANGES:

- KGM Serial Letter 0612 dated October 10, 2014

* PCO 265 - GRAYS HARBOR MOORAGE DESIGN ISSUES:

- KGM Serial Letter 0421 dated June 17, 2013
- KGM Serial Letter 0458 dated September 23, 2013 (only as this letter pertains to PCO 265; 008066 Change Order No. 191 does not resolve

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the modified moorage scheme analysis performed at the request of KGM (PCO 249) that is also addressed in KGM Serial Letter 0458) KGM Serial Letter 0502 dated February 10, 2014 (only as this letter pertains to PCO 265; 008066 Change Order No. 191 does not resolve the modified moorage scheme analysis performed at the request of KGM (PCO 249) that is also addressed in KGM Serial Letter 502) WSDOT Letter 0454 dated July 31, 2013 WSDOT Letter 0537 dated December 6, 2013 (only as this letter pertains to PCO 265; 008066 Change Order No. 191 does not resolve the modified moorage scheme analysis performed at the request of KGM (PCO 249) that is also addressed in WSDOT Letter 0537)

- * PCO 286 - GOWDY DRIVEWAY RESTORATION
- * PCO 312, 164 - OIC WEST ACCESS BRIDGE COORDINATED DESIGN ITEMS:
 - KGM Serial Letter 0429 dated June 28, 2013
 - WSDOT Letter 0192 dated November 14, 2012
 - WSDOT Letter 0613 dated May 1, 2014
- * PCO 312A - OIC WEST ACCESS BRIDGE CONSTRUCTION WORK ZONE AND CONSTRUCTION COSTS:
 - KGM Serial Letter 0609 dated October 7, 2014
- * PCO 312B - OIC WEST APPROACH GRINDING:
 - KGM Serial Letter 0609 dated October 7, 2014
 - WSDOT Letter 0705 dated September 24, 2014
- * PCO 336 - BEARING PLATE MODIFICATIONS AT FILLETS:
 - KGM Serial Letter 0593 dated August 25, 2014
- * PCO 362 - PONTOON ASSEMBLY BOLT FABRICATION TOLERANCES:
 - KGM Serial Letter 0557 (PCO 362) dated May 27, 2014
 - KGM Serial Letter 0600 (PCO 400) dated September 19, 2014
 - KGM Serial Letter 0611 (no PCO #) dated October 8, 2014
 - KGM Serial Letter 0617 (no PCO #) dated October 22, 2014
 - WSDOT Letter 0635 (PCO 362) dated June 10, 2014
 - WSDOT Letter 0706 (PCO 400) dated September 26, 2014
- * PCO 376 - REBAR 50% TIE:
 - KGM Serial Letter 0613 dated October 13, 2014
- * PCO 380 - WCB MOWAT SIGNS LEFT IN PLACE:
 - KGM Serial Letter 0604 dated September 12, 2014
 - KGM Serial Letter 0619 dated November 5, 2014
 - WSDOT Letter 0699 dated September 18, 2014
- * PCO 400, 400A through 400V - PONTOONS A-W JOINT ISSUES:
 - KGM Serial Letter 0544 (PCO 400V) dated April 30, 2014
 - KGM Serial Letter 0569 (PCO 400V) dated June 13, 2014
 - KGM Serial Letter 0577 (PCO 400U) dated July 14, 2014

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KGM Serial Letter 0600 (PCO 400) dated September 19, 2014
KGM Serial Letter 0611 (no PCO #) dated October 8, 2014
WSDOT Letter 0596 (no PCO #) dated April 2014
WSDOT Letter 0614 (PCO 400V) dated May 2, 2014
WSDOT Letter 0657 (PCO 400U) dated July 25, 2014
WSDOT Letter 0706 (PCO 400) dated September 26, 2014

- * PCO 400.30 - MATING KEYS JOINING ISSUE
- * PCO 400.31 - R-S JOINT CRACK
- * PCO 480 - ZIN ANCHOR CABLE REPLACEMENT:
WSDOT Email dated October 31, 2014
- * PCO xxx - DELETE EXISTING BRIDGE DRAINAGE MAINTENANCE
- * PCO xxx - TEMPORARY MOORAGE LOCATION FOR WSDOT MAINTENANCE BOAT
- * PCO xxx - COMMEMORATIVE PLAQUES
- * PCO xxx - DELETE TOLLING VENDOR IMPACTS

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 05/11/15
Page 17 of 34

CONTRACT NO: 008066

CHANGE ORDER NO: 191

ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE
1096	01		11/13/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	555,235.00
1096	02		11/13/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	244,800.00
1096	03		11/13/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	465,865.00
1096	06		11/13/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	116,300.00
1096	07		11/13/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	116,300.00
1096	MI A7		11/13/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	1,500.00

1,500,000.00
=====

SEC. 22, T. 25 N., R. 4 E., W.M.
KING COUNTY
SR 520

CURVE DATA					
P.I. STATION	Δ	RADIUS	TANGENT	LENGTH	SLOPE
ML 139+34.77	3°39'50.9" LT.	10,018.04	320.44	640.67	+2% RT.
MR 129+58.41	2°34'09.1" LT.	11,690.00	262.14	524.19	+2% LT.
MRWX 39+09.90	4°43'22.5" LT.	11,701.00	482.53	964.52	+2% LT.

Omit RSUP railing & curb, and bridge deck beyond curb.

End omission of RSUP railing & curb, ML Sta. 138+88.03.

Install temporary Type 2 barrier on RSUP at ML Sta 142+10, as shown sheet DR1.03.

Temporary Type 2 barrier, shall be Precast Concrete Barrier Type 2 with Scupper.

Begin omission of 42" single slope barrier

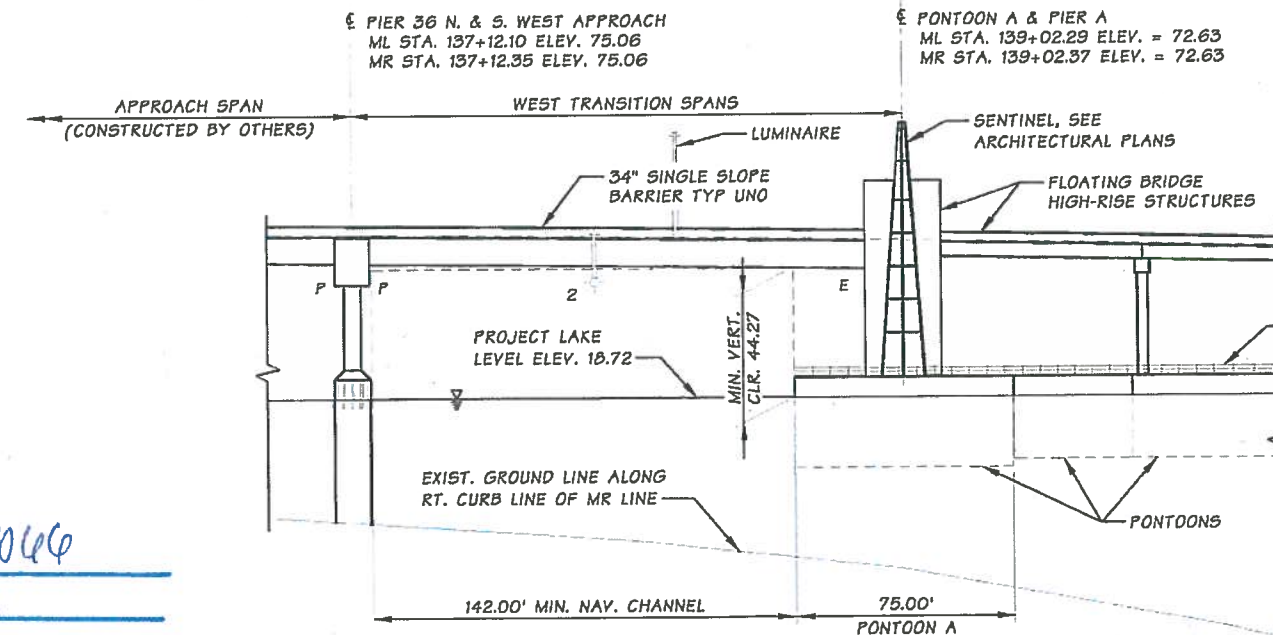
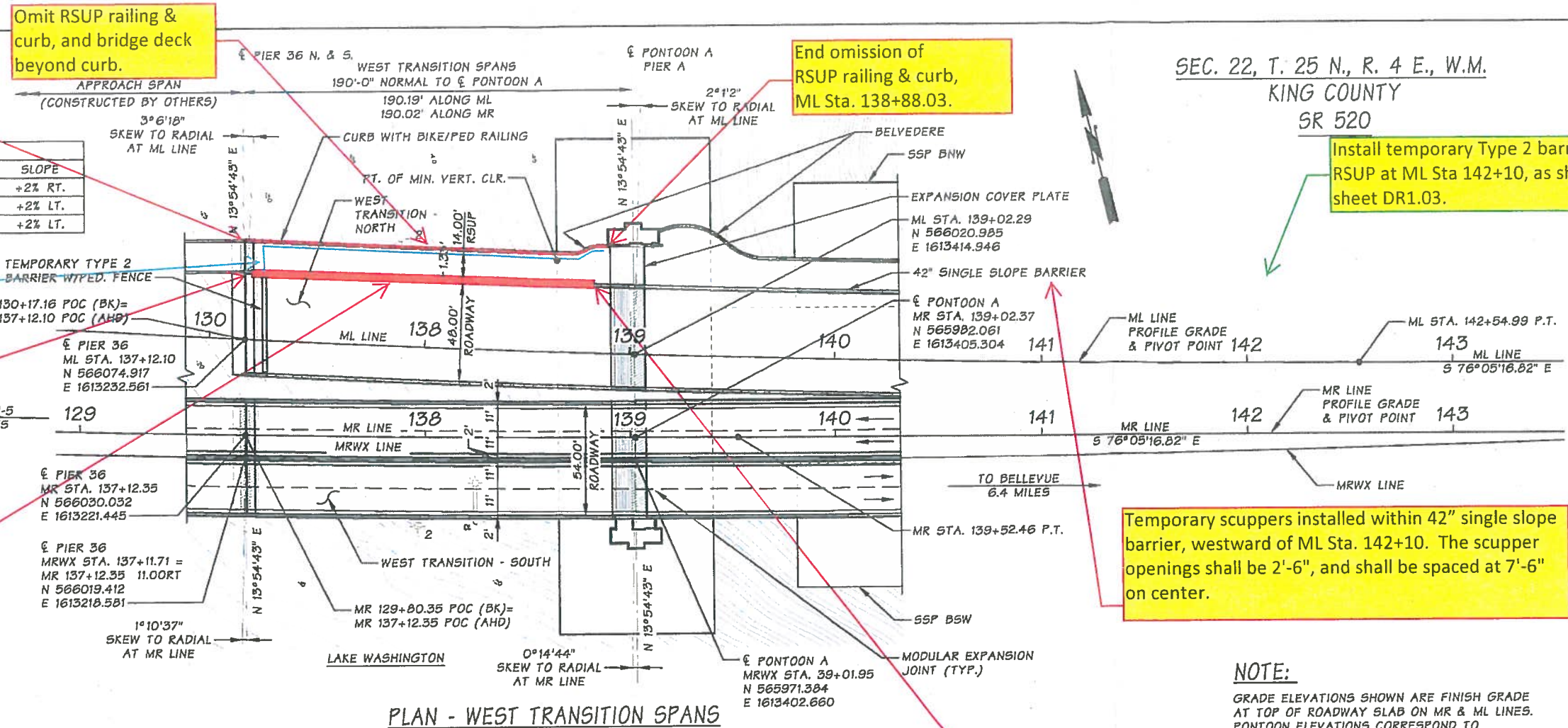
Omit 42" single slope barrier, install rebar mechanical couplers, provide roughened construction joint.

Temporary scuppers installed within 42" single slope barrier, westward of ML Sta. 142+10. The scupper openings shall be 2'-6", and shall be spaced at 7'-6" on center.

NOTE:
GRADE ELEVATIONS SHOWN ARE FINISH GRADE AT TOP OF ROADWAY SLAB ON MR & ML LINES. PONTOON ELEVATIONS CORRESPOND TO PROJECT LAKE LEVEL.

End omission of 42" single slope barrier. Western limit of 42" barrier installed by KGM shall be coincident with first barrier expansion joint located west of Pier A. Provide 2" conduit stub out below the roadway deck.

Temporary scuppers installed within 42" single slope barrier, westward of ML Sta. 142+10. The scupper openings shall be 2'-6", and shall be spaced at 7'-6" on center.



- 1 HPS LUMINAIRE ON 40' TYPE 1 LIGHT STANDARD MOUNTED OUTSIDE OF SOUTH BARRIER SEE T3.30.
- 2 NAVIGATION (GREEN 360°) CHANNEL LIGHT MOUNTED ON SOUTH SIDE OF MR AND NORTH SIDE OF ML SEE T2.50 AND T3.41.

Contract No.: 008046
Change Order No.: 191
Page 18 of 34

DATUM
NAVD 88

ELEVATION - WEST TRANSITION SPANS
GRADE ELEVATIONS SHOWN ARE FINISH GRADE AT TOP OF ROADWAY SLAB ON ML OR MR LINE

STEEL PLATE GIRDERS
LOADING: HL-93 (& FUTURE HCT)

Lavochin, Pavel on: 7/5/2012 11:28 AM File: C:\Federal\May2012\FP\W\12-060CADDD\WestTransitionSpans\B066_TS_I_001.02.dwg SR JOB NO. SHEET

Bridge Design Engr.	7/12				
Supervisor	Wilson, WE	7/12			
Designed By	Sheffer, BM	7/12			
Checked By	Wilson, WE	7/12			
Detailed By	Lavochin, PI	7/12			
Bridge Projects Engr.	7/12				
Prelim. Plan By	7/12				
Architect/Specialist	7/12	DATE	REVISION	BY	

REGION NO.	STATE	FED AID PROJ NO.
10	WASH	BR-0520(050)
JOB NUMBER		
8066		

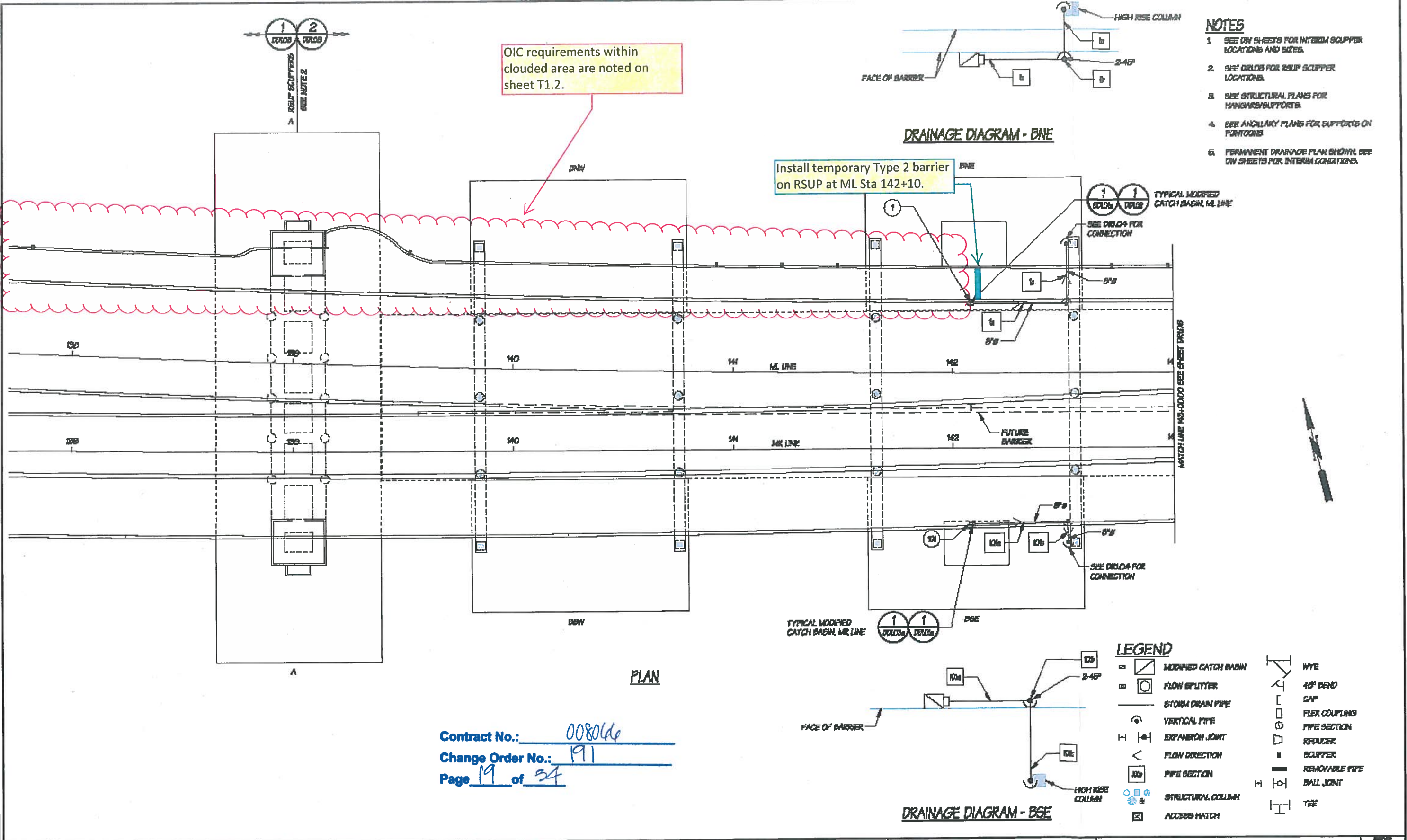
BRIDGE AND STRUCTURES OFFICE



SR 520	BRIDGE SHEET NO.
I-5 TO MEDINA - STG. 1 EVERGREEN PT. FLOATING BRIDGE AND LANDINGS	T1.2
TRANSITION SPANS	SHEET 3 OF 262 SHEETS
PLAN & ELEVATION - WEST TRANSITION SPANS	

VOLUME 4 - WSDOT SUBMITTAL - 7/5/2012 - TRANSITION SPANS FINAL

Contract Copy - 10/28/2012 11:28 AM File: H:\2011\11\18\78 SR 520 - Bridge\Drawings\Construction\SR_520_001.dwg
 SR 520 10/28/12



- NOTES**
1. SEE DW SHEETS FOR INTERIM SCUPPER LOCATIONS AND SIZES.
 2. SEE DR103 FOR RSUP SCUPPER LOCATIONS.
 3. SEE STRUCTURAL PLANS FOR HANGERS/SUPPORTS.
 4. SEE ANCILLARY PLANS FOR SUPPORTS ON FURTINGS.
 5. PERMANENT DRAINAGE PLAN SHOWN. SEE DW SHEETS FOR INTERIM CONDITIONS.

- LEGEND**
- MODIFIED CATCH BASIN
 - FLOW SPREADER
 - STORM DRAIN PIPE
 - VERTICAL PIPE
 - EXPANSION JOINT
 - < FLOW DIRECTION
 - PIPE SECTION
 - STRUCTURAL COLUMN
 - ACCESS HATCH
 - Y WYE
 - 45° DEW CAP
 - FLEX COUPLING
 - PIPE SECTION
 - REDUCER
 - SCUPPER
 - REMOVABLE PIPE
 - BALL JOINT
 - TEE

Contract No.: 00806de
 Change Order No.: 191
 Page 19 of 34

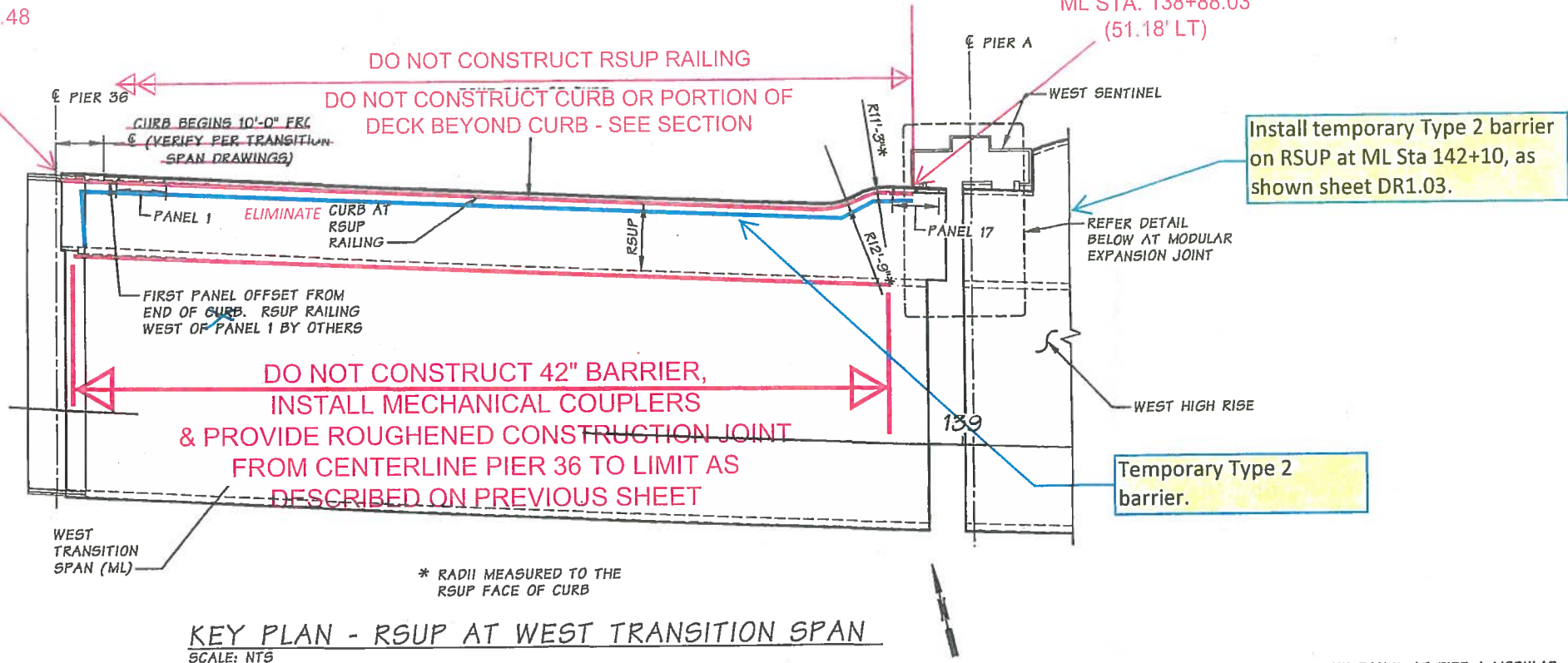
Bridge Design Engr.				
Supervisor	Glenn, D			
Designed By	Scottoff, A			
Checked By	Shaw, J			
Detailled By	Smith, C			
Bridge Projects Engr.				
Printed, Plan By				
Architect/Specifier		DATE	REVISION	BY

FED	STATE	FED AID PROJ NO
10	WASH	BR-0520(050)
JOB NUMBER	8066	

BRIDGE AND STRUCTURES OFFICE 	SR 520 I-5 TO MEDINA - STG. 1 EVERGREEN PT FLOATING BRIDGE AND LANDINGS BRIDGE STORMWATER	DR103 7 88
	BRIDGE DRAINAGE PLAN - A & B	
	RELEASED FOR CONSTRUCTION - OCTOBER 10, 2012	

ML STA. 137+22.48
(47.33' LT)

ML STA. 138+88.03
(51.18' LT)

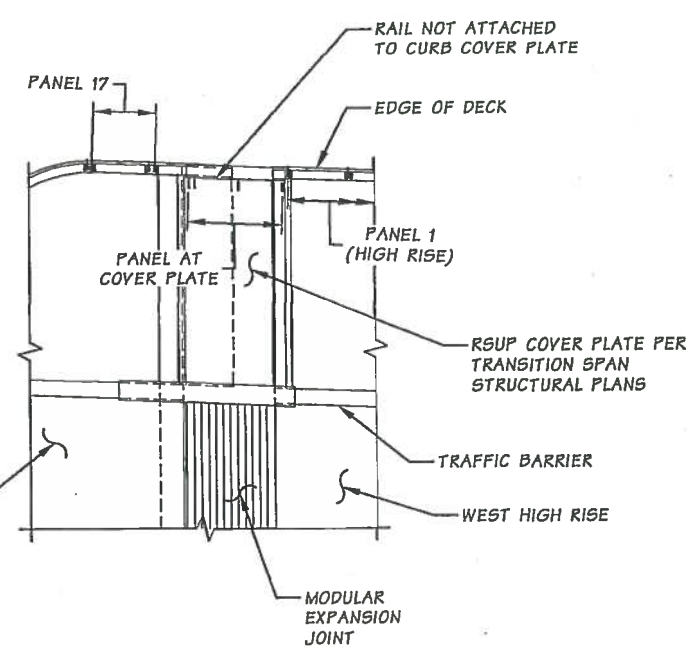


Install temporary Type 2 barrier on RSUP at ML Sta 142+10, as shown sheet DR1.03.

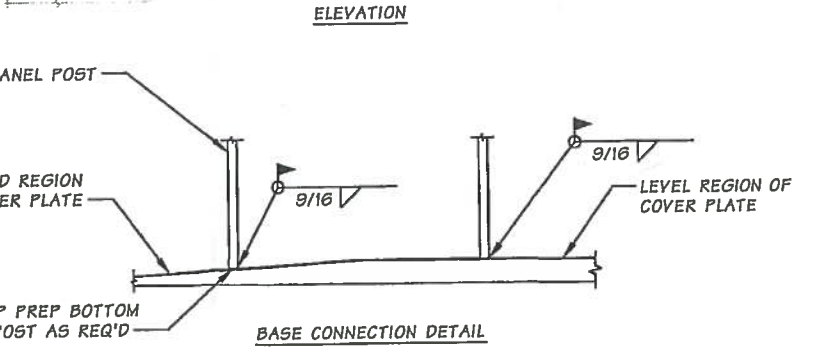
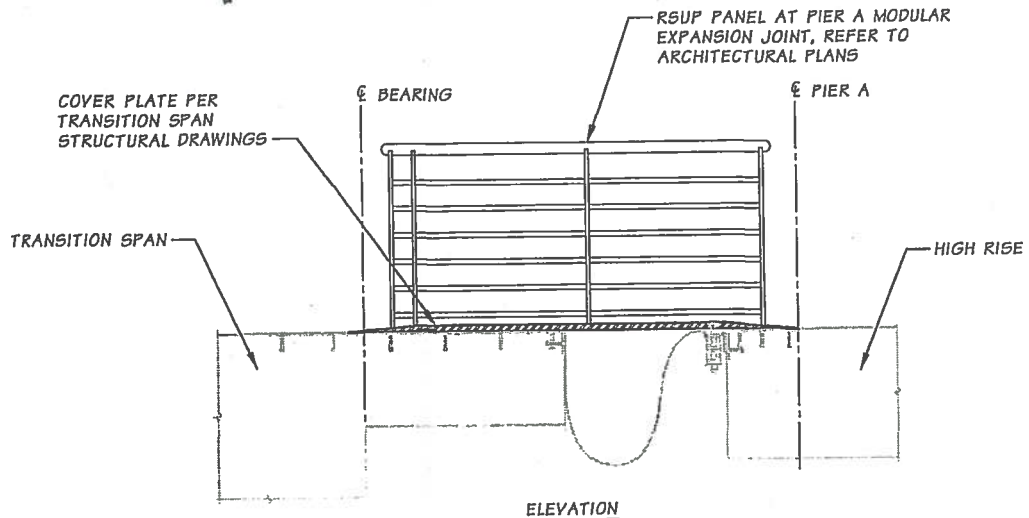
Temporary Type 2 barrier.

KEY PLAN - RSUP AT WEST TRANSITION SPAN
SCALE: NTS

West Transition Span					
Panel No.	Post	STA	OFF	TOC	TOR
1	1	137+22.48	47.33 LT	74.52	78.52
	2	137+27.36	47.33 LT	74.48	78.48
	3	137+32.24	47.33 LT	74.44	78.44
2	1	137+32.53	47.33 LT	74.43	78.43
	2	137+37.41	47.33 LT	74.39	78.39
	3	137+42.28	47.33 LT	74.34	78.34
3	1	137+42.58	47.33 LT	74.34	78.34
	2	137+47.46	47.33 LT	74.29	78.29
	3	137+52.33	47.33 LT	74.25	78.25
4	1	137+52.63	47.33 LT	74.24	78.24
	2	137+57.50	47.33 LT	74.19	78.19
	3	137+62.38	47.33 LT	74.14	78.14
5	1	137+62.67	47.33 LT	74.14	78.14
	2	137+67.55	47.33 LT	74.09	78.09
	3	137+72.43	47.33 LT	74.04	78.04
6	1	137+72.72	47.33 LT	74.03	78.03
	2	137+77.60	47.33 LT	73.98	77.98
	3	137+82.48	47.33 LT	73.92	77.92
7	1	137+82.77	47.33 LT	73.92	77.92
	2	137+87.65	47.33 LT	73.86	77.86
	3	137+92.53	47.33 LT	73.81	77.81
8	1	137+92.82	47.33 LT	73.80	77.80
	2	137+97.70	47.33 LT	73.74	77.74
	3	138+02.57	47.33 LT	73.68	77.68
9	1	138+02.87	47.33 LT	73.68	77.68
	2	138+07.74	47.33 LT	73.62	77.62
	3	138+12.62	47.33 LT	73.55	77.55
10	1	138+12.92	47.33 LT	73.55	77.55
	2	138+17.79	47.33 LT	73.49	77.49
	3	138+22.67	47.33 LT	73.42	77.42
11	1	138+22.96	47.33 LT	73.42	77.42
	2	138+27.84	47.33 LT	73.35	77.35
	3	138+32.72	47.33 LT	73.28	77.28
12	1	138+33.01	47.33 LT	73.28	77.28
	2	138+37.89	47.33 LT	73.21	77.21
	3	138+42.77	47.33 LT	73.14	77.14
13	1	138+43.06	47.33 LT	73.13	77.13
	2	138+47.94	47.33 LT	73.06	77.06
	3	138+52.82	47.33 LT	72.99	76.99
14	1	138+53.11	47.33 LT	72.98	76.98
	2	138+57.99	47.33 LT	72.91	76.91
	3	138+62.86	47.33 LT	72.83	76.83
15	1	138+63.16	47.33 LT	72.83	76.83
	2	138+68.03	47.33 LT	72.75	76.75
	3	138+73.06	47.77 LT	72.66	76.66
16	1	138+73.36	47.85 LT	72.66	76.66
	2	138+77.87	50.02 LT	72.54	76.54
	3	138+82.25	51.20 LT	72.44	76.44
17	1	138+82.53	51.21 LT	72.44	76.44
	2	138+87.52	51.18 LT	72.36	76.36
	3	138+88.03	51.18 LT	72.35	76.35



PLAN - RSUP RAILING PANEL AT PIER A JOINT
SCALE: NTS



ELEVATION - PIER A JOINT RSUP PANEL
SCALE: NTS

Contract No.: 008046
Change Order No.: 191
Page 20 of 34

Lemmas, Tom on: 11/7/2012 3:01 PM File: C:\Federal\My2012\FAP\WT-12-06\CA\DD\Wg\BA_RSUPRail\0606_BA_A_009.02.dwg SHEET JOB NO.

Bridge Design Engr.					
Supervisor	Guerra, JS	11/12			
Designed By	Fisher, BS	11/12			
Checked By	Banks, GA	11/12			
Detailed By	Fisher, BS	11/12			
Bridge Projects Engr.					
Prelim. Plan By		11/8/2012	NDC# 43	GAB	
Architect/Specialist		DATE	REVISION	BY	

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

kpff

BergerABAM

SR 520		I-5 TO MEDINA - STG. 1 EVERGREEN PT. FLOATING BRIDGE AND LANDINGS BRIDGE ARCHITECTURE	RAILING WPS AT WEST TRANSITION SPAN
BRIDGE SHEET NO. A9.2			
		66 OF 84 SHEETS	

VOLUME 13 - BRIDGE ARCHITECTURE - RFC - 10/10/12

GENERAL NOTES

NOTE

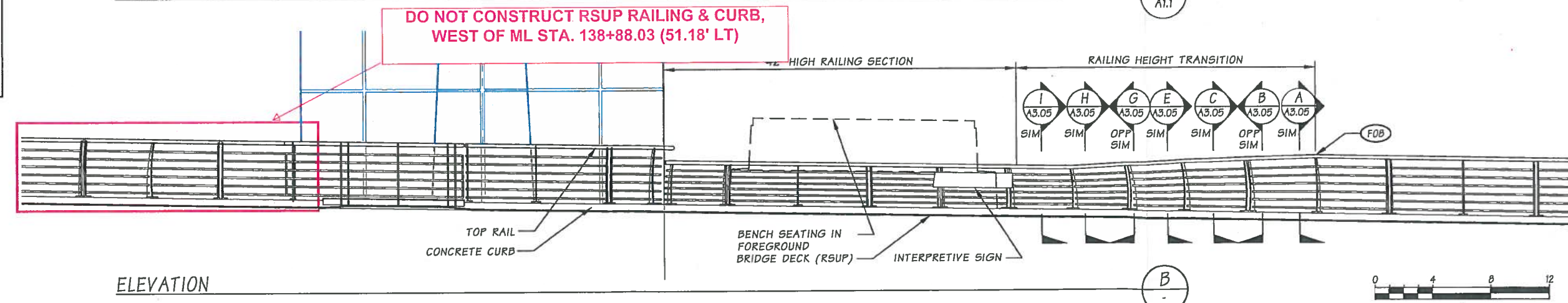
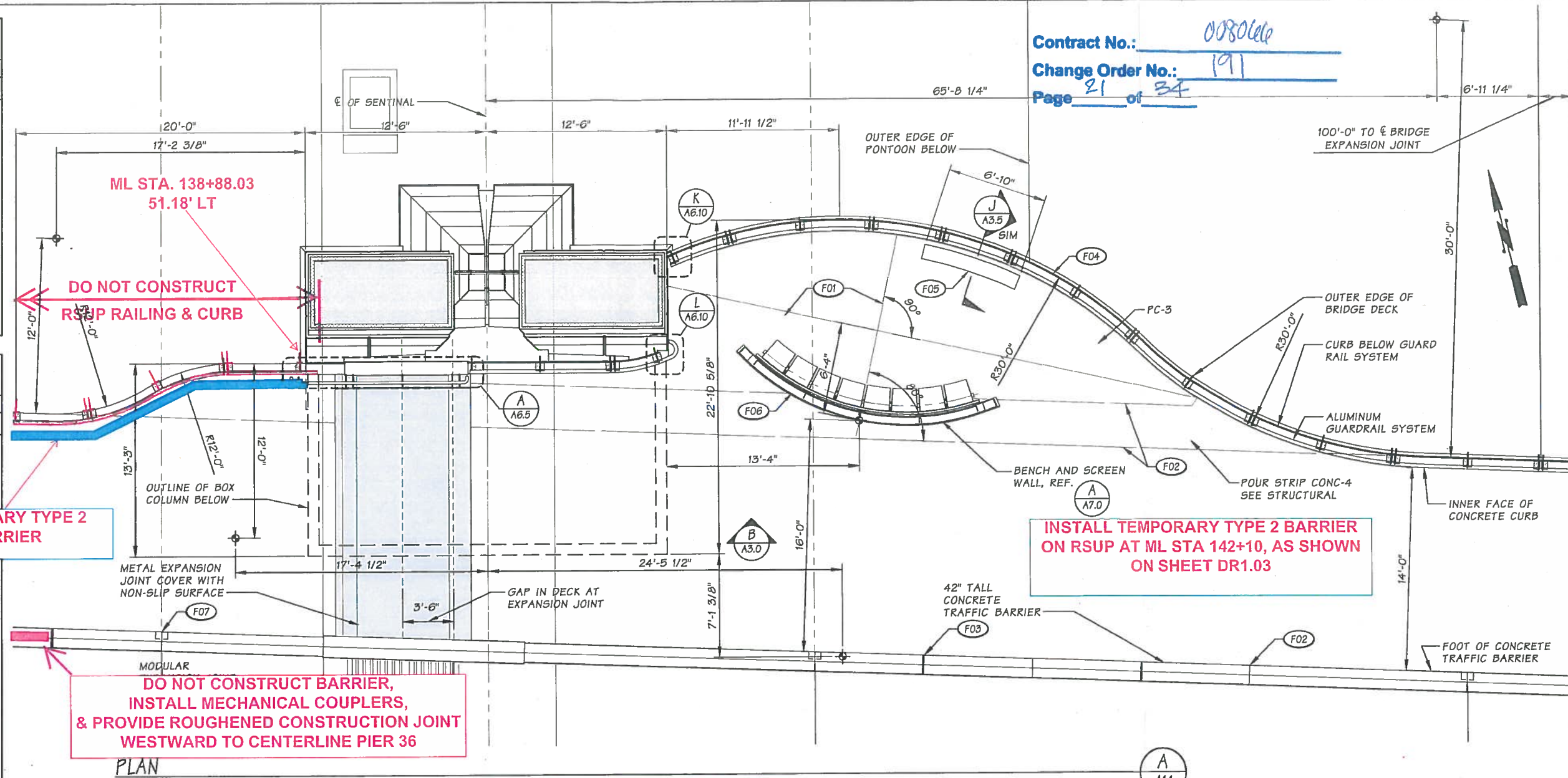
1. REFER TO BRIDGE KEY PLANS FOR BELVEDERE LOCATIONS

SHEET NOTES

SYMBOL NOTE

- (F01) CONTROL JOINT WITH METAL INSERT - SEE D/A7.1
- (F02) CONTROL JOINT (DUMMY JOINT)
- (F03) EXPANSION JOINT
- (F04) METAL GUARDRAIL
- (F05) INTERPRETIVE SIGN, SIGN SHALL FOLLOW CURVE OF RAILING AND EXTEND 12" EAST SUPPORT BRACKETS.
- (F06) BENCH SEATING AND SCREEN WALL, REFER TO DETAIL A/A7.0
- (F07) RECESSED LIGHT IN TRAFFIC BARRIER
- (F08) RAILING SHALL TRANSITION FROM 54" TO 42" WITH A CONTINUOUS SLOPING RADIUS CURVE THROUGHOUT THE RAILING TRANSITION.

Contract No.: 008066
 Change Order No.: 191
 Page 21 of 34



JUL14/2012 8:51AM File: P:\WS\DOT\11-078 SR520 Bridge\02 Drawings\02 CAD Plot Set\8066_BA_A_003.00.dwg SHEET

Bridge Design Engr.		REGION NO.	STATE	FED AID PROJ NO.
Supervisor	Blachowski, J	10	WASH	
Designed By	Ryan, J	JOB NUMBER		BR-0520(050)
Checked By	Cato, L	8066		
Detailed By	Ness, T & Ryan, J			
Bridge Projects Engr.				
Prelim. Plan By				
Architect/Specialist	McKean, Bruce	DATE	REVISION	BY

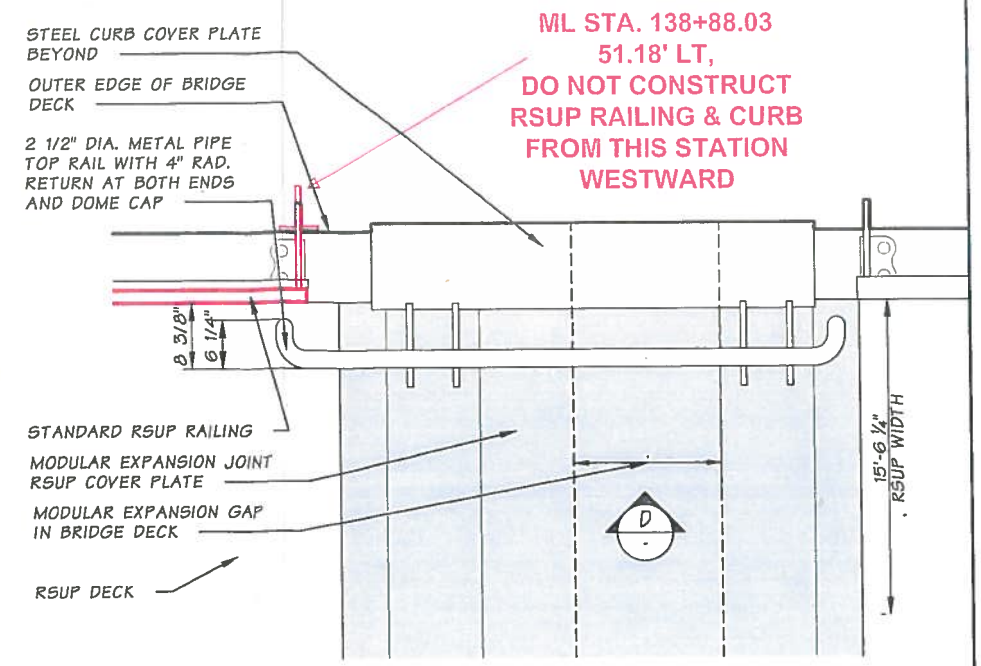
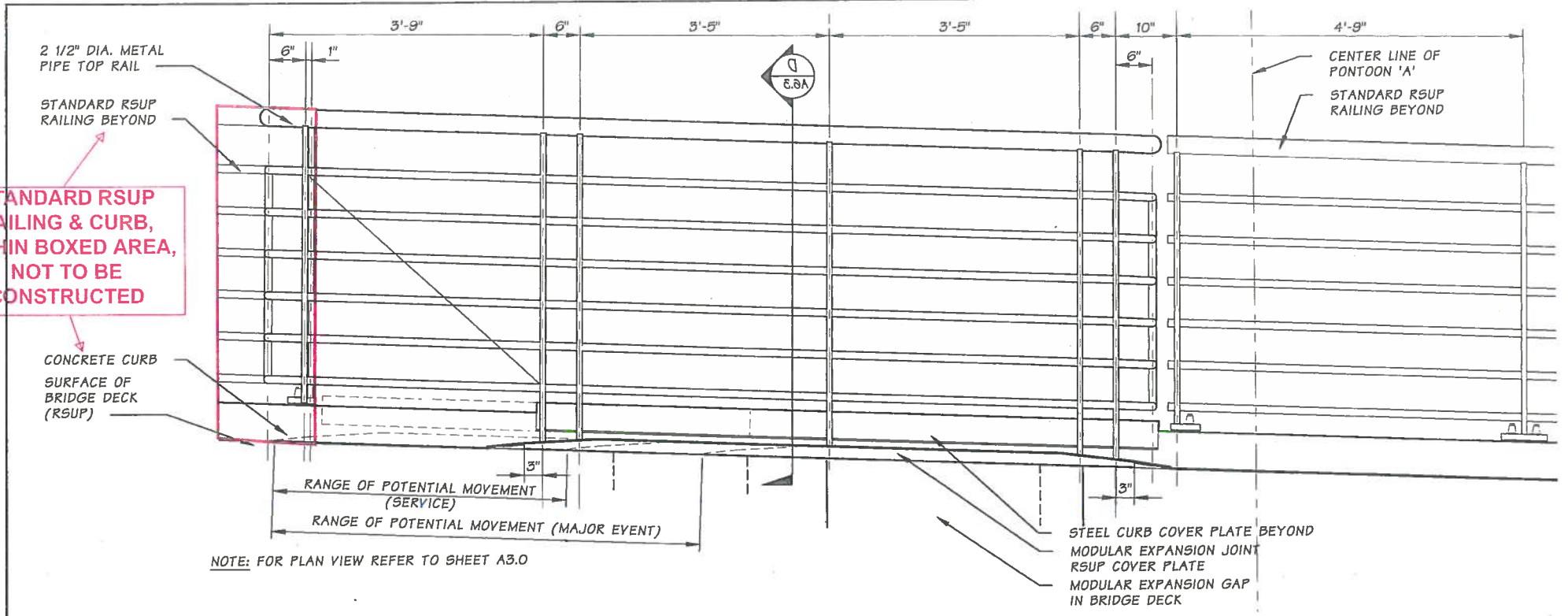
BRIDGE AND STRUCTURES OFFICE	5134 REGISTERED ARCHITECT BRUCE MCKEAN STATE OF WASHINGTON	Washington State Department of Transportation	kpff	Berger ABAM	Helix design group
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SR 520		BRIDGE SHEET NO.
I-5 TO MEDINA - STG. 1 EVERGREEN PT		A3.0
FLOATING BRIDGE AND LANDINGS		SHEET 34 OF 82 SHEETS
BRIDGE ARCHITECTURE		
BELVEDERE PONTOON 'A'		
PLAN AND ELEVATION		

VOLUME 13 - BRIDGE ARCHITECTURE - RFC - 10/10/12

STANDARD RSUP RAILING & CURB, WITHIN BOXED AREA, NOT TO BE CONSTRUCTED

**ML STA. 138+88.03
51.18' LT,
DO NOT CONSTRUCT
RSUP RAILING & CURB
FROM THIS STATION
WESTWARD**



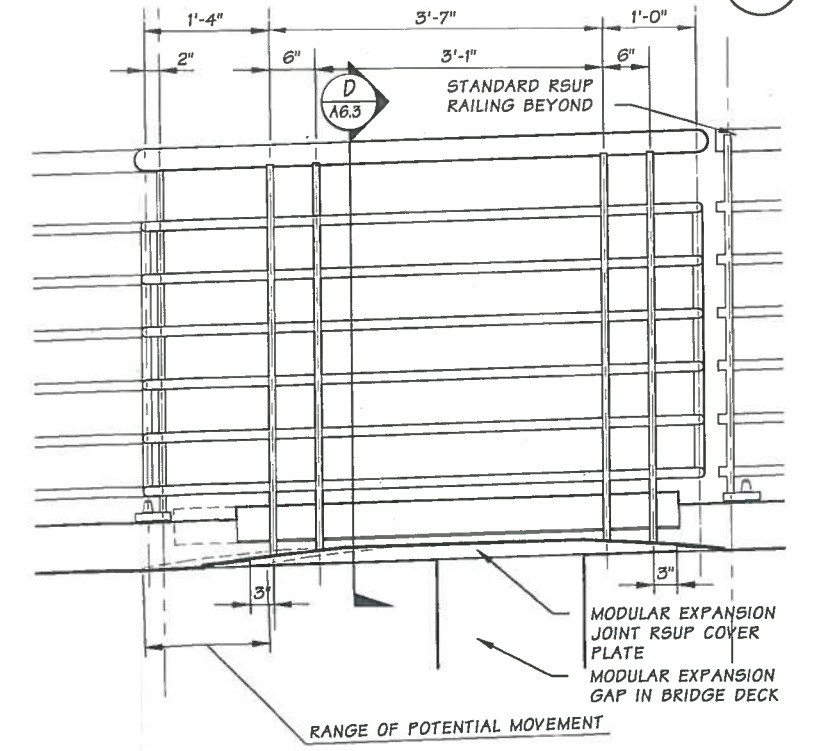
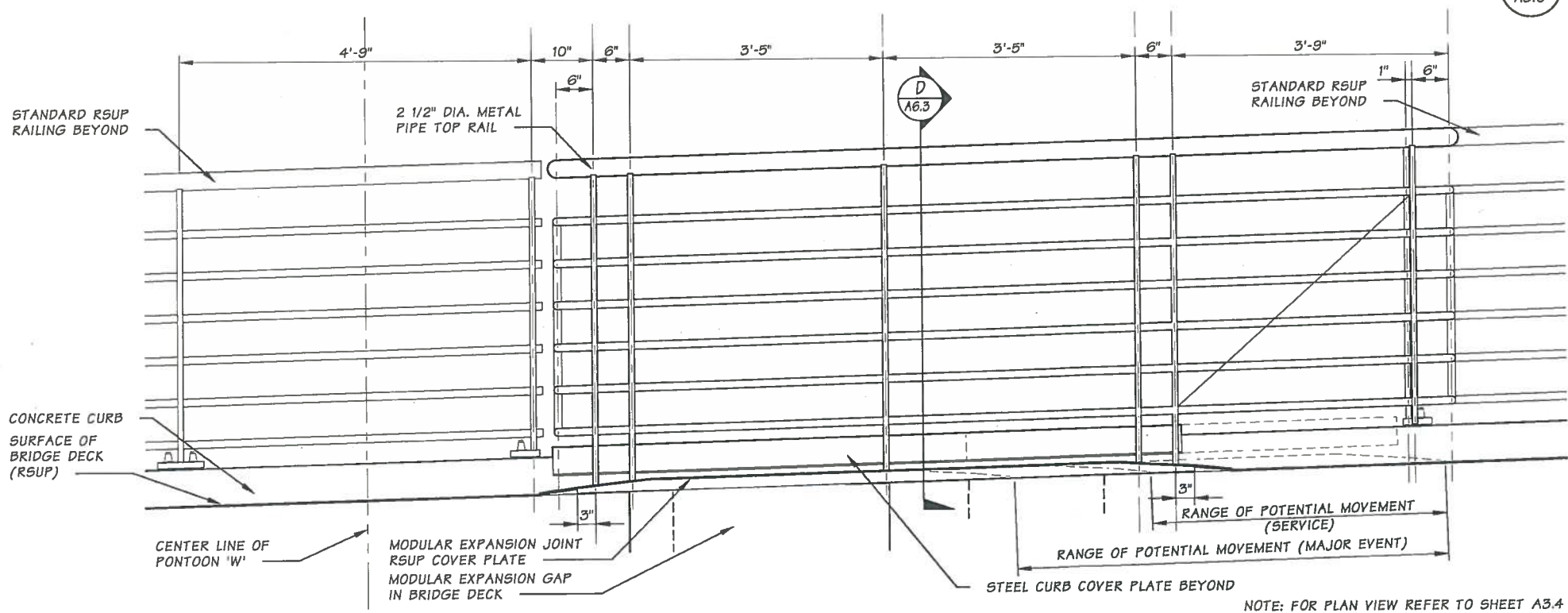
NOTE: FOR PLAN VIEW REFER TO SHEET A3.0

RAILING AT MODULAR EXPANSION JOINT - PONTOON 'A'

A
A3.0

MODULAR EXPANSION JOINT - PLAN

B
A1.3



NOTE: FOR PLAN VIEW REFER TO SHEET A3.4

RAILING AT MODULAR EXPANSION JOINT - PONTOON 'W'

RAILING AT MODULAR EXPANSION JOINT

C
A3.4

D

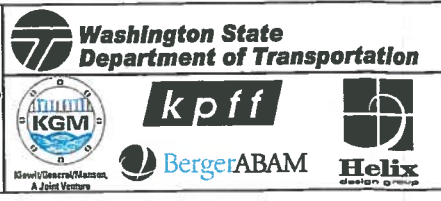
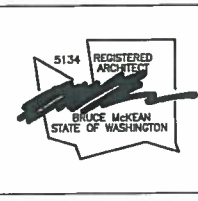
Contract No.: 008066
Change Order No.: 191
Page 22 of 34

Jai.Ryan on: 10/20/12 11:06 PM File: P:\MSD\011-078 SR520 Bridge\02 Drawings\02 CAD Plot Set\066_BA_A_006.05.dwg SHEET

Bridge Design Engr.				
Supervisor	Blachowski, J			
Designed By	Ryan, J			
Checked By	Cato, L			
Detailed By	Ness, T & Ryan, J			
Bridge Projects Engr.				
Prelim. Plan By				
Architect/Specialist	McKean, Bruce	DATE	REVISION	BY

REGION NO.	STATE	FED AID PROJ NO.
10	WASH	BR-0520(050)
JOB NUMBER		
8066		

BRIDGE AND STRUCTURES OFFICE

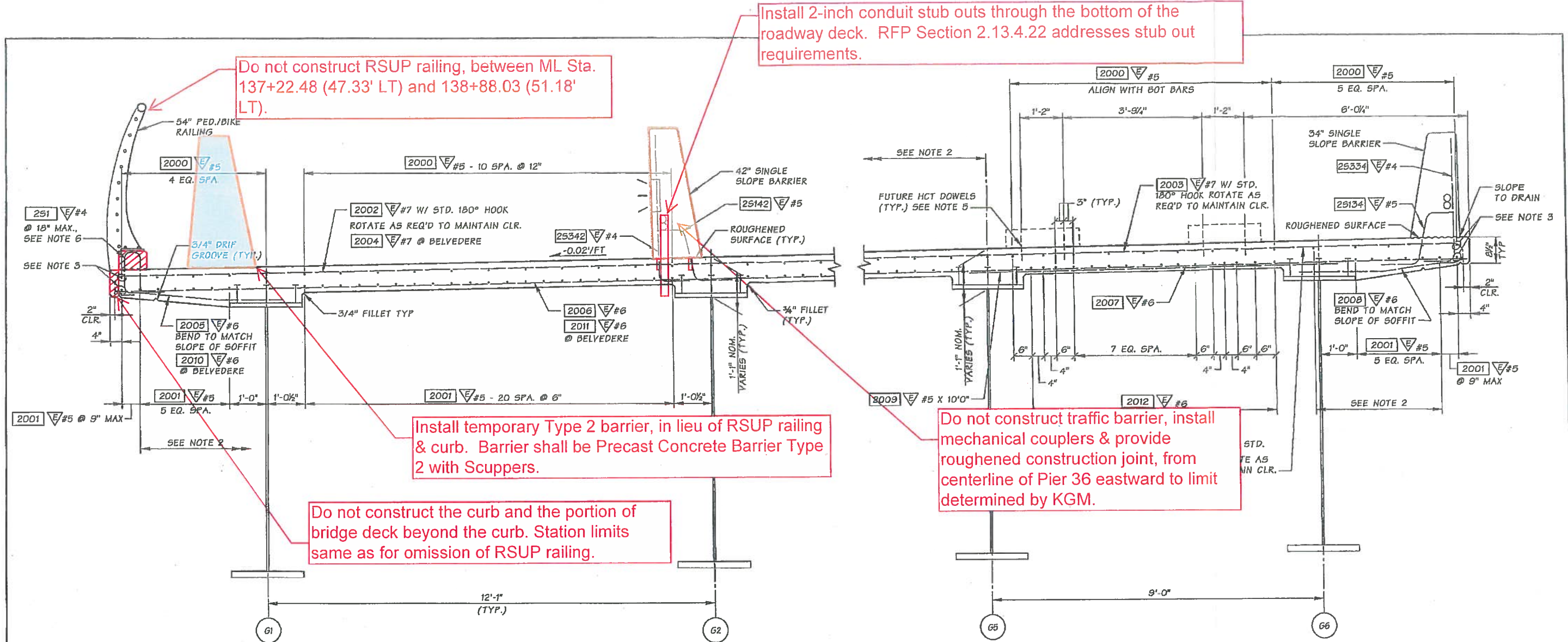


SR 520
I-5 TO MEDINA - STG. 1 EVERGREEN PT
FLOATING BRIDGE AND LANDINGS
BRIDGE ARCHITECTURE
PEDESTRIAN RAILINGS ENLARGED ELEVATIONS

BRIDGE SHEET NO.	A6.5
SHEET OF	51
SHEETS	82

VOLUME 13 - BRIDGE ARCHITECTURE - RFC - 10/10/12

Lavochin, Pavel Oct: 02/20/2012 3:20 PM File: C:\Federal\Wing\2012\21P\WT-12-090\GADD\Drawings\TransitionSpans\0520_TS_1_002.rvt



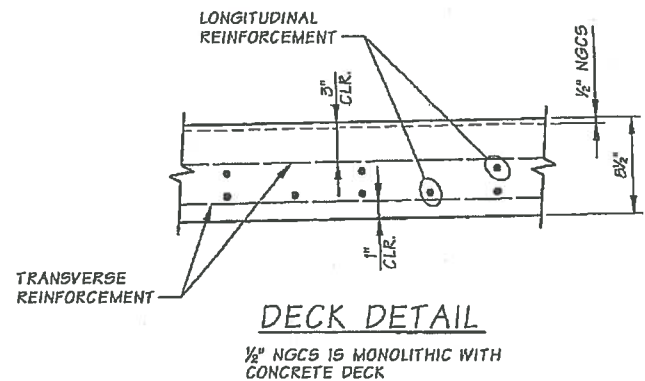
Install 2-inch conduit stub outs through the bottom of the roadway deck. RFP Section 2.13.4.22 addresses stub out requirements.

Do not construct RSUP railing, between ML Sta. 137+22.48 (47.33' LT) and 138+88.03 (51.18' LT).

Install temporary Type 2 barrier, in lieu of RSUP railing & curb. Barrier shall be Precast Concrete Barrier Type 2 with Scuppers.

Do not construct the curb and the portion of bridge deck beyond the curb. Station limits same as for omission of RSUP railing.

Do not construct traffic barrier, install mechanical couplers & provide roughened construction joint, from centerline of Pier 36 eastward to limit determined by KGM.



SECTION - WEST TRANSITION SPAN - NORTH
LOOKING AHEAD ON STATION

- NOTES:**
1. ALTERNATE BARS AT BEGIN/END OF BAR RUN IN ORDER TO STAGGER BAR SPLICES.
 2. BARS PLACED PARALLEL TO GIRDERS.
 3. BARS PLACED CONCENTRIC WITH EDGE OF DECK CURVE.
 4. ALL TOP LONGITUDINAL BARS SHALL BE ALIGNED WITH THE BOTTOM LONGITUDINAL BARS AND ALL TOP TRANSVERSE BARS SHALL BE ALIGNED WITH THE BOTTOM TRANSVERSE BARS.
 5. FUTURE HCT DOWELS ARE FOR LIGHT RAIL PLINTH ANCHORAGE. DECK REINFORCING HAS BEEN SPACED TO GIVE 6" MINIMUM FROM $\frac{1}{2}$ TO $\frac{5}{8}$ OF DOWELS TO REBARS.
 6. REINFORCING SHALL BE SPACED TO CLEAR SCUPPERS IN CURB, SEE ARCHITECTURAL AND STORMWATER PLANS FOR DETAILS.

Contract No.: 00804p
Change Order No.: 191
Page 23 of 34

Bridge Design Engr.	8/12			
Supervisor	Wilson, WE	8/12		
Designed By	Sheffer, BM	8/12		
Checked By	Wilson, WE	8/12		
Detailed By	Lavochin, PI	8/12		
Bridge Projects Engr.	8/12			
Prelim. Plan By	8/12			
Architect/Specialist	8/12	DATE	REVISION	BY

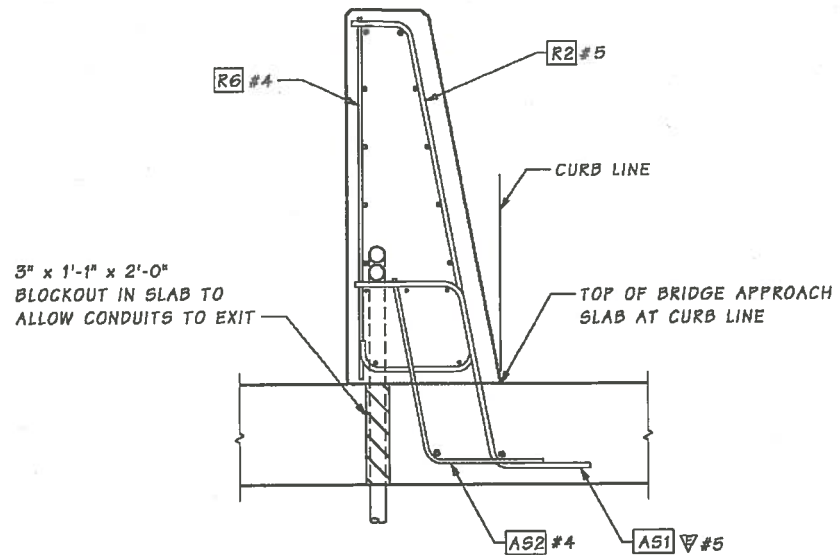
REGION NO.	STATE	FED AID PROJ NO
10	WASH	BR-0520(050)
JOB NUMBER	8066	

BRIDGE AND STRUCTURES OFFICE
8/23/2012

SR 520
I-5 TO MEDINA - STG. 1 EVERGREEN PT.
FLOATING BRIDGE AND LANDINGS
TRANSITION SPANS
DECK SLAB DETAILS SHEET 1 - TRANSITION
W/N (ML)

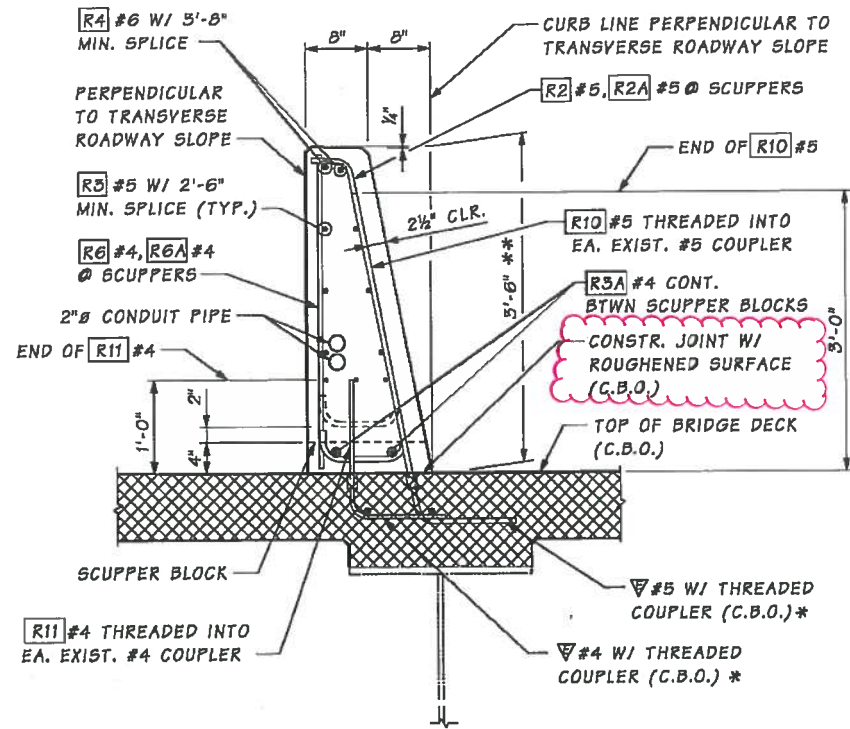
BRIDGE SHEET NO. T2.16
SHEET 40 OF 325 SHEETS

VOLUME 4 - TRANSITION SPANS RELEASED FOR CONSTRUCTION - AUGUST 24, 2012



SECTION A BRIDGE APPROACH SLAB

BA545 FOR DETAILS NOT SHOWN, SEE SECTION A "W/ SCUPPER" ON BR. SHT. BA546

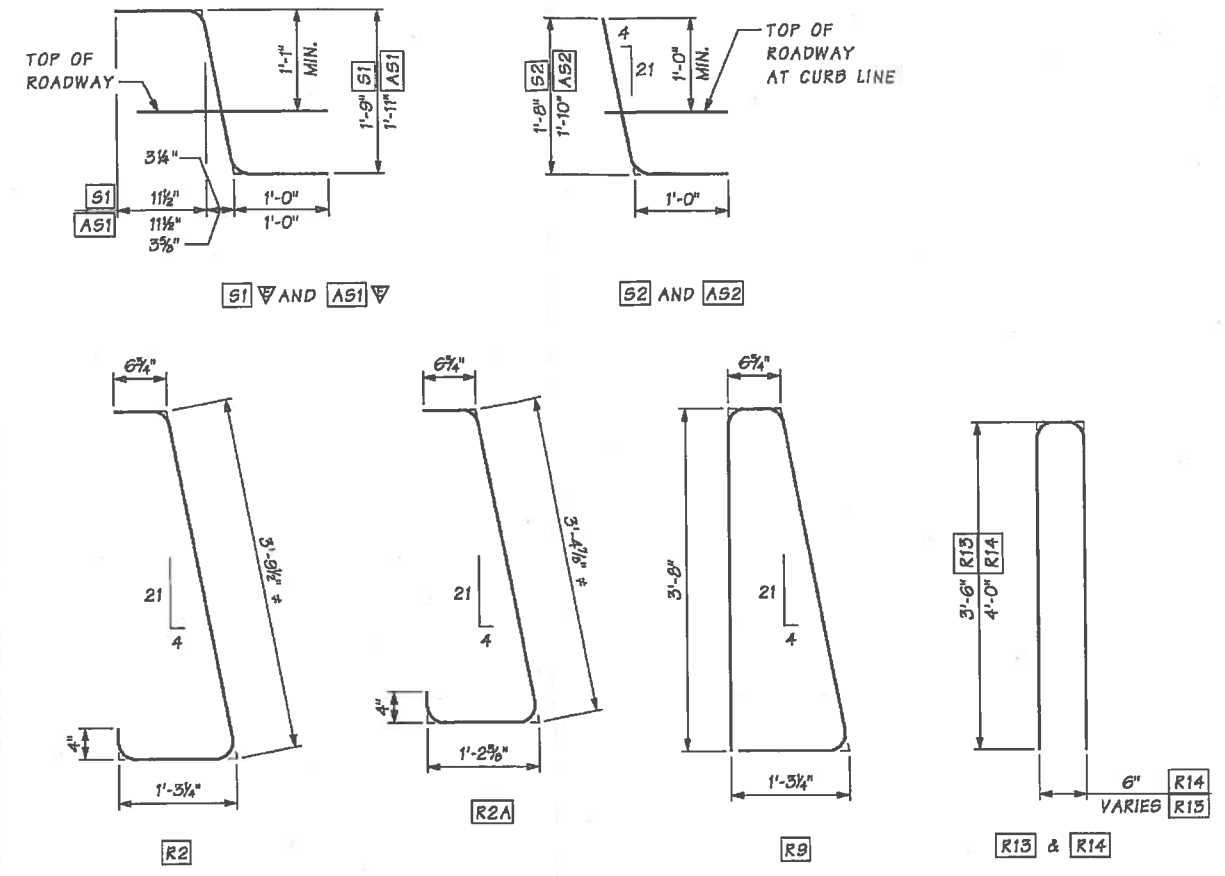


SECTION B ON EXISTING BRIDGE DECK

** HEIGHT MAY VARY IF REQUIRED TO PROVIDE A PROFILE PLEASING TO THE EYE.

BENDING DIAGRAM

ALL DIMENSIONS ARE OUT TO OUT.
* = DIMENSIONS TO POINTS OF INTERSECTION.



NOTE:

BAR DIMENSIONS SHOWN ARE FOR TYPICAL TRAFFIC PEDESTRIAN BARRIER SECTION. VARY BAR DIMENSIONS AS NECESSARY AT SPAN 41 & TRANSITION SPAN.

Contract No.: 008046
Change Order No.: 191
Page 24 of 34

SR 520 FILE NO. 7051 SHEET BA547
Projectwise Vault: WABN

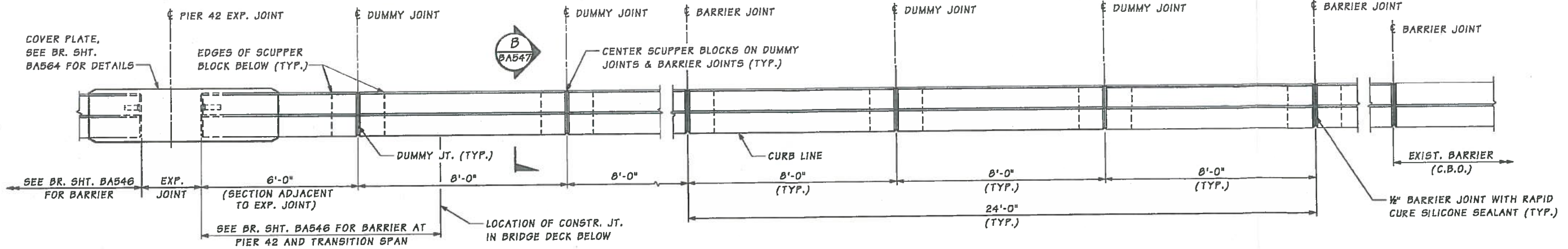
Bridge Design Engr.	PW\CADD\Proj\Westside\CADD\PS&ES\sheet\BGWABN\PE2344_WABN_DE_BG_01_BA547.dgn			
Supervisor	BOTT, P.	REGION NO.	STATE	FED. AID PROJ. NO.
Designed By	AKESSON, B.	10	WASH	
Checked By	CHEN, J.	JOB NUMBER		
Detailed By	VYPLEL, M.	15A012		
Bridge Projects Engr.		DATE	REVISION	BY APPD
Prelim. Plan By				
Architect/Specialist				



SR 520
MONTLAKE TO EVERGREEN PT. BRIDGE
WEST APPROACH BRIDGE NORTH

TRAFFIC PEDESTRIAN BARRIER
DETAILS 3 OF 4

BRIDGE SHEET NO. BA547
SHEET OF SHEETS

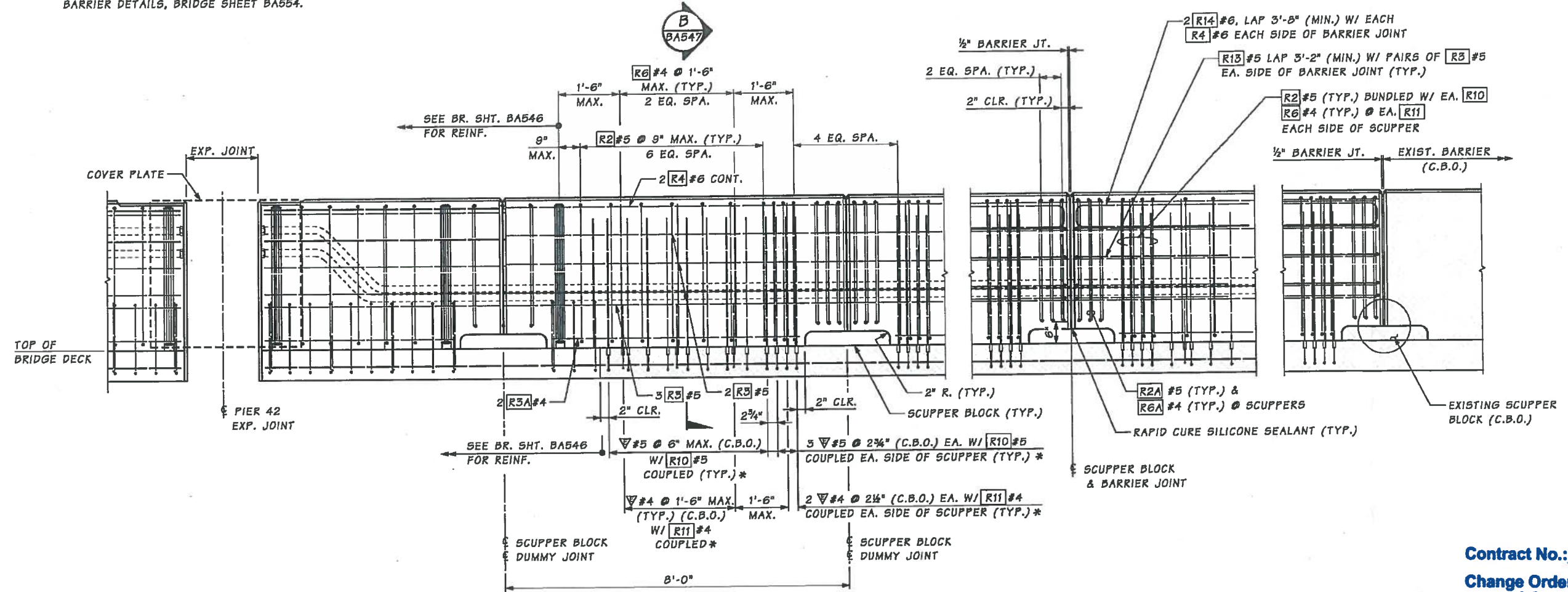


PLAN - TRAFFIC PEDESTRIAN BARRIER

BARRIER CONTINUOUS BETWEEN ROADWAY EXPANSION JOINTS.
CONSTRUCTION JOINTS WITH SHEAR KEYS ARE PERMISSIBLE AT DUMMY JOINT LOCATIONS.
FORM JOINTS BETWEEN DUMMY JOINTS SHALL NOT BE PERMITTED.

CONSTRUCTED BY OTHERS (C.B.O.)

FOR DUMMY JOINT DETAILS, SEE MEDIAN BARRIER DETAILS, BRIDGE SHEET BA554.



ELEVATION - TRAFFIC PEDESTRIAN BARRIER ON TRANSITION SPAN

* CONTRACTOR SHALL FIELD VERIFY SIZE, LOCATION, AND SPACING OF EXISTING COUPLERS PRIOR TO BARRIER REBAR FABRICATION, AND REPORT DISCREPANCIES TO THE ENGINEER.

Contract No.: 008066
Change Order No.: 191
Page 25 of 34

SR 520 FILE NO. 7051 SHEET BA54B
Projectwise Unit: WABN

Bridge Design Engr.	PW:\CADD\Proj\Westside\CADD\PS&ES\sheet\BGI\WABN\PE2344_WABN_DE_01_BA548.dgn	REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	BOTT, P.	10	WASH			
Designed By	AKESSON, B.	JOB NUMBER				
Checked By	CHEN, J.	13A012				
Detailed By	VYPLEL, M.					
Bridge Projects Engr.						
Prelim. Plan By						
Architect/Specialist		DATE	REVISION	BY	APP'D	



Washington State Department of Transportation

PARSONS BRINCKERHOFF

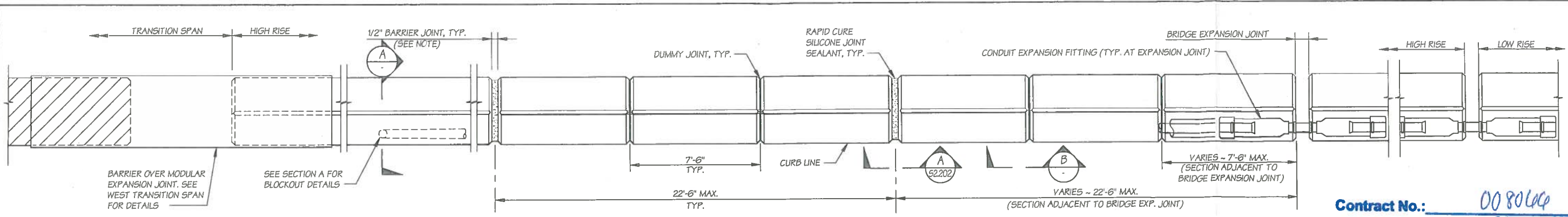
Parametrix

SR 520
MONTLAKE TO EVERGREEN PT. BRIDGE
WEST APPROACH BRIDGE NORTH

TRAFFIC PEDESTRIAN BARRIER
DETAILS 4 OF 4

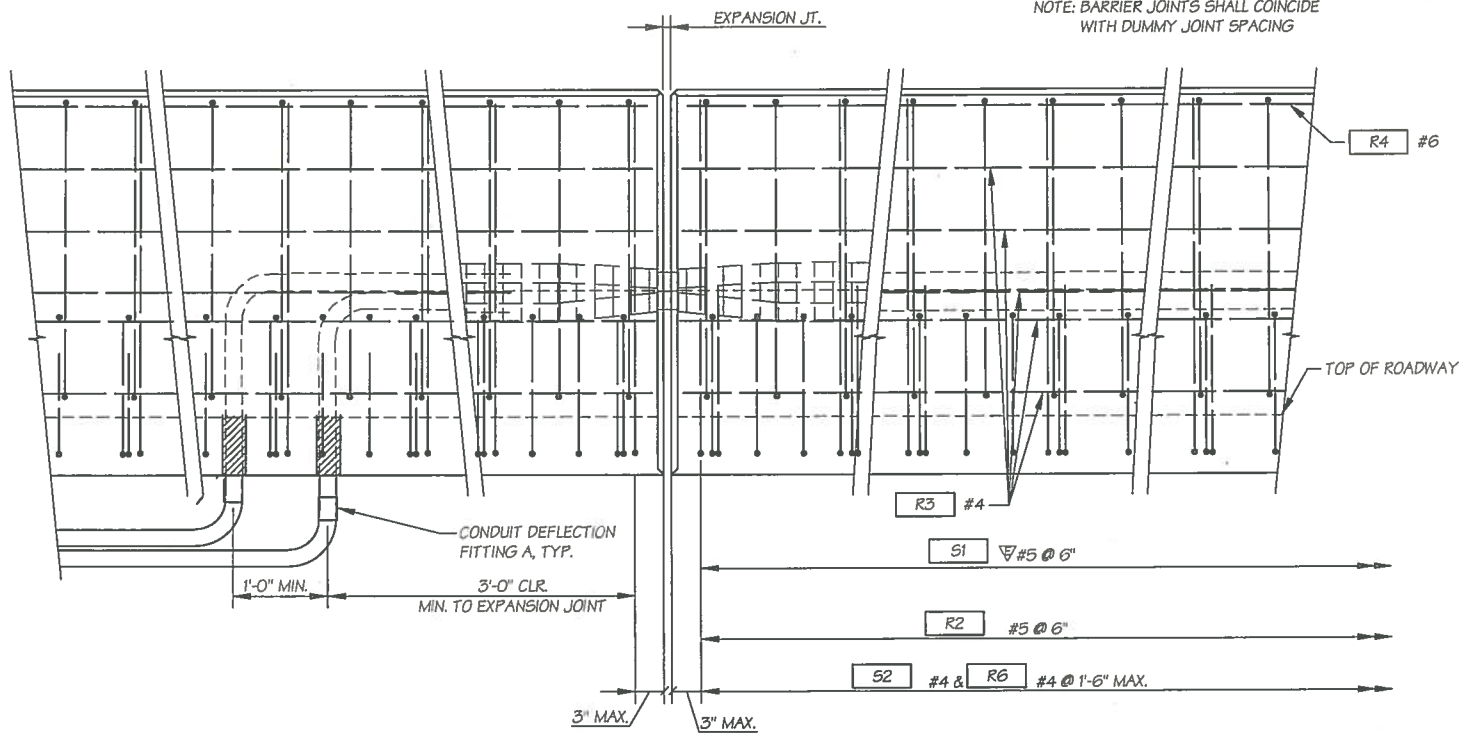
BRIDGE SHEET NO. BA54B

SHEET OF SHEETS

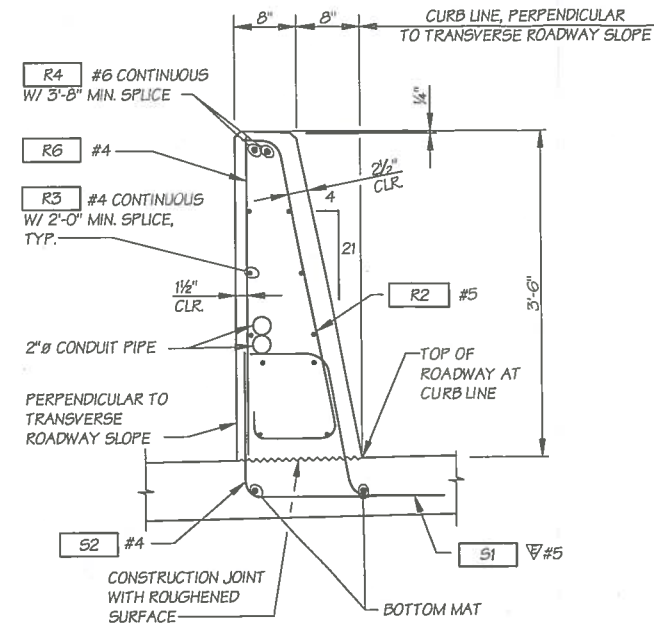


PLAN - NORTH TRAFFIC BARRIER

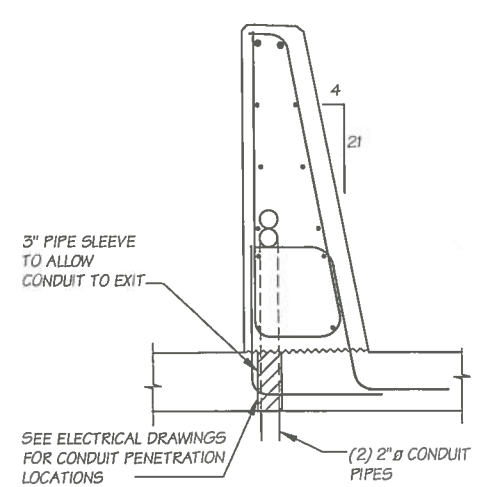
Contract No.: 008066
 Change Order No.: 191
 Page 26 of 34



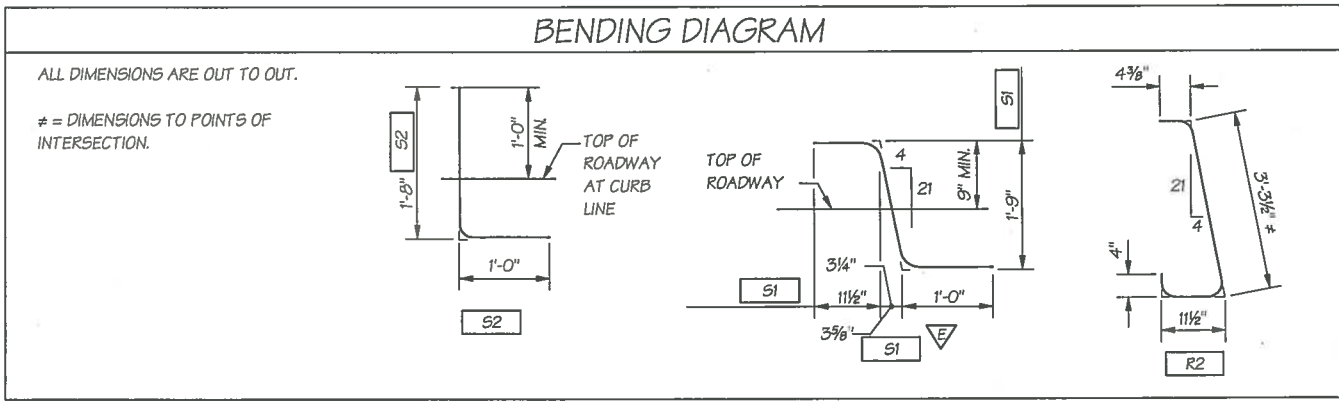
ELEVATION OF NORTH TRAFFIC BARRIER AT EXPANSION JOINT



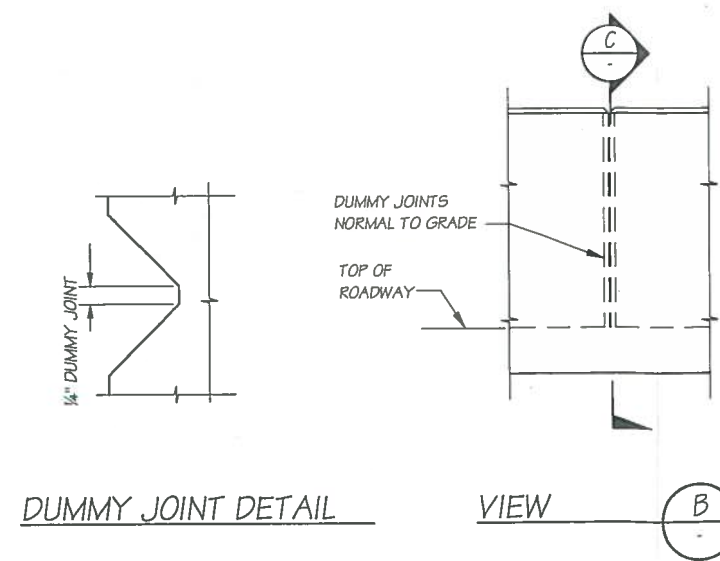
SECTION - NORTH TRAFFIC BARRIER



SECTION A

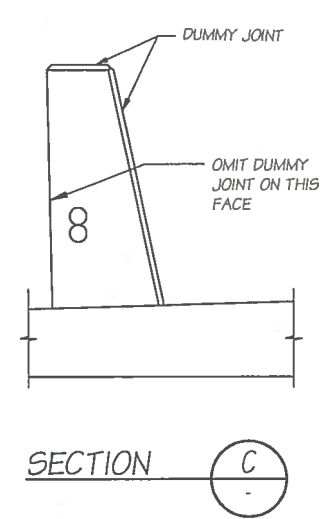


BENDING DIAGRAM



DUMMY JOINT DETAIL

VIEW B



SECTION C

Alex Day on: 9/27/2012 1:24 PM File: C:\projects\sketch\sketch_520\m0000268066_5_002.201.dwg
 SR JOB NO. SHEET

Bridge Design Engr.		REGION NO.	STATE	FED AID PROJ NO.
Supervisor		10	WASH	
Designed By	Lee, J	JOB NUMBER		BR-0520(050)
Checked By	Ashour, A	8066		
Detailed By	Day, A	DATE	REVISION	BY
Bridge Projects Engr.				
Prelim. Plan By				
Architect/Specialist				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

SR 520	BRIDGE SHEET NO.
I-5 TO MEDINA - STG. 1 EVERGREEN PT	52.201
FLOATING BRIDGE AND LANDINGS	
FLOATING BRIDGE ELEVATED STRUCTURE	
WEST HIGH RISE NORTH TRAFFIC BARRIER DETAILS 1	SHEET 151 OF 184 SHEETS

VOLUME 6A - WEST HIGH RISE - RELEASED FOR CONSTRUCTION - OCTOBER 5, 2012

Quantities for FB&L - Transition span RSUP barrier

RSUP Barrier (42" single slope barrier between RSUP and traffic)

Assumes FB&L barrier begins at approx. 19'-4.5" from pontoon A CL

20 # of scuppers on FB&L-constructed deck under WABN-constructed barriers
1 # of scuppers on WABN-constructed deck under WABN-constructed barriers
21 Total # of scuppers in WABN-constructed barrier

5 = West end segment length (ft) (deck built by WABN)
no couplers: WABN-constructed deck

4.78 = Approx length of portion of western-most interior segment on FB&L-constructed deck (ft)
5 #4 couplers with in-deck portion of Mark 2S342 bars in FB&L plan sheet T2.38
12 #5 couplers with in-deck portion of Mark 2S142 bars in FB&L plan sheet T2.38

6 = Typical interior segment length (ft)
19 # of typ interior segments
For one interior segment:
7 #4 couplers with in-deck portion of Mark 2S342 bars in FB&L plan sheet T2.38
16 #5 couplers with in-deck portion of Mark 2S142 bars in FB&L plan sheet T2.38

2 = East end segment length (WABN constructed between scupper and barrier CJ) (ft)
2 #4 couplers with in-deck portion of Mark 2S342 bars in FB&L plan sheet T2.38
6 #5 couplers with in-deck portion of Mark 2S142 bars in FB&L plan sheet T2.38

TOTALS:

140 #4 couplers with in-deck portion of Mark 2S342 bars in FB&L plan sheet T2.38
322 #5 couplers with in-deck portion of Mark 2S142 bars in FB&L plan sheet T2.38

Coupler specifications:

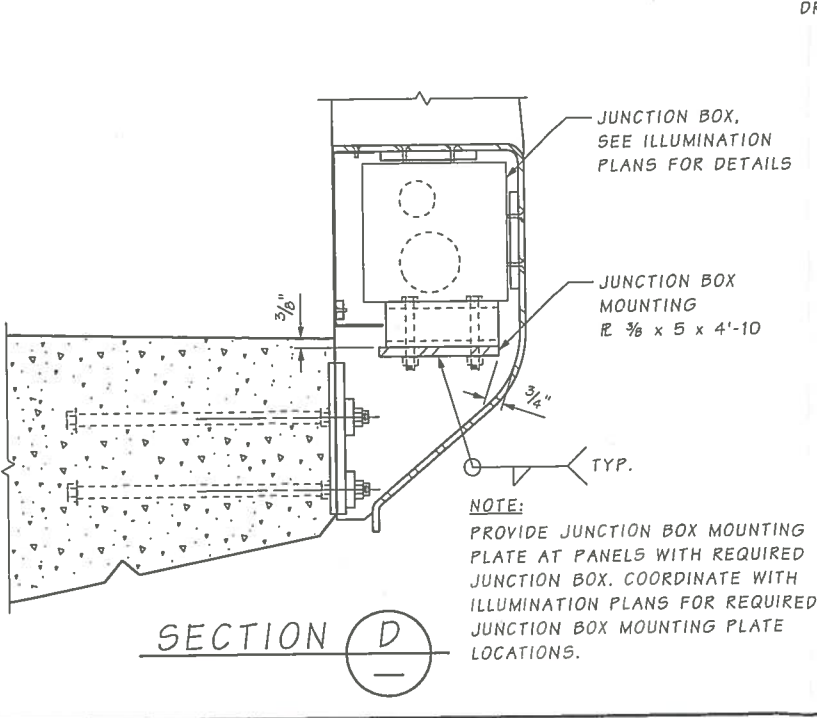
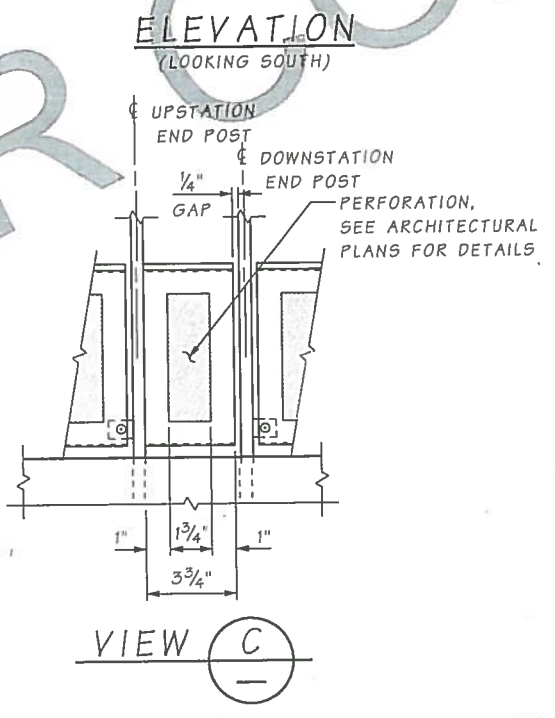
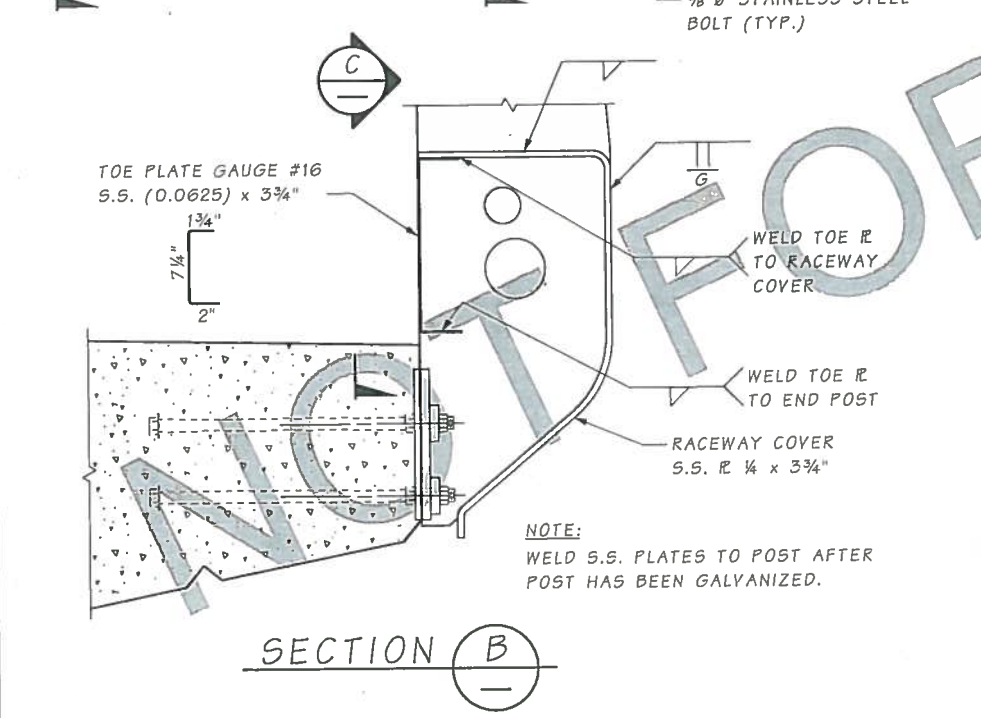
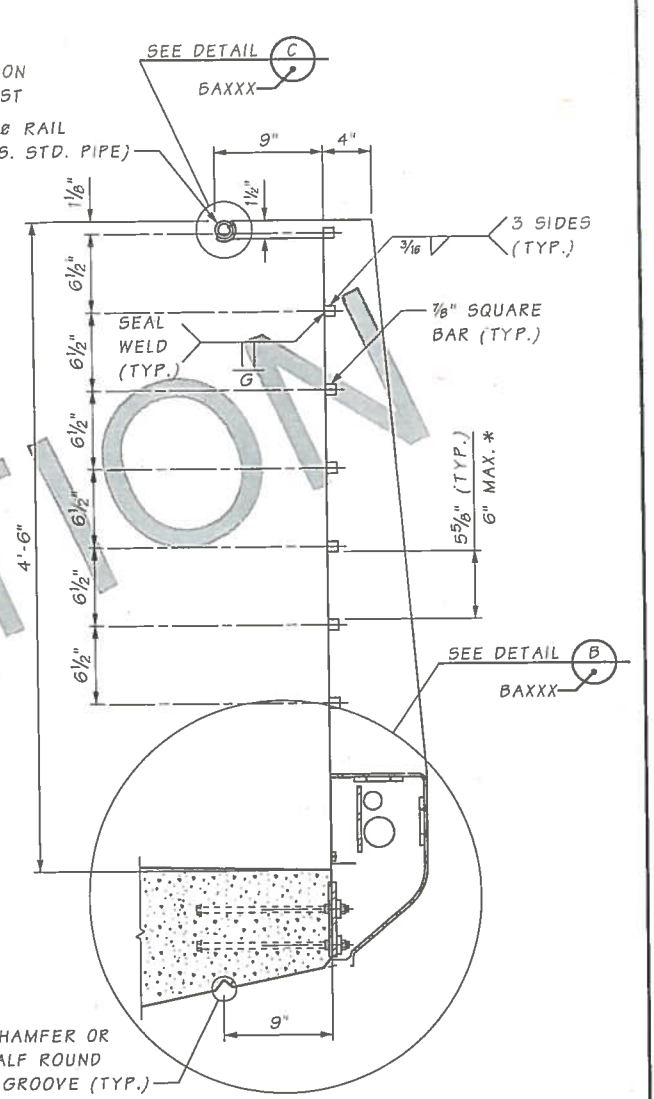
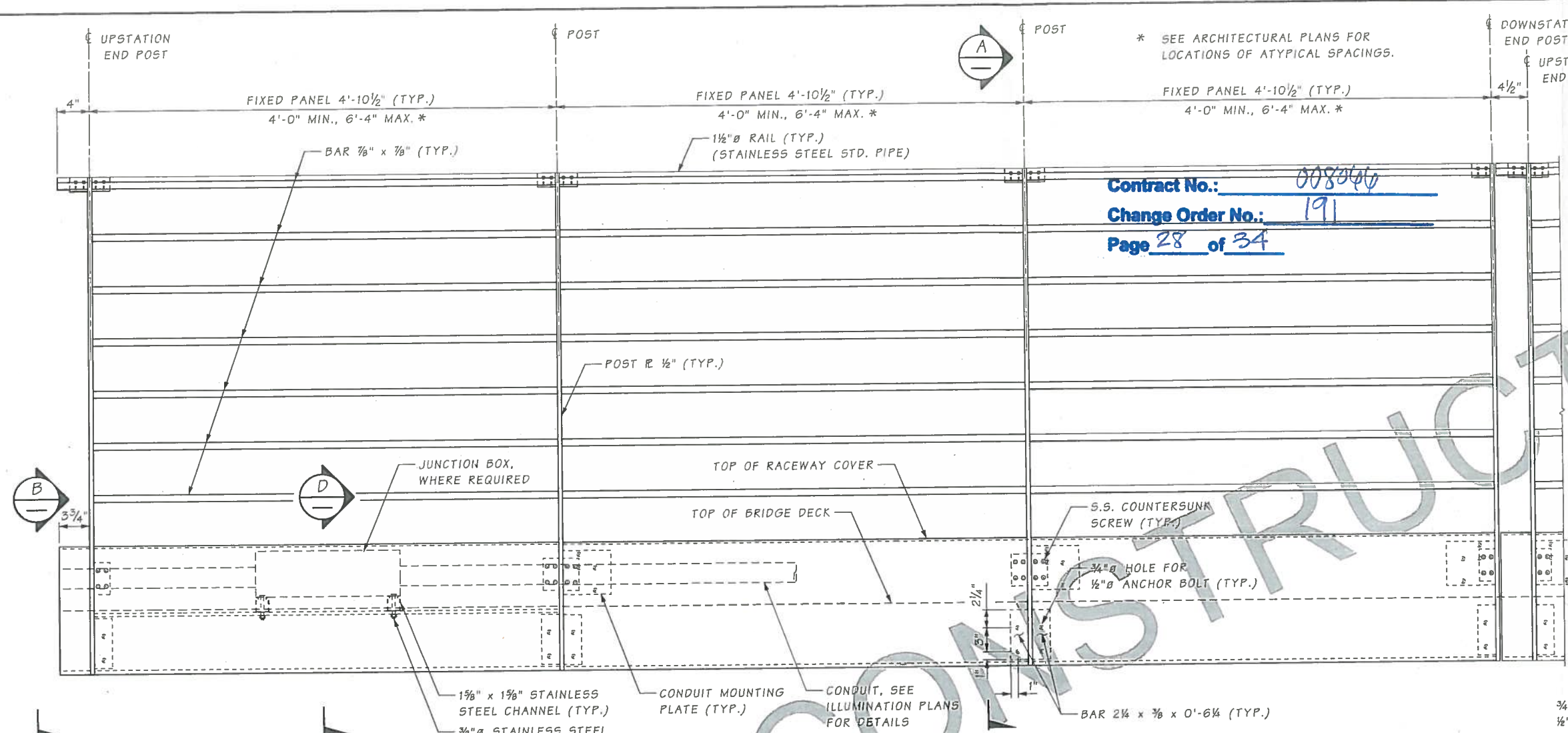
Couplers shall meet the requirements of Std. Spec. 6-02.3(24)F

#5 threaded-type rebar coupler, epoxy coated

#4 threaded-type rebar coupler

Each coupler shall have a internal coupler protector (plastic cap) on the top end

Contract No.: 008064
Change Order No.: 191
Page 27 of 34

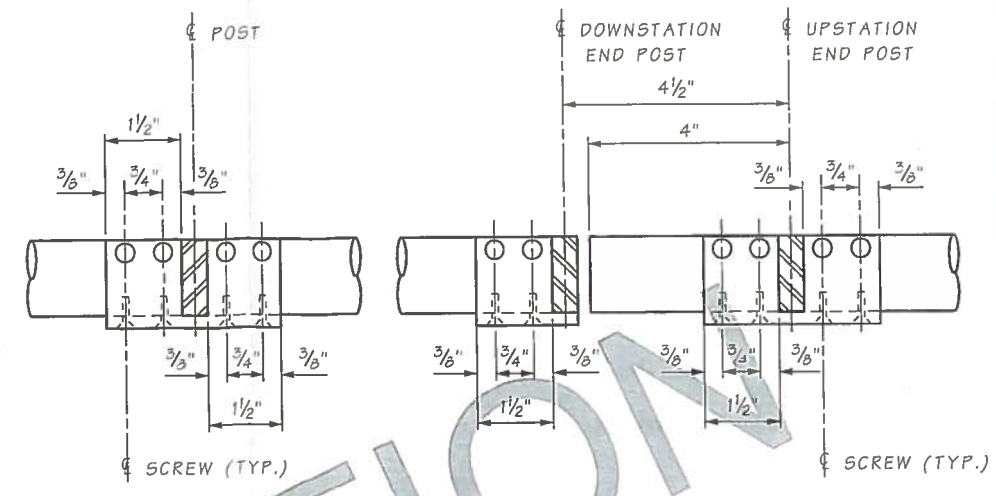
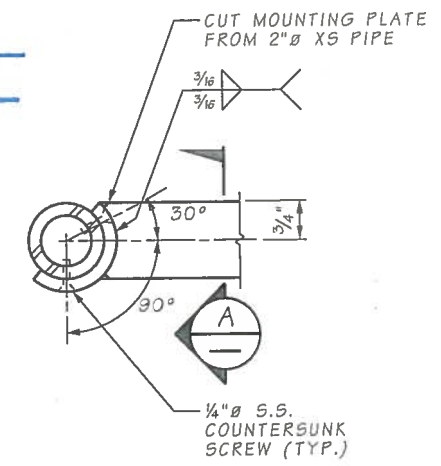
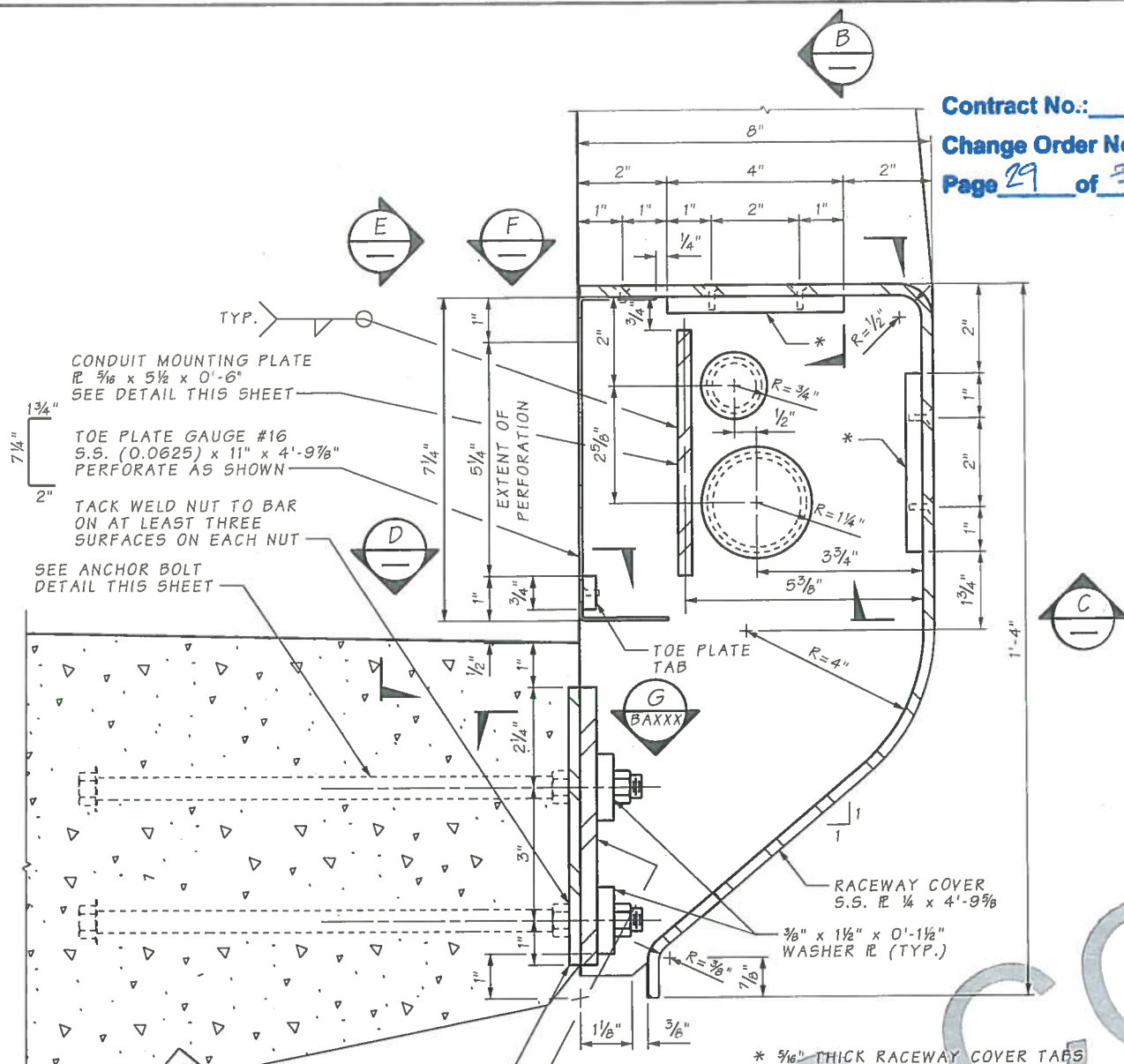


SECTION A
TYPICAL AT FIXED PANELS

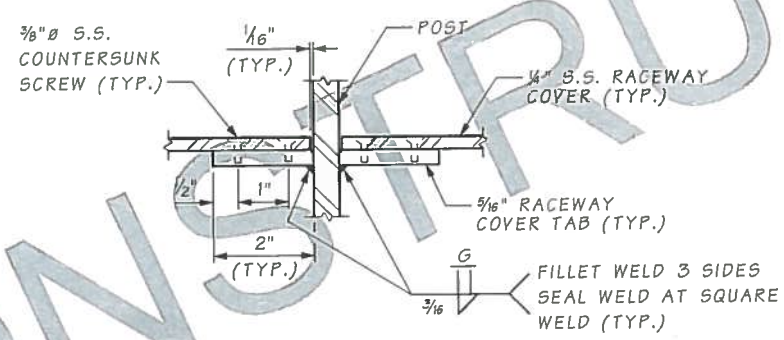
NOTES:

- SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS.
- EXCEPT FOR COMPONENTS IDENTIFIED AS STAINLESS STEEL (S.S.), ALL STEEL PLATES AND BARS SHALL BE AASHTO M270 GR 36 AND GALVANIZED ACCORDING TO AASHTO M111. CONTRACTOR SHALL FABRICATE AND GALVANIZE IN A MANNER THAT CONTROLS DISTORTION OF THE STEEL COMPONENTS AND OF THE ASSEMBLED RAILING. ANCHOR BOLTS SHALL COMPLY WITH STD. SPECIFICATION 9-06.5(1) AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M232.
- SCREWS AND COUNTERSUNK SCREWS SHALL BE STAINLESS STEEL MACHINE SCREWS. THREADS SHALL BE COATED WITH MARINE GRADE ANTI-SEIZE COMPOUND.
- FOR REPAIR OF GALVANIZED SURFACES, SEE SPECIAL PROVISIONS.
- INSTALL POSTS NORMAL TO BRIDGE DECK.
- FOR RAILING AND ANCHOR BOLT INSTALLATION, SEE SPECIAL PROVISIONS.

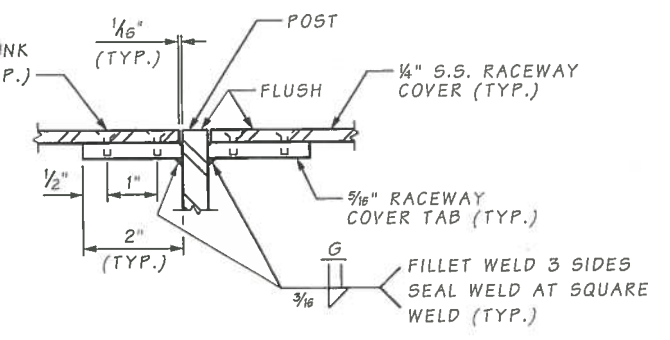
Contract No.: 0080466
 Change Order No.: 191
 Page 29 of 34



RAILING LIGHTING HARDWARE AND CONNECTIONS
 NOT SHOWN. COORDINATE WITH LIGHTING MANUFACTURER

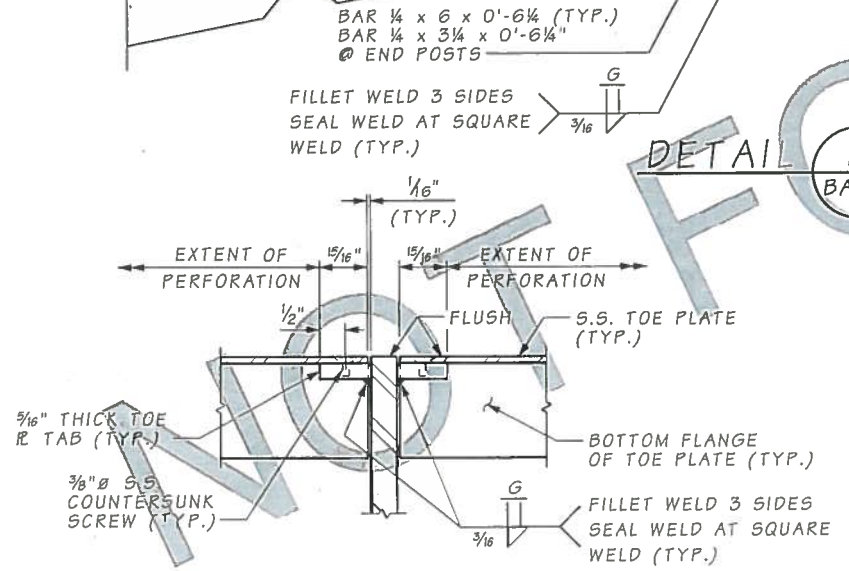


DRILL & TAP RACEWAY COVER
 TABS FOR S.S. SCREWS

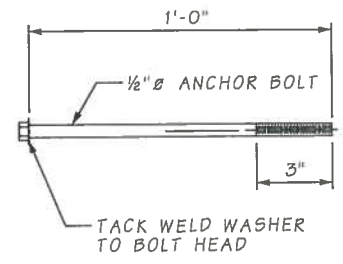


DRILL & TAP RACEWAY COVER
 TABS FOR S.S. SCREWS

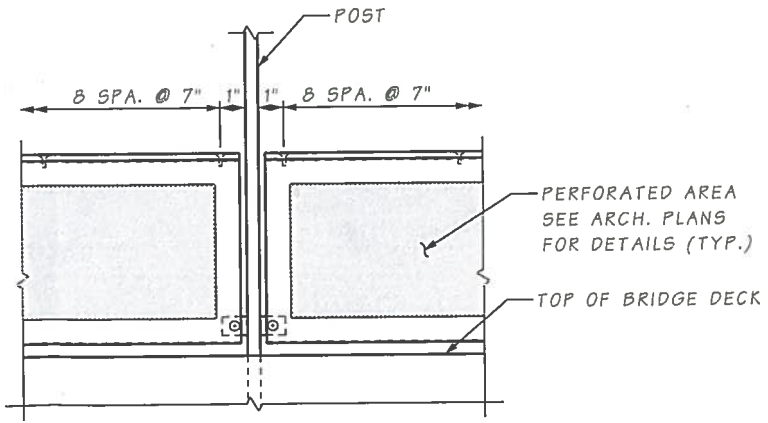
NOTE:
 FOR DETAILS OF THE TRANSITION
 SPAN RAILING, SEE SHT. BAXXX.



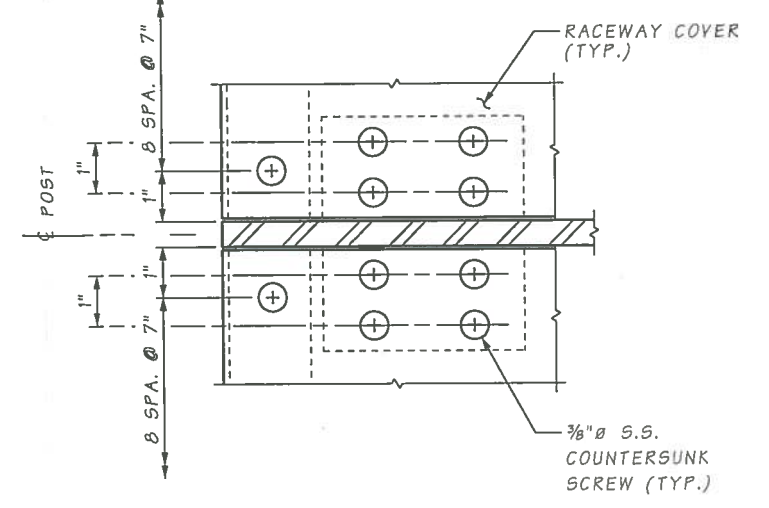
DRILL & TAP TOE PLATE
 TABS FOR S.S. SCREWS



2 NUTS & 2 WASHERS REQUIRED PER BOLT



NOTE:
 1. SEE ARCHITECTURAL PLANS
 FOR ADDITIONAL DETAILS.

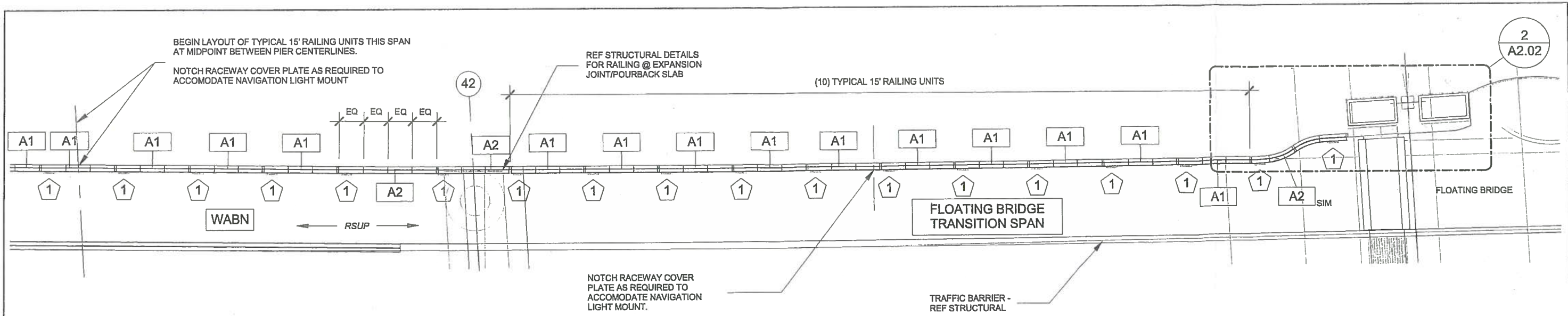


Quantities for FB&L - Transition span RSUP railing

Transition span RSUP railing post anchorage assemblies to be cast into edge of transition span bridge deck

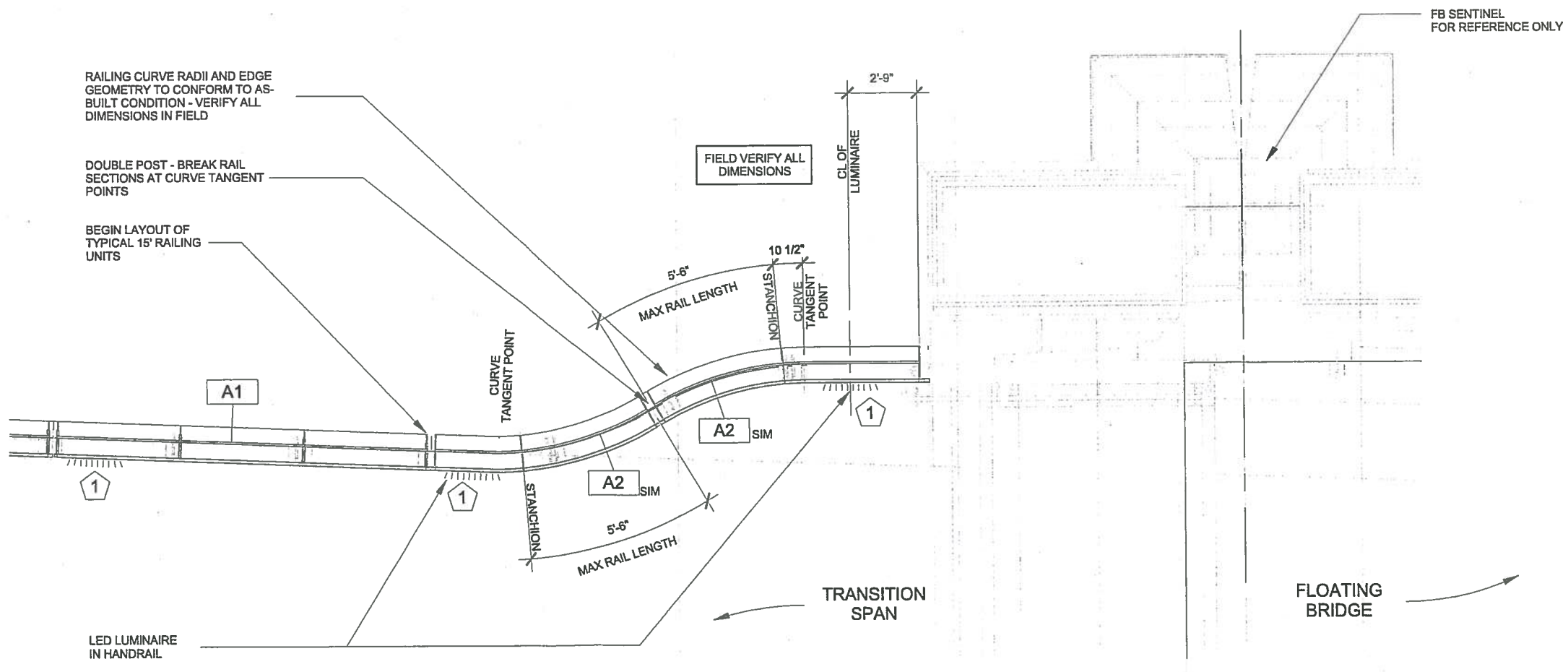
- | | | |
|--------------------------------|----|---|
| # of interior post assemblies: | 22 | <i>Per sheet A2.02 (20@A1, 2@A2 at east end)</i> |
| Each assembly contains: | | <i>Per sheet BA554, std. specs, and special provisions</i> |
| | 4 | 1'-0" long x 1/2" dia. headed anchor bolts (ASTM A 307 Gr A or B) with 3" of thread |
| | 4 | Washers for 1/2" dia bolts (ASTM F 844), each tack welded to bolt head |
| | 1 | Bar 1/4" x 6" x 6.25" (ASTM A 36) with (4) 9/16" dia holes for 1/2" dia bolts |
| | 4 | Nuts for 1/2" bolts (ASTM A 563 Gr A), each with 3 tack welds to 1/4" bar |
| | | -Bolts, nuts, and washers galvanized to AASHTO M232 |
| | | -Bar galvanized to AASHTO M111 |
|
 | | |
| # of end post assemblies: | 23 | <i>Per sheet A2.02 (19@A1, 4@A2 at east end)</i> |
| Each assembly contains: | | <i>Per sheet BA554, std. specs, and special provisions</i> |
| | 2 | 1'-0" long x 1/2" dia. headed anchor bolts (ASTM A 307 Gr A or B) with 3" of thread |
| | 2 | Washers for 1/2" dia bolts (ASTM F 844), each tack welded to bolt head |
| | 1 | Bar 1/4" x 3.25" x 6.25" (ASTM A 36) with (2) 9/16" dia holes for 1/2" dia bolts |
| | 2 | Nuts for 1/2" bolts (ASTM A 563 Gr A), each with 3 tack welds to 1/4" bar |
| | | -Bolts, nuts, and washers galvanized to AASHTO M232 |
| | | -Bar galvanized to AASHTO M111 |

Note: Bonding/Grounding or electrical isolation needs still to be determined



2
A2.02

1 RAILING SPACING PLAN - FLOATING BRIDGE TRANSITION SPAN
1" = 20'-0"



FB SENTINEL FOR REFERENCE ONLY

Contract No.: 008066
Change Order No.: 191
Page 31 of 34

- 1 2' LINEAR LED LUMINAIRE
- A RAILING TYPE - SEE A3.00

A1 - TYPICAL 15' RAILING UNIT
A2 - INFILL RAILING
A3 - RAILING ON-GRADE

2 WABN RAIL TERMINATION @ FB SENTINEL
3/16" = 1'-0"

NOTES
1. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL RAILING DETAILS

SR 520 FILE NO. SHEET A2.02 ProjectWise Vault

Supervisor		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
- A. HART		10	WASH			
Designed By		JOB NUMBER				
- B. KENNY		13A012				
Checked By						
- D. LUNDMAN						
Detailed By						
- B. KENNY						
Project Engr.						
- D. EDWARDS						
Regional Adm.		DATE	REVISION	BY	APP'D	
- J. MEREDITH						

7888 REGISTERED ARCHITECT
Alan Hart
STATE OF WASHINGTON
HDR
ENGINEERING INC.

Washington State
Department of Transportation
VIA

SR 520
MONTLAKE TO EVERGREEN PT. BRIDGE
WEST APPROACH BRIDGE NORTH
FLOATING BRIDGE TRANSITION SPAN

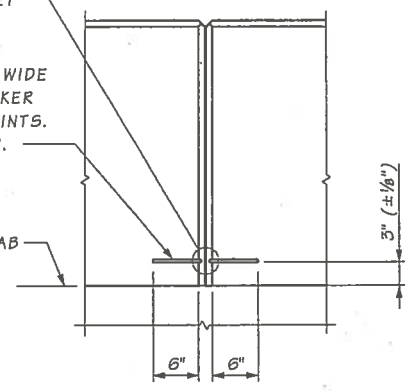
BRIDGE SHEET NO. A2.02
SHEET 1635 OF 1797 SHEETS

SR 520
Projectwise Voui: WABN
FILE NO. 7051 SHEET BA554

SEE PAVEMENT MARKER
DETAIL ON THIS SHEET

PROVIDE 3/8" DEEP x 3/8" WIDE
SAWCUT PAVEMENT MARKER
REQUIRED AT DUMMY JOINTS,
BOTH SIDES OF BARRIER.

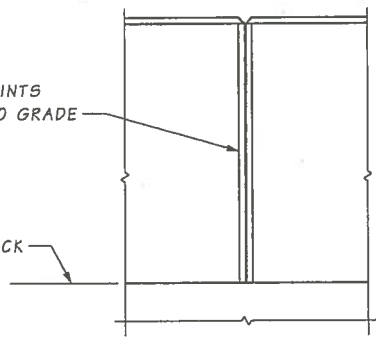
TOP OF ROADWAY AT
BRIDGE APPROACH SLAB



VIEW C
BA553

DUMMY JOINTS
NORMAL TO GRADE

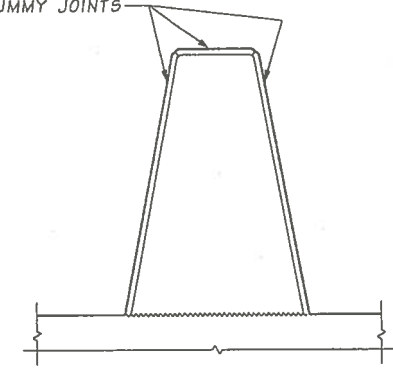
TOP OF
BRIDGE DECK



VIEW D
BA553

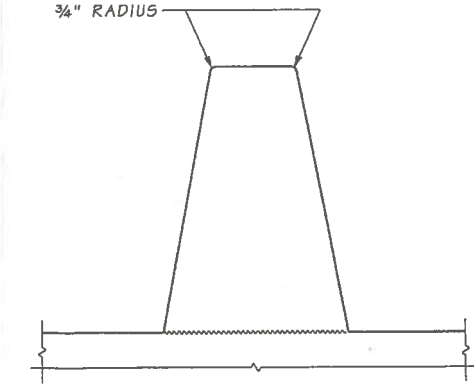
MEDIAN TRAFFIC BARRIER SHOWN,
TRAFFIC PEDESTRIAN BARRIER SIMILAR.

DUMMY JOINTS



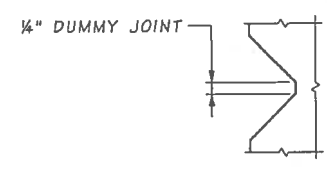
SECTION E

3/4" RADIUS



SLIPFORM ALTERNATE
SEE "TYPICAL SECTION - MEDIAN TRAFFIC BARRIER"
FOR ADDITIONAL DETAILS.

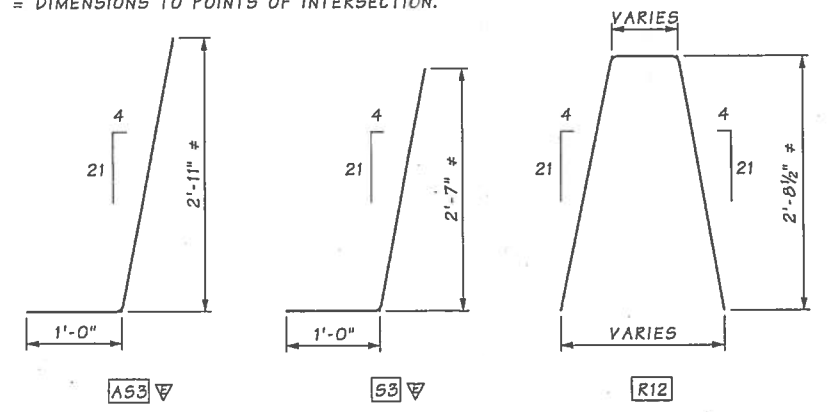
Contract No.: 008046
Change Order No.: 19
Page 32 of 34



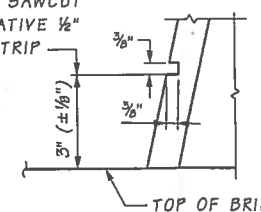
DUMMY JOINT
DETAIL

BENDING DIAGRAM

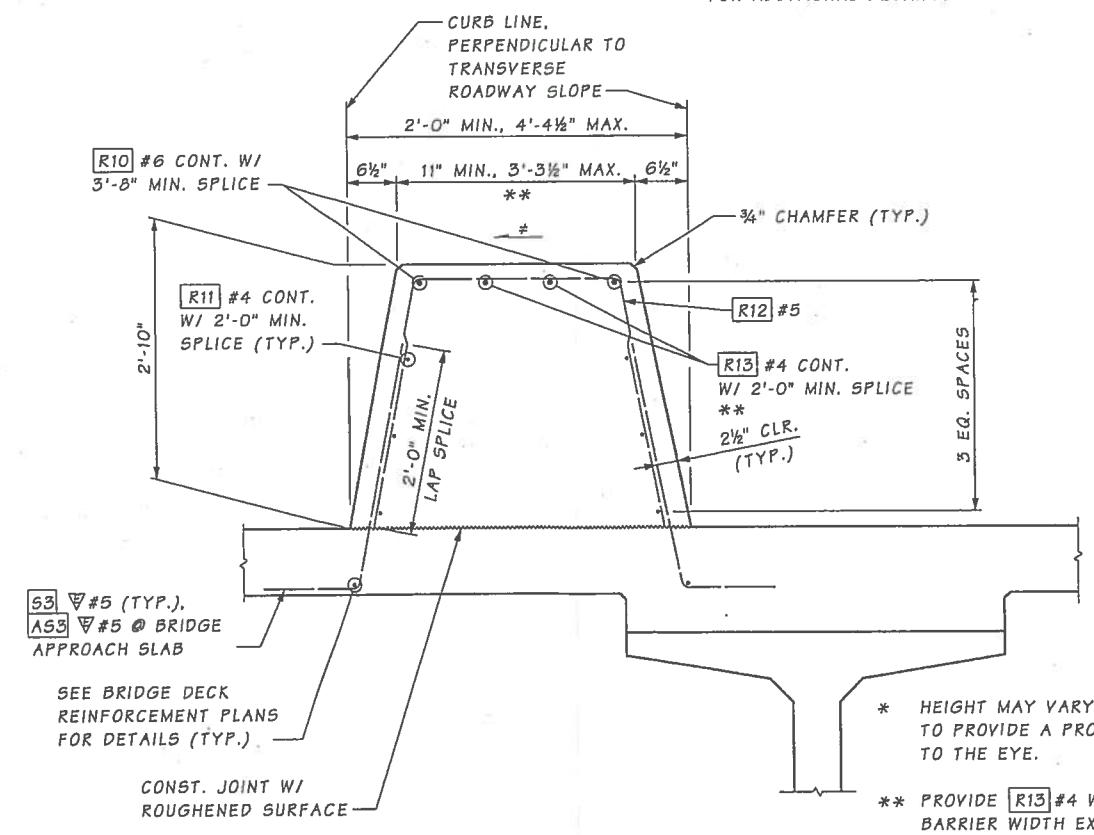
ALL DIMENSIONS ARE OUT TO OUT.
= DIMENSIONS TO POINTS OF INTERSECTION.



BOTTOM OF SAWCUT
OR ALTERNATIVE 1/2"
CHAMFER STRIP



PAVEMENT MARKER
DETAIL



TYPICAL SECTION
MEDIAN TRAFFIC BARRIER
ON BRIDGE - WEST OF WDXV STA. 27+27.14

- * HEIGHT MAY VARY IF REQUIRED TO PROVIDE A PROFILE PLEASING TO THE EYE.
- ** PROVIDE R13 #4 WHERE TOP OF BARRIER WIDTH EXCEEDS 1'-6"
- # SLOPE VARIES AND SHALL MATCH TRANSVERSE ROADWAY SLOPE

Bridge Design Engr.	PW:ICADDProj\WestsideCADD\PS&ESheets\BGWABN\PE2344_WABN_DE_BG_01_BA554.dgn	REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	BOTT, P.	10	WASH		1490	1797
Designed By	AKESSON, B.	JOB NUMBER				
Checked By	CHEN, G.	15A012				
Detailled By	VYPLEL, M.					
Bridge Projects Engr.						
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY	APPD		



HDR
ENGINEERING INC.

4-8-14

Washington State
Department of Transportation

PARSONS BRINCKERHOFF
Parametrix

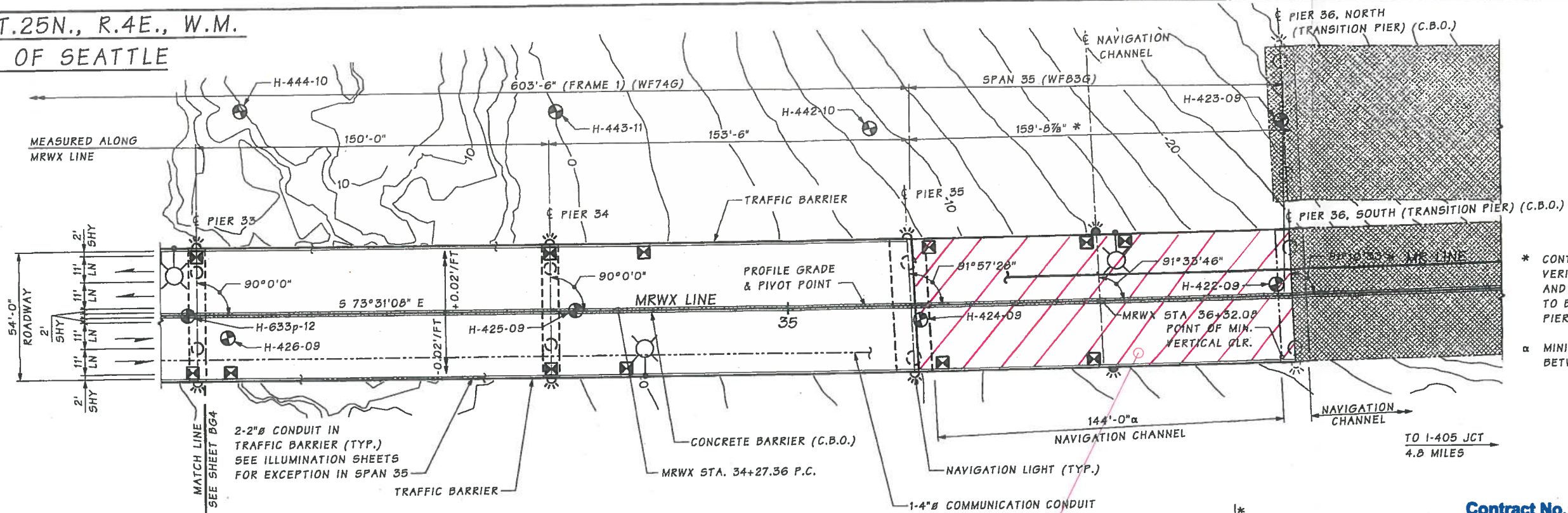
SR 520
MONTLAKE TO EVERGREEN PT. BRIDGE
WEST APPROACH BRIDGE NORTH

MEDIAN TRAFFIC BARRIER
DETAILS 2 OF 2

BRIDGE SHEET NO.
BA554
SHEET
1490
OF
1797
SHEETS

SEC. 22, T.25N., R.4E., W.M.
CITY OF SEATTLE

SR 520



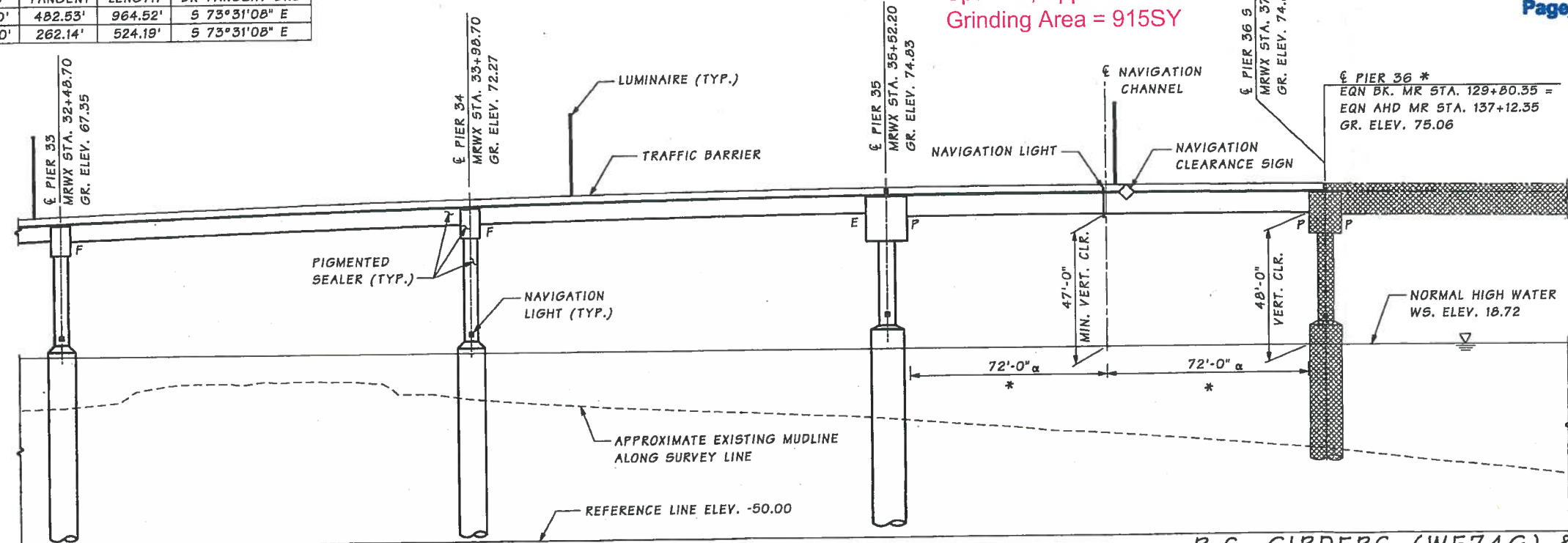
* CONTRACTOR SHALL FIELD VERIFY DIMENSIONS, LOCATION, AND BEARING OF PIER 36 PRIOR TO BEGINNING WORK AT PIER 36 OR SPAN 35.
 α MINIMUM CLEAR DIMENSION BETWEEN FENDERS.

PIER	BEARING
33	N 16°28'52" E
34	N 16°28'52" E
35	N 13°54'43" E
36	N 13°54'43" E
36	N 13°54'43" E *

CURVE DATA					
P.I. STA.	DELTA	RADIUS	TANGENT	LENGTH	BK TANGENT BRG
MRWX 39+09.90	4°43'23" LT	11701.00'	482.53'	964.52'	S 73°31'08" E
MR 129+58.41	2°34'09" LT	11690.00'	262.14'	524.19'	S 73°31'08" E

PLAN

Contract No.: 008066
 Change Order No.: 191
 Page 33 of 34



P.C. GIRDERS (WF74G) & (WF83G)
 CONTINUOUS FOR LIVE LOAD

LOADING: HL-93 (AND FUTURE LRT SPAN 35 ONLY)

LEGEND
 SEE BRIDGE SHEET B62.

DATUM
 NAVD 1988

DEVELOPED ELEVATION
 GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF BRIDGE DECK ON MRWX LINE AND ARE EQUAL TO PROFILE GRADE

SR 520 FILE NO. 7052 SHEET B65 Projectwise Vault: WCB

Bridge Design Engr.	PW:\CADD\Proj\Westside\CADD\PS&ESheets\B65\WCB_P6_B6_01_004.dgn	REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	Bolt, P.	10	WASH	BR-0520(051)	63	281
Designed By	Harris, B. 11/12	JOB NUMBER		12A009		
Checked By	Zhong-Brisbois, J. 11/12					
Detailed By	Vypiel, M. 11/12					
Bridge Projects Engr.						
Prelim. Plan By	Harris, B. 03/12					
Architect/Specialist		DATE	REVISION	BY	APPD	

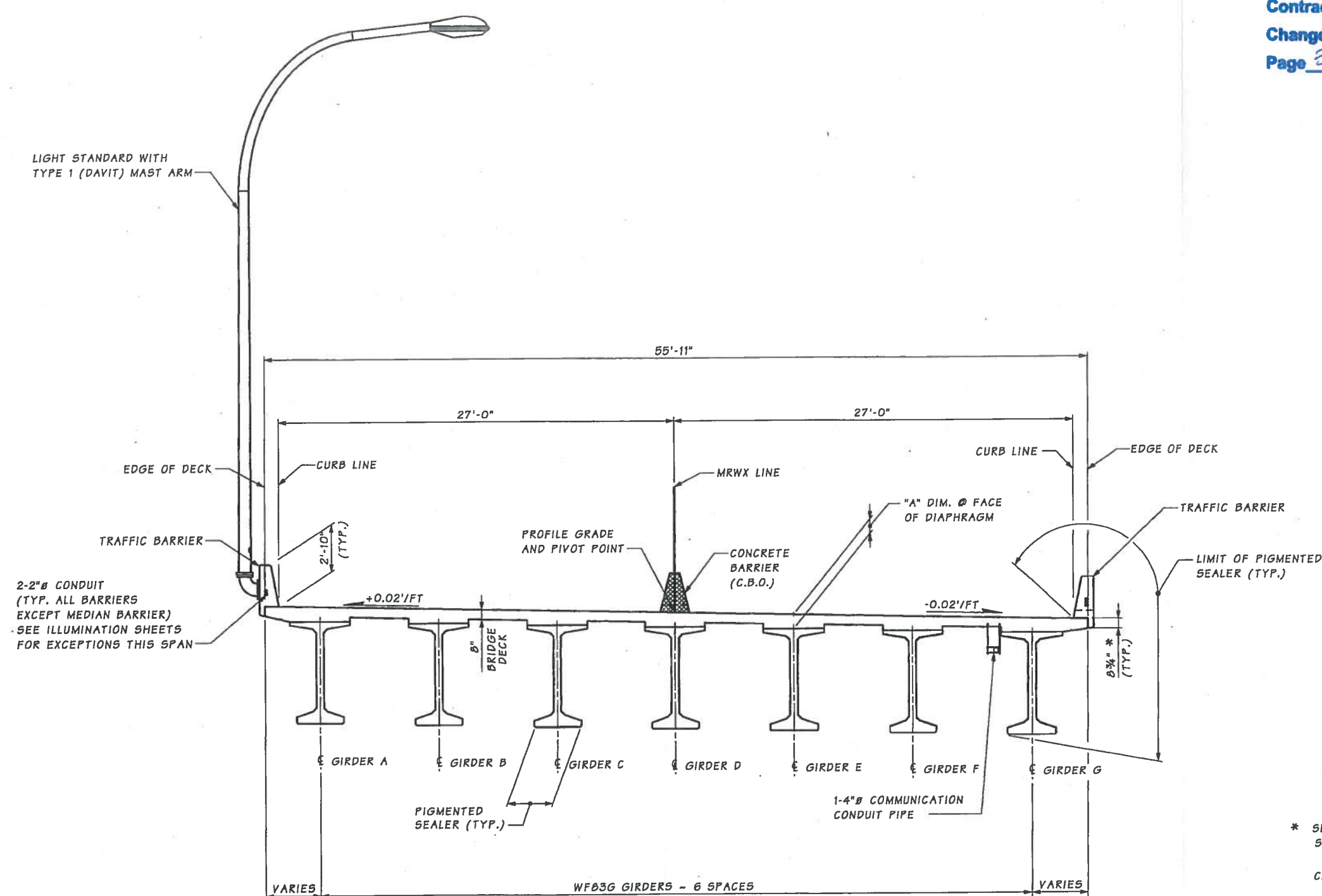


SR 520
 WEST CONNECTION BRIDGE

LAYOUT 3 OF 3

BRIDGE SHEET NO.
 B65
 SHEET
 63
 OF
 281
 SHEETS

Contract No.: 008046
 Change Order No.: 191
 Page 34 of 34



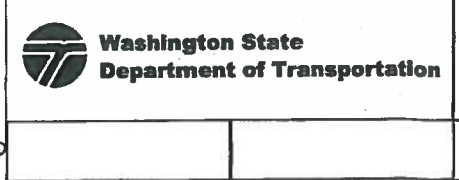
TYPICAL SECTION - SPAN 35

SECTION SHOWN NEAR MRWX STA. 36+36.00
 SECTION CUT IS NORMAL TO MRWX LINE

* SEE BR. SHT. BG175 FOR BRIDGE DECK SURFACE DEPRESSION INSIDE SCUPPER
 C.B.O. = CONSTRUCTED BY OTHERS

SR 520 FILE NO. 7052 SHEET BG98 Projectwise Vault: WCB

Bridge Design Engr.	PW:ICADDProj\Westside\CADD\PS&ESheets\BG\WCB\12877_WCB_DE_BG_01_005.dgn			REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	Bott, P.			10	WASH		156	281
Designed By	Harris, B.	11/12		JOB NUMBER				
Checked By	Saidy, Z.	11/12		12A009				
Detailed By	Vypiel, M.	11/12						
Bridge Projects Engr.								
Prelim. Plan By								
Architect/Specialist								
	DATE	REVISION	BY	APP'D				



SR 520 WEST CONNECTION BRIDGE		BRIDGE SHEET NO. BG98
TYPICAL SECTION SPAN 35		SHEET 156 OF 281 SHEETS

DESIGN-BUILD CHANGE ORDER CHECKLIST

Cont. #: 008066	Cont. Title: SR 520, Evergreen Point Floating Bridge and Landings Project	Approval from State Construction Office Required
C.O. #: 191	C.O. Title: 11/13/2014 Project Resolution	
<input checked="" type="checkbox"/> Design-Builder Initiated. <input checked="" type="checkbox"/> Agency Initiated.		
I. Executed by the State Construction Office 1. Cost or credit equal to or exceeding \$200,000.*1 2. Change in the contract documents beyond the scope, intent or term of the original contract.*2 3. Change in the condition of award. 4. Change in contract time greater than 30 working days.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X X X X
II. Executed by the Region 5. Cost or credit greater than \$100,000 but less than \$200,000.*1 6. Change in contract time greater than 10 and less than or equal to 30 working days, must be related to changes implemented by change order.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
III. Executed by the Project Engineer 7. Determination of impacts and/or overhead. 8. Design or construction work that does not comply with the Mandatory Standards. 9. A change to a Chapter 1 General Provision. 10. A change to a technical requirement in any of the following sections: Design Deviations, Geotechnical Design, Pavement, Project Documentation, Bridges and Structures, Control of Materials, MWBE Goals, QMP Requirements, or WSDOT Standard Specifications. 11. Determination of changed condition (Section 1-04.7 of the Request For Proposal). 12. Settlement of a claim (Section 1-09.11(2) of the Request For Proposal). 13. Repair of damage regarding "acts of God" or "acts of the public enemy or of government authorities (Section 1-07.13 of the Request For Proposal). 14. A "no-cost" change based upon a determination of "equal or better".	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X X X X X X X X

Approvals obtained:

Project Engineer: **(REQUIRED)** Date:

Region: **(REQUIRED)** Date:

State Construction Office: Date:

To be completed by the Project Engineer :

CO Reason(s) (See CCIS Source/Outcome) :

Change Order Prepared By: Date:

Has change been entered as lesson learned? Yes No N/A

Has design documentation been updated? Yes No N/A

Is change approved by program management? Yes No N/A

To be completed by the Region :

Is the change eligible for Federal participation? Yes No N/A

Change Order Reviewed by: Date:

This form represents the minimum information required by the State Construction Office. *3

*1 Cost or Credit greater than \$200,000 on Federal Stewardship requires FHWA approval (see Construction Manual - Ch.1-2.4C(3) and Ch. 1-3.4)
 *2 Per RCW 47.28.050, any change beyond \$7,500 that is beyond the original scope shall go through the competitive bidding process.
 *3 Changes that do not meet any of the itemized criteria above may be executed by the PE with Region approval.

DESIGN-BUILD CHANGE ORDER CHECKLIST

SR 520 Corridor Program: Design-Build Change Order Page 2 - Checklist Supplement

Cont. #:
 C.O. #:

To be completed by the Business Manager:

Does this change order require coordination with other SR 520 Projects / Program Areas? Yes No

Coordination has taken place with:

Contract Project (Identify your project):

Pontoon	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Name:	<input type="text"/>	Date:	<input type="text"/>
Pontoon Mitigation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Name:	<input type="text"/>	Date:	<input type="text"/>
Pontoon Moorage	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Name:	<input type="text"/>	Date:	<input type="text"/>
Eastside HOV	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Name:	<input type="text"/>	Date:	<input type="text"/>
Evans Creek	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Name:	<input type="text"/>	Date:	<input type="text"/>
FB&L	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Name:	<input type="text"/>	Date:	<input type="text"/>
WCB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Name:	<input type="text" value="John Chi (various dates)"/>	Date:	<input type="text"/>
WABN	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Name:	<input type="text" value="Brian Dobbins (various dates)"/>	Date:	<input type="text"/>

Identified risk has been entered into the SR 520 Risk Management Database: Yes No N/A

Risk ID Number (If pending, identify as Pending):

Project Risk ID No.:
 Project Risk ID No.:
 Project Risk ID No.:

To be coordinated with Program Finance, Budget and Controls Group:

Program Funding Concurrence? Yes No Funding Concurrence Obtained on:
 Is Sales Tax Included in CO Cost? Yes No Is sales tax deferred? Yes No
 Max Payment Curve Changes discussed with: Date:
 Third Party Agreements discussed with: Date:

Coordination with Others:

Design / Technical Lead: Name: Date:
 Maintenance: Name: Date:
 Environmental Commitments: Name: Date:

RISK ID Number (continued from above):
 CNS.900.47a Difficulty in Future Joining Activities - Joining Bolt Alignment
 CNS.900.87b Joining Bolt and Nut FIT-Up - Potential Owner Cost
 CNS.900.56 WABN Coordination and FB&L Accommodation

Contract 08066

Change Order 191 – 11-13-2014 Project Resolution

Change Order 40 - Embed Conduit Lowrise Clossure

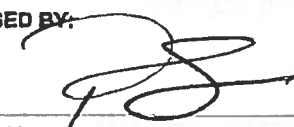
**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 08/24/12
Page 1 of 2

CONTRACT NO: 008066 FEDERAL AID NO: BR-0520(047)
 CONTRACT TITLE: SR 520 / I-5 TO MEDINA - EVERGREEN POINT FLOATING
 CHANGE ORDER NO: 40 EMBED CONDUIT LOWRISE CLOSURE


PRIME CONTRACTOR: SW0106139 KIEWIT/GENERAL/MANSON, A JOINT
 33455 6TH AVE S
 FEDERAL WAY WA 98003-6335

- Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications
 Change proposed by Contractor

ENDORSED BY:  <hr/> CONTRACTOR 10/22/12. <hr/> DATE	SURETY CONSENT: <hr/> ATTORNEY IN FACT <hr/> DATE
--	---

ORIGINAL CONTRACT AMOUNT: 586,561,000.00
 CURRENT CONTRACT AMOUNT: 599,680,015.00
 ESTIMATED NET CHANGE THIS ORDER: 0.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 599,680,015.00

Approval Required: Region Olympia Service Center Local Agency

<input type="checkbox"/> APPROVAL RECOMMENDED	<input checked="" type="checkbox"/> EXECUTED	EXECUTED: <hr/> STATE CONSTRUCTION ENGINEER <hr/> DATE
PROJECT ENGINEER:  Engineering Manager 11/2/12 <hr/> DATE	<input type="checkbox"/> APPROVAL RECOMMENDED	<input type="checkbox"/> EXECUTED
REGIONAL ADMIN: <hr/> BY: <hr/> DATE	OTHER APPROVAL WHEN REQUIRED <hr/> SIGNATURE _____ DATE _____ <hr/> REPRESENTING CCIS 8 11.19.12	

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 08/24/12
Page 2 of 2

CONTRACT NO: 008066

CHANGE ORDER NO: 40

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The first paragraph above is revised to read:

All work, materials, and measurements to be in accordance with the Request for Proposal (RFP) and the Contract Documents for this project.

DESCRIPTION:

This Category 2 Design-Builder Initiated Change provides for conduit to be embedded in the concrete closure pour between the north and south lowrise bridge deck panels.

CONTRACT REQUIREMENTS:

The embedded conduit and pipe requirements in Technical Requirements Section 2.12.4.2.9.11 Conduits and Pipe Supports shall be revised as follows:

The last paragraph shall be replaced in its entirety with:

"Conduits and pipes shall not be embedded in structural concrete elements, except:

- Conduits shall be installed in the barriers in accordance with the requirements of Section 2.13.
- Conduits shall be installed in the closure pour between the north and south lowrise bridge deck panels. Embedded conduits shall be at least two inches clear from any post-tensioning duct in the closure pour."

PAYMENT:

There shall be no increase in Contract Price as a result of this change order.

CONTRACT TIME:

There shall be no increase in Contract Time as a result of this change order.

Contract 08066

Change Order 191 – 11-13-2014 Project Resolution

Change Order 85 - WCB Access/Control Area Dates

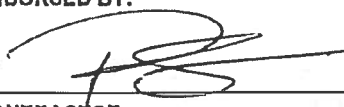
**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 04/10/13
Page 1 of 6

CONTRACT NO: 008066 FEDERAL AID NO: BR-0520 (047)
 CONTRACT TITLE: SR 520 / I-5 TO MEDINA - EVERGREEN POINT FLOATING
 CHANGE ORDER NO: 85 WCB ACCESS/CONTROL AREA DATES

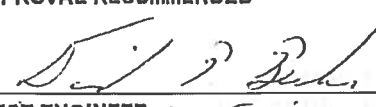
PRIME CONTRACTOR: SW0106139 KIEWIT/GENERAL/MANSON, A JOINT
33455 6TH AVE S
FEDERAL WAY WA 98003-6335

- Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications
 Change proposed by Contractor

ENDORSED BY:  <hr/> CONTRACTOR DATE <u>4/18/13.</u>	SURETY CONSENT: <hr/> ATTORNEY IN FACT DATE _____
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ORIGINAL CONTRACT AMOUNT: 586,561,000.00
 CURRENT CONTRACT AMOUNT: 609,890,058.00
 ESTIMATED NET CHANGE THIS ORDER: 0.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 609,890,058.00

Approval Required: Region Olympia Service Center Local Agency

<input type="checkbox"/> APPROVAL RECOMMENDED <input checked="" type="checkbox"/> EXECUTED  PROJECT ENGINEER <i>Engineering Manager</i> DATE <u>Apr 124, 2013</u>	EXECUTED: <hr/> STATE CONSTRUCTION ENGINEER DATE _____
<input type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED REGIONAL ADMIN: <hr/> BY: DATE _____	OTHER APPROVAL WHEN REQUIRED <hr/> SIGNATURE _____ DATE _____ REPRESENTING _____

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 04/10/13
Page 2 of 6

CONTRACT NO: 008066

CHANGE ORDER NO: 85

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The first paragraph above is revised to read:

All work, materials, and measurements to be in accordance with the Request for Proposal (RFP) and the Contract Documents for this project.

DESCRIPTION:

This is a WSDOT-initiated change in accordance with General Provisions Section 1-04.4(1) to revise the West Connection Bridge (WCB) access and control areas, and the WCB access and control timeline dates.

CONTRACT REQUIREMENTS:

Technical Requirements Section 2.12.5.17.5 West Transition Span and Pier 36N&S shall be deleted in its entirety and replaced with:

"2.12.5.17.5 West Transition Span and Pier 36N&S

The Design-Builder shall construct Pier 36N&S in accordance with the requirements of this section, Section 2.13, and as shown on the Design-Builder's Pier 36 Released for Construction (RFC) Documents and revised RFC Documents. The "WCB Contractor," under separate contract with WSDOT, will have intermittent access to the work areas as defined below, and the Design-Builder shall coordinate construction operations with the "WCB Contractor." The "WCB Contractor" will not be permitted access to the east of Work Area 1B.

Brief descriptions of work areas are as follows:

- * Work Area 1A: An area west of the centerline of the Pier 36S columns and west of the Pier 36N pier cap.
- * Work Area 1B: An area surrounding the east portion of Pier 36S and all of Pier 36N.
- * Work Area 2: An area west of Work Areas 1A and 1B.

Exact plan limits of work areas, and access and control timeline dates, are shown on Contractor Control Area (Appendix M7), Plan Ref. No. AC-01, WCB Access and Control CO 85. Work areas shall include, but not be limited to, the bridge structure and lake.

The Design-Builder will have exclusive access to Work Areas 1A and 1B and shall Physically Complete the following Work at Pier 36N&S, and obtain acceptance of said Work by WSDOT, by not later than November 15, 2013:

1. Construction of foundations, columns, and crossbeams.
2. Installation of anchor bolts or anchor bolt sleeves for WCB bearings.

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 04/10/13
Page 3 of 6

CONTRACT NO: 008066

CHANGE ORDER NO: 85

3. Installation of grout pad pockets at said anchor bolts.
4. Installation of embedded reinforcing steel for WCB girder stops and diaphragms.
5. Installation of roughened construction joint surfaces at said reinforcing steel.
6. Removal of all pier formwork and falsework after all concrete has attained its specified compressive strength.
7. Vacation of Work Areas 1A and 1B.

Refer to General Provisions Section 1-08.9(7) for liquidated damages due the State for failure by the Design-Builder to complete the Work described above by the date indicated.

The "WCB Contractor" will have exclusive access to Work Area 1A, Work Area 1B, and Work Area 2 only during the intervals shown as "Available" on Contractor Control Area (Appendix M7), Plan Ref. No. AC-01, WCB Access and Control CO 85. Loadings from construction access on the WCB shall be limited as governed by Section 6-01.6 of the WSDOT Standard Specifications (Appendix D18). Refer to General Provisions Section 1-04.4(9) for remedies available to the Design-Builder in the event the work areas are not available by the dates indicated.

The Design-Builder shall be responsible for the installation and construction of the elements as shown on the Conceptual Plans (Appendix M1), the West Connection Bridge Drawings (Appendix M3), and as indicated below:

- * Modular expansion joint between the WCB and RSUP superstructures and the West Transition Spans at Pier 36S.
- * Traffic barriers, pedestrian barriers, and railings on the West Transition Spans.
- * Joint covers for barriers and railings between the WCB superstructure and the West Transition Spans at Pier 36S.

All connections of the above items to Pier 36S and the WCB superstructure shall be the responsibility of the Design-Builder.

The Design-Builder will not be required to furnish and install the modular expansion joint and the joint covers for barriers and railings between Pier 36N and the West Transition Span (westbound bridge). The West Transition Span (westbound bridge) shall be outfitted by the Design-Builder with blockouts and connection points to permit installation of these items in the future by others.

The "WCB Contractor" will have exclusive access to Work Area 2 until the completion of the WCB construction which will not be later than October 1, 2014. On October 2, 2014, the Design-Builder will have exclusive access to Work Area 1A, Work Area 1B, and Work Area 2, and shall complete the Work."

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 04/10/13
Page 4 of 5

CONTRACT NO: 008066

CHANGE ORDER NO: 85

Contractor Control Area (Appendix M7), Plan Ref. No. AC-01, WCB - Access and Control, shall be deleted in its entirety and replaced with page 5 of 5 of this change order.

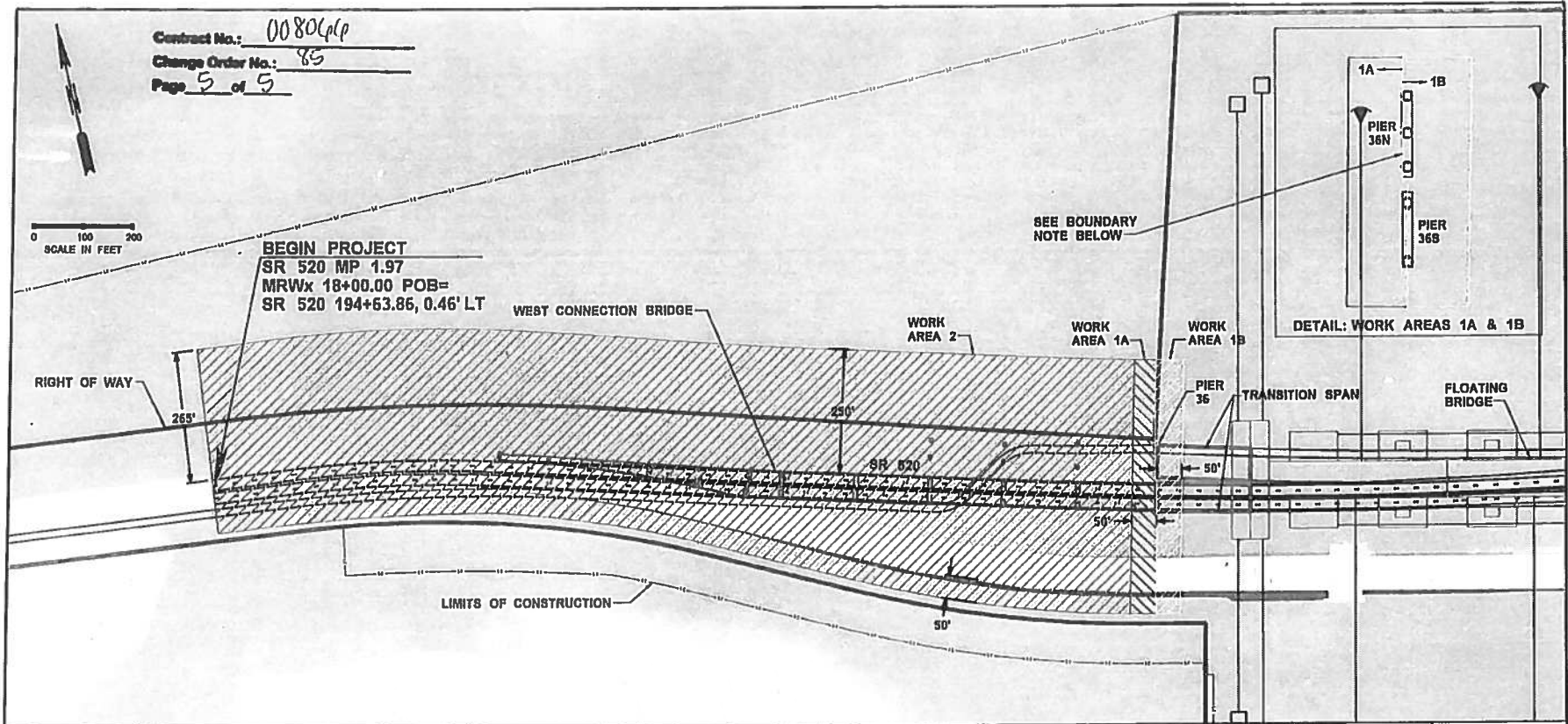
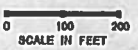
PAYMENT:

As mutually agreed, there shall be no adjustment to Contract Price as a result of this change order. Any adjustment to Contract Price resulting from an Instant of Transfer date on or before May 31, 2015 for Cycle 6 of the Pontoons Furnished by the State (PFS) will be addressed under a separate change order.

CONTRACT TIME:

There shall be no adjustment to Contract Time as a result of this change order. Any adjustment to Contract Time resulting from an Instant of Transfer date on or before May 31, 2015 for Cycle 6 of the PFS will be addressed under a separate change order.

Contract No.: 008064p
 Change Order No.: 85
 Page 5 of 5



- THIS DRAWING SHOWS ALLOWABLE ACCESS AND CONTROL AREAS FOR THE WEST CONNECTION BRIDGE.
- BOUNDARY BETWEEN 1A & 1B IS:
 - PIER 36N: WEST EDGE OF CAP BEAM
 - PIER 36S: STRAIGHT LINE THAT INTERSECTS CENTER OF BOTH COLUMNS

TIMELINE DATES	WORK AREA 1A	WORK AREA 1B	WORK AREA 2
BETWEEN NOTICE TO PROCEED NO. 2 AND 11/15/13	AVAILABLE	AVAILABLE	NOT AVAILABLE
BETWEEN 11/16/13 AND 5/14/14	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
BETWEEN 5/15/14 AND 7/31/14	NOT AVAILABLE	AVAILABLE	NOT AVAILABLE
BETWEEN 8/1/14 AND 10/1/14	AVAILABLE	AVAILABLE	NOT AVAILABLE
BETWEEN 10/2/14 AND PROJECT COMPLETION	AVAILABLE	AVAILABLE	AVAILABLE

FILE NAME: PW\CADD\Pre\Westies\CADD\Displays\FB Staging\FB WCB Staging Access 1 Revised.dgn	PLANNING NO.:	STATE:	FED.AID PROJ.NO.:		SR 520 I-5 TO MEDINA - STG. 1 EVERGREEN PT. FLOATING BRIDGE AND LANDINGS	PLAN REF. NO. AC-01
TIME: 8:19:16 PM	10	WASH				
DATE: 3/21/2013	JOB NUMBER:	CONTRACT ID:	LOCATION NO.:			
PLOTTED BY: sharps						
DESIGNED BY: S. SHARPE						
ENTERED BY: S. SHARPE						
CHECKED BY: S. MALIM						
PROJ. ENGR.: A. CHAN						
REGIONAL ADM.: J. MEREDITH	REVISION:	DATE:	BY:			

WCB - ACCESS AND CONTROL COB5

Contract 08066

Change Order 191 – 11-13-2014 Project Resolution

Change Order 86 - Draft Hydraulic Report

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**


DATE: 04/30/13
Page 1 of 4

CONTRACT NO: 008066 FEDERAL AID NO: BR-0520(047)
 CONTRACT TITLE: SR 520 / I-5 TO MEDINA - EVERGREEN POINT FLOATING
 CHANGE ORDER NO: 86 DRAFT HYDRAULIC REPORT

PRIME CONTRACTOR: SW0106139 KIEWIT/GENERAL/MANSON, A JOINT
 33455 6TH AVE S
 FEDERAL WAY WA 98003-6335

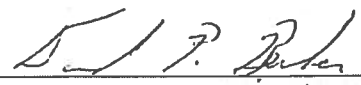
Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications

Change proposed by Contractor

ENDORSED BY:  _____ CONTRACTOR DATE: 5/23/13.	SURETY CONSENT: _____ ATTORNEY IN FACT _____ DATE:
--	--

ORIGINAL CONTRACT AMOUNT: 586,561,000.00
 CURRENT CONTRACT AMOUNT: 612,635,213.00
 ESTIMATED NET CHANGE THIS ORDER: 29,135.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 612,664,348.00

Approval Required: Region Olympia Service Center Local Agency

<input type="checkbox"/> APPROVAL RECOMMENDED <input checked="" type="checkbox"/> EXECUTED  PROJECT ENGINEER: <i>Engineering Manager</i> DATE: June 10, 2013	EXECUTED: _____ STATE CONSTRUCTION ENGINEER _____ DATE:
<input type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED REGIONAL ADMIN: BY: _____ DATE: _____	OTHER APPROVAL WHEN REQUIRED _____ SIGNATURE _____ DATE _____ REPRESENTING _____

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 04/30/13
Page 2 of 6

CONTRACT NO: 008066

CHANGE ORDER NO: 86

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The first paragraph above is revised to read:

All work, materials, and measurements to be in accordance with the Request for Proposal (RFP) and the Contract Documents for this project.

DESCRIPTION:

This is a WSDOT-initiated change in accordance with General Provisions Section 1-04.4(1) to add requirements for a Draft Hydraulic Report.

CONTRACT REQUIREMENTS:

Technical Requirements Section 2.14.3.4.3 Supplemental Hydraulic Report shall be revised as follows:

In the first paragraph, delete the sentence:

"In accordance with the Mandatory Standards, the Design-Builder shall expand the content of the Conceptual Hydraulic Report to include all elements of the final design including plan sheets for facilities and conveyance systems, and shall produce a Final Hydraulic Report for submittal with the As-Built Plans."

And replace with:

"In accordance with the Mandatory Standards, the Design-Builder shall expand the content of the Conceptual Hydraulic Report to include all elements of the final design including plan sheets for facilities and conveyance systems, and shall produce a Draft Hydraulic Report upon completion of the drainage design based on the wall construction for the SR 520 Eastside Transit and HOV Project, and a Final Hydraulic Report for submittal with the As-Built Plans."

Technical Requirements Section 2.14.4.2 Collection and Conveyance Structures shall be revised as follows:

In the first paragraph, delete the sentence:

"The Design-Builder shall analyze the capacity of new inlets, storm drains, ditches, outfalls and other conveyance structures within the Project limits and include this evaluation in the Design-Builder's Final Hydraulic Report."

And replace with:

"The Design-Builder shall analyze the capacity of new inlets, storm drains, ditches, outfalls and other conveyance structures within the Project limits and include this evaluation in the Design-Builder's Hydraulic Reports."

WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER

DATE: 04/30/13
Page 3 of 6

CONTRACT NO: 008066

CHANGE ORDER NO: 86

Technical Requirements Section 2.14.4.5 Cross-Drains and Culverts shall be revised as follows:

In the third paragraph, delete the sentence:

"All cross-drains and culverts in the Project area shall be sized for capacity based on the standards in the HM (Appendix D7) and the results shall be included in the Design-Builder's design calculations and Final Hydraulic Report."

And replace with:

"All cross-drains and culverts in the Project area shall be sized for capacity based on the standards in the HM (Appendix D7) and the results shall be included in the Design-Builder's design calculations and Hydraulic Reports."

Technical Requirements Section 2.14.4.7 Runoff Treatment and Flow Control shall be revised as follows:

In the ninth paragraph, delete the sentence:

"The Design-Builder shall review the BMP selection process in the HRM (Appendix D6) and document the procedures and final selections in the Final Hydraulic Report."

And replace with:

"The Design-Builder shall review the BMP selection process in the HRM (Appendix D6) and document the procedures and final selections in the Hydraulic Reports."

Technical Requirements Section 2.14.4.10 Downstream Analysis shall be revised as follows:

In the first paragraph, delete the sentence:

"The Design-Builder shall perform a final downstream analysis for all individual stormwater facilities to be constructed, as a required part of the Final Hydraulic Report."

And replace with:

"The Design-Builder shall perform a final downstream analysis for all individual stormwater facilities to be constructed, as a required part of the Hydraulic Reports."

In the first paragraph, delete the sentence:

"All calculations, maps and final plans shall be included in the Final Hydraulic Report."

And replace with:

"All calculations, maps and final plans shall be included in the Hydraulic Reports."

WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER

DATE: 04/30/13
Page 4 of 6

CONTRACT NO: 008066

CHANGE ORDER NO: 86

Technical Requirements Section 2.14.5.4 Design Calculations shall be revised as follows:

Delete the sentence:

"All design supporting calculations shall be included in the Final Hydraulic Report as a hard copy and shall also be submitted in an approved electronic format on a CD-ROM."

And replace with:

"All design supporting calculations shall be included in the Hydraulic Reports as a hard copy and shall also be submitted in an approved electronic format on a CD-ROM."

Technical Requirements Section 2.14.5.5 Final Hydraulic Report shall be revised as follows:

Delete the section heading:

"2.14.5.5 Final Hydraulic Report"

And replace with the new heading:

"2.14.5.5 Hydraulic Reports"

In the first paragraph, delete the sentence:

"A Preliminary Hydraulic Report is not required from the Design-Builder."

After the first paragraph, insert the paragraph:

"The Design-Builder shall submit a Draft Hydraulic Report to support WSDOT's review of the drainage design drawings. The Draft Hydraulic Report shall show the Design-Builder's overall Project runoff treatment, dewatering, and storm drainage concept for the Project. In particular, the report shall include the overall drainage basin and sub-basin layouts; locations of cross-drains and outfalls; floodplain impact analysis; basic hydrology and hydraulic calculations; downstream analysis; major conveyance system layout; and concepts to be used at specific locations for treatment of Project runoff."

The fourth and fifth paragraphs shall be deleted in their entirety and replaced with the following:

"By following the hierarchy outlined in the Mandatory Standards, the Design-Builder may choose to prepare the Draft Hydraulic Report by expanding the content of the Supplemental Hydraulic Report (Appendix H2) to include all elements of the final design. The Design-Builder shall submit the Draft Hydraulic Report, including the final drainage plans, to WSDOT for review and comment, following the specifications outlined in the Review Process of the HM (Appendix D7). The Draft Hydraulic Report shall meet the applicable Mandatory Standards and fulfill the Environmental Commitments List (Appendix C1)."

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 04/30/13
Page 5 of 6

CONTRACT NO: 008066

CHANGE ORDER NO: 86

The Final Hydraulic Report shall incorporate the final as-constructed (As-Built) documentation in accordance with this section, including the updated Report text, records of decision, associated design criteria, drainage maps, drainage plans and profiles, facility sheet plans and sections, details, and include both hard and electronic copies of calculations on a CD-ROM. The Design-Builder shall submit the Final Hydraulic Report, including the final As-Built documentation, to WSDOT for review, comment and Final Acceptance, following the specifications outlined in the Review Process of the HM (Appendix D7). The Final Hydraulic Report shall meet the applicable Mandatory Standards and fulfill the Environmental Commitments List (Appendix C1)."

Technical Requirements Section 2.14.5.9 List of Submittals shall be revised as follows:

After the bulleted item:

"* Gutter Flow evaluation for existing mainline;"

Insert the new bulleted item:

"* Draft Hydraulic Report Type A in both hard copy and PDF format including a copy on a CD-ROM including all calculations, documents, and drawing files in a digital format;"

PAYMENT:

As mutually agreed for the performance of the Work as described in this change order, WSDOT will reimburse the Design-Builder in the lump sum amount of \$29,135 under the new item "Draft Hydraulic Report".

CONTRACT TIME:

There shall be no adjustment to Contract Time as a result of this change order.

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 04/30/13
Page 6 of 6

CONTRACT NO: 008066				CHANGE ORDER NO: 86			
ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE

1043	01		DRAFT HYDRAULIC REPORT	L.S.	16,024.00	1.00	16,024.00
1043	03		DRAFT HYDRAULIC REPORT	L.S.	13,111.00	1.00	13,111.00

29,135.00

Contract 08066

Change Order 191 – 11-13-2014 Project Resolution

Change Order 110 - SW Pipe for Bridges

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 10/04/13
Page 1 of 3


CONTRACT NO: 008066 FEDERAL AID NO: BR-0520 (047)
 CONTRACT TITLE: SR 520 / I-5 TO MEDINA - EVERGREEN POINT FLOATING
 CHANGE ORDER NO: 110 SW PIPE FOR BRIDGES

PRIME CONTRACTOR: SW0106139 KIEWIT/GENERAL/MANSON, A JOINT
 33455 6TH AVE S

FEDERAL WAY WA 98003-6335

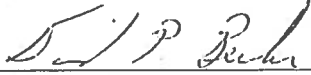
Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications

Change proposed by Contractor

ENDORSED BY:  _____ CONTRACTOR _____ DATE <u>10/9/2013</u>	SURETY CONSENT: _____ ATTORNEY IN FACT _____ DATE _____
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ORIGINAL CONTRACT AMOUNT: 586,561,000.00
 CURRENT CONTRACT AMOUNT: 663,324,143.00
 ESTIMATED NET CHANGE THIS ORDER: 0.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 663,324,143.00

Approval Required: Region Olympia Service Center Local Agency

<input type="checkbox"/> APPROVAL RECOMMENDED <input checked="" type="checkbox"/> EXECUTED  PROJECT ENGINEER <u>Engineering Manager</u> _____ DATE <u>December 3, 2013</u>	EXECUTED: _____ STATE CONSTRUCTION ENGINEER _____ DATE _____
<input type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED REGIONAL ADMIN: _____ BY: _____ _____ DATE _____	OTHER APPROVAL WHEN REQUIRED _____ SIGNATURE _____ DATE _____ _____ REPRESENTING _____

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 10/04/13
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CONTRACT NO: 008066

CHANGE ORDER NO: 110

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The first paragraph above is revised to read:
All work, materials, and measurements to be in accordance with the Request for Proposal (RFP) and the Contract Documents for this project.

DESCRIPTION:

This is a Category 2 Design-Builder Initiated Change in accordance with General Provisions Section 1-04.4(2) to revise the material requirements for the stormwater drainage systems at the Floating Bridge, the East Approach Bridges, and the Transitions Spans.

CONTRACT REQUIREMENTS:

Technical Requirements Section 2.13.4.19 Bridge Deck Drainage shall be revised as follows:

Delete the sentence:

"Downspout pipe supported by bridge superstructures shall be at least six-inch diameter Schedule 80 hot-dip galvanized steel pipe with a smooth two-mil epoxy coating on the pipe interior and shall have watertight joints."

And replace with:

"Downspout pipe supported by bridge superstructures shall be at least six-inch diameter Schedule 40 hot-dip galvanized steel pipe with a smooth six-mil to ten-mil epoxy coating on the interior and exterior of the pipe. All bridge deck drainage components shall have watertight joints."

Technical Requirements Section 2.14.4.2 Collection and Conveyance Structures shall be revised as follows:

In the paragraph that begins:

"The use of any galvanized products that contact the runoff water on storm drainage systems and other hydraulic structures will not be allowed as a standalone treatment or conveyance type "

After the sentence:

"The exterior surface of the pipe shall also be coated to prevent dissolved zinc from entering the waters of the State associated with climatic events."

Insert:

"Galvanized pipe for storm drainage systems shall be Schedule 40 hot-dip galvanized steel pipe with a smooth six-mil to ten-mil epoxy coating on the interior and exterior of the pipe."

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CONTRACT NO: 008066

CHANGE ORDER NO: 110

At the end of the paragraph, insert:

"The Design-Builder shall submit an inspection and installation plan for the interior and exterior pipe coating to WSDOT at least 30 calendar days before the delivery of the pipe. Stormwater piping that crosses modular expansion joints shall be solid wall HDPE pipe with standard dimension ratio SDR 26. Stormwater piping that crosses maintenance access openings shall be removable pipe with a maximum length of 13-feet, and shall be filament-wound glass-fiber-reinforced polyester-resin pipe with a 1/8-inch wall thickness. All materials for the collection and conveyance of stormwater shall have watertight joints and shall meet the color aesthetics requirements specified in Section 2.15.5.1.1.6."

PAYMENT:

There shall be no adjustment to Contract Price as a result of this change order.

CONTRACT TIME:

There shall be no adjustment to Contract Time as a result of this change order.

Contract 08066

Change Order 191 – 11-13-2014 Project Resolution

Change Order 141 - Alignment Key Pourback

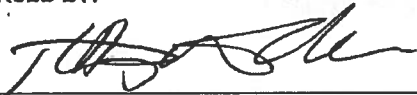
**WASHINGTON STATE
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CHANGE ORDER**

DATE: 04/04/14
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CONTRACT NO: 008066 FEDERAL AID NO: BR-0520 (047)
 CONTRACT TITLE: SR 520 / I-5 TO MEDINA - EVERGREEN POINT FLOATING
 CHANGE ORDER NO: 141 ALIGNMENT KEY POURBACK

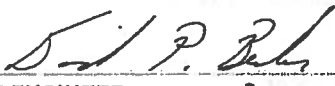
PRIME CONTRACTOR: SW0106139 KIEWIT/GENERAL/MANSON, A JOINT
 33455 6TH AVE S
 FEDERAL WAY WA 98003-6335

- Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications
 Change proposed by Contractor

ENDORSED BY:  <hr/> CONTRACTOR 4/7/14 <hr/> DATE	SURETY CONSENT: <hr/> ATTORNEY IN FACT <hr/> DATE
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ORIGINAL CONTRACT AMOUNT: 586,561,000.00
 CURRENT CONTRACT AMOUNT: 751,804,100.00
 ESTIMATED NET CHANGE THIS ORDER: 0.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 751,804,100.00

Approval Required: Region Olympia Service Center Local Agency

<input type="checkbox"/> APPROVAL RECOMMENDED <input checked="" type="checkbox"/> EXECUTED  <hr/> PROJECT ENGINEER <i>Engineering Manager</i> Apr. 17, 2014 <hr/> DATE	EXECUTED: <hr/> STATE CONSTRUCTION ENGINEER <hr/> DATE
<input type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED REGIONAL ADMIN: <hr/> BY: <hr/> DATE	OTHER APPROVAL WHEN REQUIRED <hr/> SIGNATURE <i>✓ CCIS MB</i> REPRESENTING DATE <i>4-22-14</i>

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DATE: 04/04/14
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CONTRACT NO: 008066

CHANGE ORDER NO: 141

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The first paragraph above is revised to read:

All work, materials, and measurements to be in accordance with the Request for Proposal (RFP) and the Contract Documents for this project.

DESCRIPTION:

This is a Category 2 Design-Builder Initiated Change in accordance with General Provisions Section 1-04.4(2) to modify the grouting and concrete pourback requirements at the Pontoon alignment keys and recess frames.

CONSTRUCTION REQUIREMENTS:

Appendix M23 Outfitting and Assembly Minimum Technical Requirements, Bridge Sheet No. A9 "Pontoon Assembly Details 7", shall be revised as follows:

In the sheet notes:

Delete note:

** 1" GAP BETWEEN KEY AND RECESS FRAME TO BE GROUTED BEFORE GROUTING PONTON JOINT (TYP.)

And replace with:

✓ ** 1" GAP BETWEEN KEY AND RECESS FRAME TO BE GROUTED SIMULTANEOUSLY WITH PONTON JOINT (TYP.)

In Detail 1:

Delete pontoon joint call-out:

PONTON JOINT GROUTED AFTER GAP BTWN. KEY & FRAME IS GROUTED (TYP.)

And replace with:

✓ PONTON JOINT GROUTED SIMULTANEOUSLY WITH GAP BTWN. KEY & FRAME (TYP.)

Delete concrete fillet call-out:

CONC. POURBACK (TYP.) INSTALL AFTER FINAL TENSIONING OF PONTON JOINT BOLTS. POURBACK CONCRETE SHALL BE THE SAME MIX DESIGN AS PONTON EXTERIOR WALL MIX DESIGN.

And replace with:

✓ CONC. POURBACK (TYP.) WITH THE APPROVAL OF THE WSDOT ENGINEER, CONC. POURBACK MAY BE PLACED MONOLITHICALLY WITH THE PONTON JOINT POUR; OTHERWISE, INSTALL POURBACK AFTER FINAL TENSIONING OF PONTON JOINT BOLTS. POURBACK CONCRETE SHALL BE THE SAME MIX DESIGN AS THE EXTERIOR WALL DESIGN.

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PAYMENT:

There shall be no adjustment to Contract Price as a result of this change order.

CONTRACT TIME:

There shall be no adjustment to Contract Time as a result of this change order.

Contract 08066

Change Order 191 – 11-13-2014 Project Resolution

Change Order 163 - 05/08/14 Project Resolution

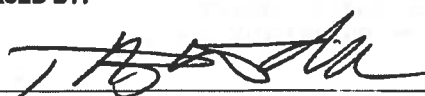
**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 08/19/14
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CONTRACT NO: 008066 FEDERAL AID NO: BR-0520 (047)
 CONTRACT TITLE: SR 520 / I-5 TO MEDINA - EVERGREEN POINT FLOATING
 CHANGE ORDER NO: 163 05/08/14 PROJECT RESOLUTION

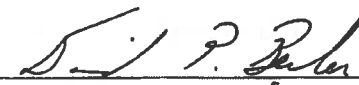
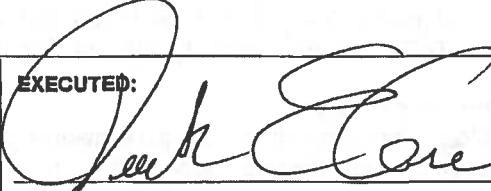
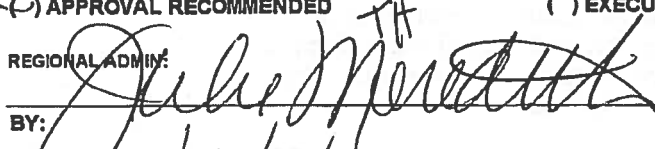
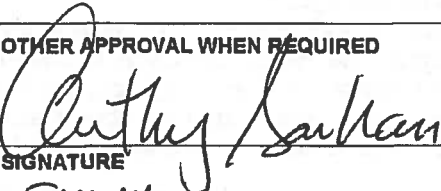
PRIME CONTRACTOR: SW0106139 KIEWIT/GENERAL/MANSON, A JOINT
 33455 6TH AVE S
 FEDERAL WAY WA 98003-6335

- Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications
 Change proposed by Contractor

ENDORSED BY:  <hr/> CONTRACTOR 8/25/14 <hr/> DATE	SURETY CONSENT: <hr/> ATTORNEY IN FACT <hr/> DATE
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ORIGINAL CONTRACT AMOUNT: 586,561,000.00
 CURRENT CONTRACT AMOUNT: 752,503,672.00
 ESTIMATED NET CHANGE THIS ORDER: 350,000.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 752,853,672.00

Approval Required: () Region Olympia Service Center () Local Agency

<input checked="" type="checkbox"/> APPROVAL RECOMMENDED () EXECUTED  PROJECT ENGINEER <i>Engineering Manager</i> October 12, 2014 <hr/> DATE	EXECUTED:  STATE CONSTRUCTION ENGINEER 10/20/14 <hr/> DATE
<input checked="" type="checkbox"/> APPROVAL RECOMMENDED () EXECUTED REGIONAL ADMIN:  BY: 10/16/14 <hr/> DATE	OTHER APPROVAL WHEN REQUIRED  SIGNATURE FHWA REPRESENTING 10/20/14 <hr/> DATE

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CONTRACT NO: 008066

CHANGE ORDER NO: 163

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The first paragraph above is revised to read:

All work, materials, and measurements to be in accordance with the request for proposal (RFP) and the contract documents for this project.

DESCRIPTION:

This change order incorporates both WSDOT-Initiated Changes and Design-Builder Initiated Changes in accordance with General Provisions Section 1-04.4 to provide for the resolution of potential change orders (PCOs) associated with Contract No. 008066 as agreed to on 05/08/2014 and as described in this change order.

CONTRACT REQUIREMENTS:

* PCO 27 - DBIC Deletion of Concrete Roof at Maintenance Building, Contract Requirements:

Technical Requirements Section 2.30.3.4 Screening from Adjacent Residences shall be revised as follows:

In the second paragraph, delete the sentence:

"Landscaped fill shall be placed on top of the Bridge Maintenance Facility building to recreate existing hillside contours."

Technical Requirements Section 2.30.3.5 LEED Certification shall be revised as follows:

In the first paragraph, after the sentence:

"The Design-Builder shall perform all Work necessary to achieve at a minimum LEED Silver Certification for the Bridge Maintenance Facility."

Add the sentence:

"The LEED Certification requirements pertain to all Work, including Work associated with change orders."

Technical Requirements Section 2.30.3.7 Safety and Security shall be revised as follows:

Delete the paragraph:

"Maintenance and inspection personnel shall be protected from falling debris from the East Approach Bridges roadways above. Portions of the Bridge Maintenance Facility and Dock exposed to falling debris from the roadways above, such as the Observation Deck, shall be covered. The exterior staircase and sidewalk need not be covered."

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And replace with:

"The Bridge Maintenance Facility, and maintenance and inspection personnel shall be protected from falling debris from the East Approach Bridges roadways above. Portions of the Bridge Maintenance Facility and Dock exposed to falling debris from the roadways above shall be covered. The exterior staircase and sidewalk need not be covered."

Technical Requirements Section 2.30.4.2.4.10 Fluid-Applied Waterproofing shall be revised as follows:

In the second paragraph, delete the sentence:

"These standards and procedures apply to roofs located over occupied and service spaces, which are below grade and covered with earth or walking surfaces, and above grade roofs which are developed for landscaping, planters, and maintenance access and circulation."

And replace with:

"These standards and procedures apply to roofs located over occupied and service spaces."

Under "Design Criteria", Item 1, Item k, delete the sentence:

"Landscaped roof areas shall be tested prior to installation of geofoam, soil or landscape material to ensure no leaks."

Alternative Technical Concept "ATC 12: Reduced Impact Maintenance Facility" of the Design-Builder's Proposal shall be revised as follows:

Under "Aesthetics", delete the sentence:

"The design features sloping, landscaped roof elements, planted with "Green Roof" technology, that help blend the building into the Medina neighborhood in a similar fashion as the RFP design."

On Drawing No. A102, delete the two call-outs:

"LOWER GARDEN ROOF"

And replace with:

"LOWER ROOF"

On Drawing No. A103, delete the two call-outs:

"LOWER GARDEN ROOF"

And replace with:

"LOWER ROOF"

* PCO 128, 302 - DBIC PT Duct Threaded Pipe and Flange Assemblies, Contract Requirements:

Appendix M23 Outfitting and Assembly Minimum Technical Requirements, Bridge Sheet No. A7 "Pontoon Assembly Details 5", "Notes", shall be revised as follows:

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Delete the Note:

- "2. IMMEDIATELY AFTER CORING HOLE IN INTERIOR WALL, INSTALL STEEL PIPE THROUGH HOLE AND TIGHTEN THREADED FLANGE TO SEAL GASKETS. STEEL PIPE FABRICATION SHALL BE AVAILABLE WITH CAPS ON CAPS ON GROUT VENTS AND READY FOR INSTALLATION WHEN CORING COMMENCES."

And replace with:

- "2. FOR ALL PONTOONS, EXCEPT PONTOON V AND ITS ADJOINING SUPPLEMENTAL STABILITY PONTOONS: THE DESIGN-BUILDER SHALL UTILIZE THE PONTOON ASSEMBLY DETAILS INCLUDED IN APPENDIX M23, OR THE ALTERNATE DETAILS PROPOSED BY THE DESIGN-BUILDER, KGM, AND SHOWN ON PAGES 16 AND 17 OF 008066 CHANGE ORDER NO. 163. IF THE APPENDIX M23 DETAILS ARE UTILIZED: IMMEDIATELY AFTER CORING HOLE IN INTERIOR WALL, INSTALL STEEL PIPE THROUGH HOLE AND TIGHTEN THREADED FLANGE TO SEAL GASKETS. STEEL PIPE FABRICATION SHALL BE AVAILABLE WITH CAPS ON GROUT VENTS AND READY FOR INSTALLATION WHEN CORING COMMENCES. IF THE ALTERNATE DETAILS ARE UTILIZED: IMMEDIATELY AFTER CORING HOLE IN INTERIOR WALL, PULL CONTINUOUS HDPE PIPE THROUGH THE LONGITUDINAL PONTOON AND THE ADJOINING SUPPLEMENTAL STABILITY PONTOONS. PULL THE TENDON THROUGH THE HDPE PIPE, STRESS THE TENDON, THEN PRESSURE GROUT THE HDPE PIPE. AFTER THE HDPE PIPE IS PRESSURE GROUTED, MONOLITHICALLY GROUT THE ANCILLARY SPACE BETWEEN THE HDPE PIPE AND THE 6" DIAMETER CORE HOLE TO ACHIEVE A WATERTIGHT SEAL.
3. FOR PONTOON V AND ITS ADJOINING SUPPLEMENTAL STABILITY PONTOONS: THE DESIGN-BUILDER SHALL UTILIZE THE PONTOON ASSEMBLY DETAILS PROPOSED BY THE DESIGN-BUILDER, KGM, AND SHOWN ON PAGES 18 THROUGH 21 OF 008066 CHANGE ORDER NO. 163. IMMEDIATELY AFTER CORING HOLE IN INTERIOR WALL, PULL CONTINUOUS HDPE PIPE THROUGH PONTOON V AND THE ADJOINING SUPPLEMENTAL STABILITY PONTOONS. PULL THE TENDON THROUGH THE HDPE PIPE, STRESS THE TENDON, THEN PRESSURE GROUT THE HDPE PIPE. AFTER THE HDPE PIPE IS PRESSURE GROUTED, MONOLITHICALLY GROUT THE ANCILLARY SPACE BETWEEN THE HDPE PIPE AND THE 6" DIAMETER CORE HOLE TO ACHIEVE A WATERTIGHT SEAL."

- * PCO 158 - DBIC Eliminate Rebar Continuity High Rise Elevated Structure and Low Rise Barrier, Contract Requirements:

Technical Requirements Section 2.12.5.2 Electrical Isolation and Electrical Continuity shall be revised as follows:

In the second paragraph, after the sentence:

"All reinforcing steel, both conventional and prestressed in the Pontoons and Elevated Structures shall form one continuous electrical system."

Insert:

"Electrical continuity for the minor reinforcing steel within the Elevated Structures may be achieved by welding or by alternate methods developed by the Design-Builder; the alternate methods shall be submitted

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to WSDOT for review and approval, and shall clearly illustrate the electrical pathways that provide an equivalent level of protection as welding."

- * PCO 162 - DBIC Change Noise Wall Material at Modular Expansion Joint, Contract Requirements:

Technical Requirements Section 2.12.4.2.9.2.1 Modular Expansion Joint Systems shall be revised as follows:

Delete the sentence:

"The bottom and all sides of each modular expansion joint shall be contained in a complete concrete enclosure, full length and width of each joint, to mitigate traffic noise from the modular expansion joint."

And replace with:

"The bottom and all sides of each modular expansion joint shall be contained in a concrete enclosure, full length and width of each joint, to mitigate traffic noise from the modular expansion joint. Gaps in the enclosure shall be minimized, and are only allowed so as to provide clearance for required movements between the Floating Bridge and Transition Spans. Enclosure access doors that are provided for maintenance and inspection access may use alternative sound mitigation materials with a minimum STC rating of 30."

- * PCO 208 - OIC Temperature Requirement Inside ITS Sheds, Contract Requirements:

Technical Requirements Section 2.32.4.2.1 Indoor Design Conditions shall be revised as follows:

In Table 2-32.2 - HVAC Indoor Design Conditions for Maintenance Sheds, under the table headings:

Space	Winter (F DB)	Summer (F DB)	(Percent RH)
-------	---------------	---------------	--------------

Add the row:

Type 3 Sheds	60	125	--
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In the Table 2-32.2 Notes, insert

"(6) Sheds are not required to meet Non Residential Energy Code (NREC)."

- * PCO 264 - Type 316 SSt1 Inserts in Lieu of Type 316L, Contract Requirements:

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Technical Requirements Section 2.12.4.2.7.7 Maintenance Access Systems shall be revised as follows:

In the second to the last paragraph, delete the sentence:

"All hardware for FRP components shall be Type 316L stainless steel with nylon-insert type locknuts."

And replace with:

"All hardware for FRP components shall be Type 316 stainless steel with nylon-insert type locknuts."

In the last paragraph, delete the sentence:

"Anchor connections to concrete walls and slabs shall use Type 316L stainless steel embedded concrete inserts or drilled-in resin bonded anchors, except that resin bonded anchors will not be allowed in walls or slabs containing post-tensioning."

And replace with:

"Anchor connections to concrete walls and slabs shall use Type 316 stainless steel embedded concrete inserts or drilled-in resin bonded anchors, except that resin bonded anchors will not be allowed in walls or slabs containing post-tensioning."

- * PCO 281 - Grading Conflict with Eastside CDF & Conduit, Contract Requirements:

Add the Contract Requirement:

"The Design-Builder shall remove existing Controlled-Density Fill (CDF) and conduit located under the Evergreen Point Road Lid in order to meet the Project requirements."

- * PCO 283 - ECC Erosion @ Evergreen Point Lid Incomplete Drainage, Contract Requirements:

Add the Contract Requirement:

"The Design-Builder shall address the effects of erosion experienced prior to the completion of the stormwater drainage system provided by the SR 520 Eastside Transit and HOV Project in the vicinity of the northwest corner of the Evergreen Point Road Lid."

- * PCO 291 - ECC Elec Vaults Conduits in Conflict with Perm Pave (Under EGPL), Contract Requirements:

Add the Contract Requirement:

"The Design-Builder shall resolve the conflict between two pull boxes installed by the SR 520 Eastside Transit and HOV Project under the Evergreen Point Road Lid, and the proposed location of traffic barrier

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to be provided by the Design-Builder. The resolution to the location conflict shall be coordinated with WSDOT for review and approval. Relocation of the pull boxes will not be required."

- * PCO 301 - Medina Mechanical Building Inspector Says Mechanical Design Must Meet 2012 Code Not 2009

Appendix S13 Bridge Maintenance Facility Building Code, Zoning and Land Use Analysis shall be revised as follows:

Delete the Section title:
"1.2 APPLICABLE CODES"

And replace with:
"1.2 APPLICABLE CODES. Conform to the listed Edition, unless otherwise required by the appropriate permitting agencies."

- * PCO 307 - V4 Column Embedment, Contract Requirements:

Appendix M22 Pontoon Minimum Technical Requirements, Bridge Sheet No. SN20, shall be revised as follows:

In Section B, after the call-out:
20"-0" DUCT LENGTH

Add the note:
NOTE: DOWELS FOR THE EAST COLUMNS ON PONTOONS VNE AND VSE SHALL HAVE A MIN EMBEDMENT OF 15'-0".

- * PCO 326 - OIC Oil Sheen March 2014, Contract Requirements:

Add the Contract Requirement:

"The Design-Builder shall perform work on March 13, 2014 to clean up an oil sheen generated by others and located on the north side of the existing bridge."

- * PCO 343 - Temporary Cofferdam Moorage, Contract Requirements:

The Construction Requirements specified in 008066 Change Order No. 108 PFS Cycle 1 Repair shall be revised as follows:

Under "Construction Requirements", in the paragraph that begins:
"The Design-Builder shall fabricate a coffer cell in accordance with the Gerwick design provided on pages 14 through 45 of this change order, which has been developed under a separate change order for a Type 1 longitudinal Pontoon incorporating a 5-year storm event rating as directed by WSDOT."

Delete the sentence:

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"Upon completion of the Work for pontoons U and V, the coffer cell shall be removed from the Project, and shall remain the property of the Design-Builder."

And replace with:

"Upon completion of the Work for pontoons U and V specified in 008066 Change Order No. 108, the Design-Builder shall temporarily moor the coffer cell on Lake Washington at a location coordinated with WSDOT. Upon completion of the joining of the longitudinal pontoons, the coffer cell shall be removed from the Project and shall remain the property of the Design-Builder."

* PCO 349 - Medina Site - Possible Contaminated Soil, Contract Requirements:

Technical Requirements Section 2.8.4.6.6.1 Potential Soil and/or Groundwater Contamination shall be revised as follows:

Delete the sentence:

"If any previously unidentified Hazardous Material is encountered during construction it will be considered a DSC in accordance with Section 1-04 of the General Provisions."

And replace with:

"Any previously unidentified Hazardous Material encountered during construction will be considered a DSC in accordance with Section 1-04 of the General Provisions, except that the pre-existing contaminated soil encountered in Medina on April 25, 2014 and associated with underground storage tanks that were previously removed by WSDOT, will not be considered a DSC."

Add the Contract Requirement:

"The Design-Builder shall address the pre-existing contaminated soil encountered in Medina on April 25, 2014 in accordance with the Design-Builder's Soil and Groundwater Management Plan (SGMP) developed in accordance with Section 2.8.3.2.3.7.

008066 Change Order No. 163 does not address additional contaminated material discovered by the Design-Builder on May 22, 2014 that is associated with underground storage tanks that were previously removed by WSDOT."

* PCO 354 - Furnish 1800-ft of Existing Bridge Anchor Strand, Contract Requirements:

Add the Contract Requirement:

"The Design-Builder shall furnish and store 1,800 linear feet of new anchor cable that shall be the same size and type as the anchor cable for

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the existing bridge. The anchor cable requirements shall be coordinated with the WSDOT Bridge Maintenance Group."

- * PCO 355 - WSDOT Bridge Maintenance Support (Anchor Cable Detension / Tensioning Operations), Contract Requirements:

Add the Contract Requirement:

"The WSDOT Bridge Maintenance Group will perform de-tensioning and re-tensioning of the existing bridge anchor cables in coordination with its regular maintenance work, as required for Pontoon joining operations; the Design-Builder shall coordinate the work to be performed by WSDOT."

- * PCO 356 - Fire Panel Issue, Contract Requirements:

Technical Requirements Section 2.35.6.2.2 Pump Control System shall be revised as follows:

In the first paragraph, after the sentence:

"The Bridge Fire Protection pumping control system shall be a complete and stand alone system."

Insert:

"The control system panels shall be XLS Panels as manufactured by Siemens, or approved equal."

- * PCO 357 - Oxblue Camera Location (East Approach), Contract Requirements:

Technical Requirements Section 2.9.6.10 Photographs and Video, as modified by 008066 Change Order No. 5, shall be revised as follows:

At the end of the first paragraph, insert:

"The camera at the SR 520 site shall also include a pan and tilt feature. The camera at the SR 520 site shall be mounted on the Design-Builder's tower crane at the east end of the bridge site within 30 Calendar Days of execution of 008066 Change Order No. 163. Both the location and position of the camera at the SR 520 site will be reviewed and commented on by WSDOT."

- * PCO 358 - BMF Window Treatments (Anodized Materials), Contract Requirements:

Technical Requirements Section 2.30.4.2.4.1 Windows/Glazing and Wall Openings shall be revised as follows:

Under "Design Criteria", delete the sentence:

"Metal panels, window framing and louvers shall be part of a manufactured aluminum framing system and factory coated with a fluoropolymer finish."

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And replace with:

"Metal panels, window framing and louvers shall be part of a manufactured aluminum framing system and factory coated with either a fluoropolymer finish or an anodized finish."

Technical Requirements Section 2.30.4.2.4.12 Flashing and Exterior Sheet Metal shall be revised as follows:

Delete the sentence:

"Flashing and exterior sheet metal shall be galvanized steel sheet, 24 gage minimum, factory coated with a fluoropolymer finish to match adjacent metal building components."

And replace with:

"Flashing and exterior sheet metal shall be galvanized steel sheet, 24 gage minimum, factory coated with either a fluoropolymer finish or an anodized finish to match adjacent metal building components."

Appendix B12 Bridge Maintenance Facility Mandatory Specifications Section 07 6200 Sheet Metal Flashing and Trim shall be revised as follows:

Delete the item:

"A. Pre-Finished Galvanized Steel: ASTM A 653/A 653M, with G90/Z275 zinc coating; minimum 0.02 inch thick base metal, shop pre-coated with PVDF coating."

And replace with:

"A. Pre-Finished Galvanized Steel: ASTM A 653/A 653M, with G90/Z275 zinc coating; minimum 0.02 inch thick base metal, shop pre-coated with PVDF coating or anodized finish."

Appendix B12 Bridge Maintenance Facility Mandatory Specifications Section 08 4413 Glazed Aluminum Curtain Walls, Part 2.1.A Aluminum-Framed Curtain Wall, shall be revised as follows:

Delete the item:

"5. Finish: High performance organic coating."

And replace with:

"5. Finish: High performance organic coating or anodized coating."

* PCO 476B - OIC Pontoon V - Core Drilling, Contract Requirements:

Technical Requirements Section 2.12.5.3.1 Pontoons Furnished by the State shall be revised as follows:

Delete the paragraph:

"The Design-Builder shall accurately locate all post-tensioning ducts,

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CHANGE ORDER**

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steel reinforcing bars and other embedded items in the vicinity of all holes that require drilling in the slabs and walls of the PFS in accordance with the Locating Embedded Items Plan. Core drilling will not be permitted in any Pontoon. All permissible concrete drilling shall be done with a rotary-hammer drill."

And replace with:

"The Design-Builder shall accurately locate all post-tensioning ducts, steel reinforcing bars and other embedded items in the vicinity of all holes that require drilling in the slabs and walls of the PFS in accordance with the Locating Embedded Items Plan. The Design-Builder shall not core drill in any Pontoon, unless otherwise shown in the Appendix M Conceptual Plans that are categorized as Contract Documents. All other permissible concrete drilling shall be done with a rotary-hammer drill. All efforts associated with concrete core drilling in the PFS shall be the responsibility of the Design-Builder."

PAYMENT:

As mutually agreed for the Work as described in this change order, WSDOT will reimburse the Design-Builder under the new lump sum item "05/08/2014 Resolution" in the amount of \$350,000. The lump sum amount shall be full compensation for all costs related to Work addressed under this change order.

TIME:

There is no adjustment to Contract Time as a result of this change order.

RELEASE:

The Design-Builder, Kiewit/General/Manson, A Joint Venture (KGM), by the signing of this change order agrees and certifies that:

Upon payment of this change order in the amount of \$350,000, any and all requests for compensation for direct and indirect costs set forth in the following Potential Change Order (PCO) issues and associated documents including, but not limited to, those documents listed herein, arising out of or pertaining to Contract No. 008066, have been satisfied in full and the State of Washington is discharged and released from any additional requests for extra compensation:

- * PCO 27 - DBIC Deletion of Concrete Roof at Maintenance Building
 - KGM Serial Letter #0078 dated February 20, 2012
 - KGM Serial Letter #0185 dated August 1, 2012
 - KGM Serial Letter #0292 dated January 15, 2013
 - KGM Serial Letter #0372 dated April 16, 2013
 - WSDOT Letter 0234 dated January 2, 2013
 - WSDOT Letter 0268 dated February 19, 2013
- * PCO 128, 302 - DBIC PT Duct Threaded Pipe and Flange Assemblies
 - KGM Serial Letter #0171 dated July 16, 2012 (PCO 128)
 - KGM Serial Letter #0221 dated September 26, 2012
 - KGM Serial Letter #0257 dated November 8, 2012
 - KGM Serial Letter #0478 dated November 8, 2013 (PCO 302)

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- KGM Serial Letter #0501 dated January 23, 2014 (PCO 128)
- WSDOT Letter 0166 dated October 18, 2012
- WSDOT Letter 0196 dated November 16, 2012
- WSDOT Letter 0578 dated March 21, 2014
- * PCO 131 - OIC Strand / Hi-Strength Bolt Testing
 - KGM Serial Letter #0113 dated May 8, 2012
 - KGM Serial Letter #0144 dated June 18, 2012
 - KGM Serial Letter #0176 dated July 17, 2012
 - KGM Serial Letter #0205 dated August 23, 2012
 - KGM Serial Letter #0412 dated June 3, 2013
 - WSDOT Letter 0092 dated June 12, 2012
 - WSDOT Letter 0105 dated July 10, 2012
 - WSDOT Letter 0341 dated April 9, 2013
 - WSDOT Letter 0398 dated May 28, 2013
 - WSDOT Letter 0425 dated June 21, 2013
- * PCO 158 - DBIC Eliminate Rebar Continuity High Rise Elevated Structure and Low Rise Barrier
 - KGM Serial Letter #0277 dated December 7, 2012
- * PCO 162 - DBIC Change Noise Wall Material at Modular Expansion Joint
 - KGM Serial Letter #0229 dated October 4, 2012
 - KGM Serial Letter #0443 dated August 9, 2013
 - WSDOT Letter 0322 dated March 21, 2013
 - WSDOT Letter 0534 dated December 3, 2013
- * PCO 208 - OIC Temperature Requirement Inside ITS Sheds
 - KGM Serial Letter #0298 dated January 21, 2013
 - KGM Serial Letter #0363 dated April 8, 2013
 - WSDOT Letter 0228 dated December 26, 2012
- * PCO 264 - Type 316 SStl Inserts in Lieu of Type 316L
 - KGM Serial Letter #0414 dated May 29, 2013
 - KGM Serial Letter #0510 dated February 28, 2014
 - WSDOT Letter 0432 dated June 27, 2013
 - WSDOT Letter 0588 dated April 3, 2014
- * PCO 281 - Grading Conflict with Eastside CDF & Conduit
 - KGM Serial Letter #0546 dated May 7, 2014
- * PCO 283 - ECC Erosion @ Evergreen Point Lid Incomplete Drainage
 - KGM Serial Letter #0512 dated March 6, 2014
 - KGM Serial Letter #0538 dated April 23, 2014
 - WSDOT Letter 0592 dated April 7, 2014
- * PCO 291 - ECC Elec Vaults Conduits in Conflict with Perm Pave (Under EGPI)
 - KGM Serial Letter #0463 dated October 15, 2013
 - KGM Serial Letter #0491 dated December 6, 2013
 - WSDOT Letter 0508 dated October 28, 2013
 - WSDOT Letter 0561 dated January 28, 2014
- * PCO 301 - Medina Mechanical Building Inspector Says Mechanical Design Must Meet 2012 Code Not 2009
 - KGM Serial Letter #0516 dated March 18, 2014
- * PCO 307 - V4 Column Embedment
 - KGM Serial Letter #0279 dated December 10, 2012
 - WSDOT Letter 0509 dated October 30, 2013

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- * PCO 326 - OIC Oil Sheen March 2014
KGM Serial Letter #0515 dated March 18, 2014
- * PCO 343 - Temporary Cofferdam Cell Moorage
KGM Change Order Proposal dated April 10, 2014
KGM Change Order Proposal dated April 10, 2014; revision dated April 22, 2014
- * PCO 347 - Additional Fish Mitigation for Joining
KGM Serial Letter #0531 dated April 18, 2014
KGM Serial Letter #0545 dated May 7, 2014
WSDOT Letter 0611 dated April 30, 2014
- * PCO 349 - Medina Site - Possible Contaminated Soil
KGM Serial Letter #0541 dated April 25, 2014
KGM Serial Letter #0542 dated April 29, 2014
WSDOT Letter 0616 dated May 6, 2014
- * PCO 354 - Furnish 1800-ft of Existing Bridge Anchor Strand
- * PCO 355 - WSDOT Bridge Maintenance Support (Anchor Cable Detensioning/Tensioning Operations)
- * PCO 356 - Fire Panel Issue
KGM Serial Letter #0526 dated April 4, 2014
WSDOT Letter 0601 dated April 15, 2014
- * PCO 357 - Oxblue Camera Location (East Approach)
- * PCO 358 - BMF Window Treatments (Anodized Materials)
KGM Serial Letter #0552 dated May 13, 2014
WSDOT Letter 0630 dated May 29, 2014
- * PCO 475B - OIC Pontoon W - Pontoon Monitoring
KGM Serial Letter #0262 dated November 16, 2012
KGM Serial Letter #0375 dated April 17, 2013
KGM Serial Letter #0401 dated May 13, 2013
KGM Serial Letter #0475 dated October 30, 2013
WSDOT Letter 0382 dated May 7, 2013
WSDOT Letter 0392 dated May 20, 2013
- * PCO 476A - OIC Pontoon V - Leaky Ballast Cells
KGM Serial Letter #0203 dated August 23, 2012
KGM Serial Letter #0240 dated October 22, 2012
KGM Serial Letter #0375 dated April 17, 2013
KGM Serial Letter #0475 dated October 30, 2013
WSDOT Letter 0135 dated August 24, 2012
WSDOT Letter 0151 dated September 7, 2012
WSDOT Letter 0220 dated December 20, 2012
WSDOT Letter 0382 dated May 7, 2013
- * PCO 476B - OIC Pontoon V - Core Drilling
KGM Serial Letter #0253 dated November 2, 2012
KGM Serial Letter #0273 dated December 3, 2012
KGM Serial Letter #0315 dated February 14, 2013
KGM Serial Letter #0329 dated February 25, 2013
WSDOT Letter 0270 dated February 19, 2013
WSDOT Letter 0335 dated April 2, 2013
- * PCO 477A - OIC Pontoon U - Ballast Resequencing
KGM Serial Letter #0225 dated September 28, 2012
KGM Serial Letter #0263 dated November 16, 2012

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KGM Serial Letter #0375 dated April 17, 2013
KGM Serial Letter #0475 dated October 30, 2013
WSDOT Letter 0161 dated October 9, 2012
WSDOT Letter 0382 dated May 7, 2013

* PCO 479 - Leaky Pontoon A Cells

KGM Serial Letter #0426 dated June 21, 2013
KGM Serial Letter #0475 dated October 30, 2013
WSDOT Letter 0593 dated April 7, 2014

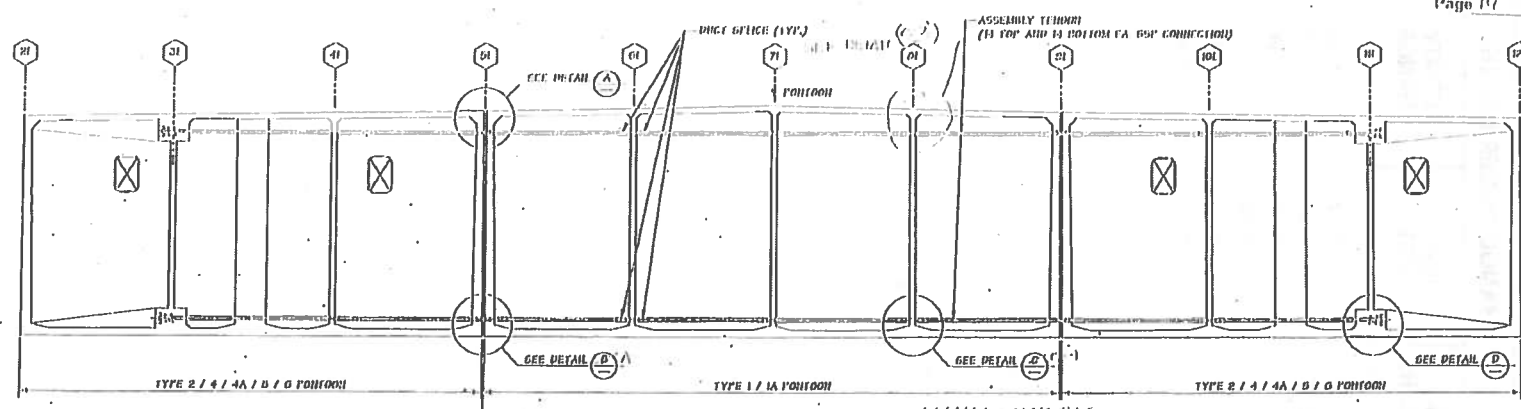
**WASHINGTON STATE
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CONTRACT NO: 008066				CHANGE ORDER NO: 163			
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1089	01		05/08/2014 RESOLUTION	L.S.	0.00	0.00	174,403.00
1089	03		05/08/2014 RESOLUTION	L.S.	0.00	0.00	75,089.00
1089	04		05/08/2014 RESOLUTION	L.S.	0.00	0.00	2,808.00
1089	05		05/08/2014 RESOLUTION	L.S.	0.00	0.00	23,900.00
1089	06		05/08/2014 RESOLUTION	L.S.	0.00	0.00	37,600.00
1089	17		05/08/2014 RESOLUTION	L.S.	0.00	0.00	36,200.00

350,000.00
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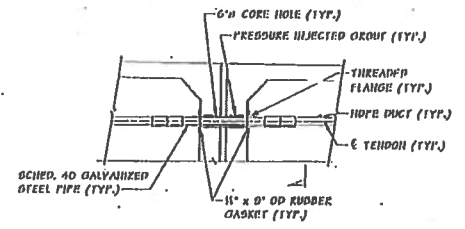


SECTION A-A

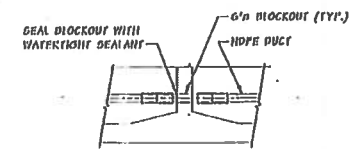
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- 12/19/11 - RFP #55
- 6/13/12 - RFP #289
- 7/26/12 - RFP #327

NOTES:

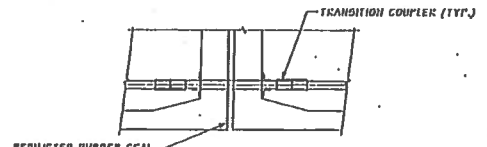
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2. IMMEDIATELY AFTER CORING HOLE IN INTERIOR WALL, INSTALL STEEL PIPE THROUGH HOLE AND TIGHTEN THREADED FLANGE TO SEAL GASKET. STEEL PIPE FABRICATION SHALL BE AVAILABLE WITH CAPS ON ENDS ON GROUT VENTS AND READY FOR INSTALLATION WHEN CORING COMMENCED.



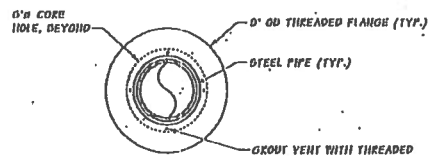
DETAIL A
 FOR DETAILS NOT SHOWN SEE DETAIL B



DETAIL C
 TYPICAL AT INTERIOR WALLS

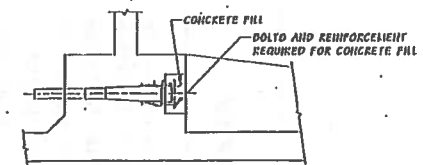


DETAIL B
 FOR DETAILS NOT SHOWN SEE DETAIL A



DETAIL E

GROUT VENT WITH THREADED FITTING AND CAPS (4 EACH). INJECT GROUT AT LOWEST VENT. WASTED GROUT AT UPPER VENT. ALL OTHER VENTS REMAIN CLOSED.

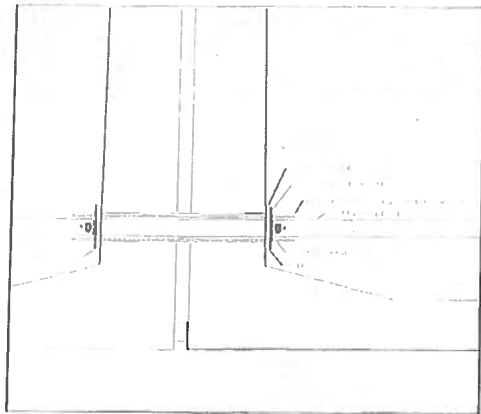


DETAIL D
 SEE RFP TECHNICAL REQUIREMENTS, CHAPTER 2.12 FOR CONCRETE FILL REQUIREMENTS.

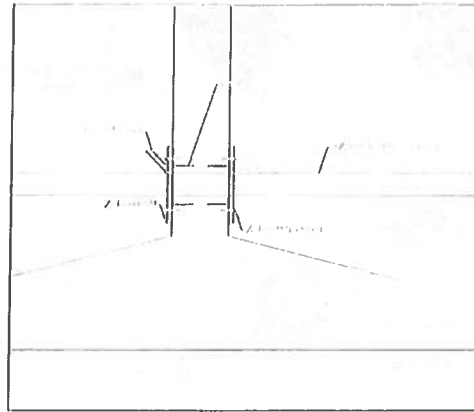
SHEET NO.

DATE	BY	REVISION
02/20/11	WJH	REV. 1 - SEE 2.12 FOR DETAIL C
02/20/11	WJH	REV. 2 - SEE DETAIL A
02/20/11	WJH	REV. 3 - SEE DETAIL B
02/20/11	WJH	REV. 4 - SEE DETAIL D
02/20/11	WJH	REV. 5 - SEE DETAIL E

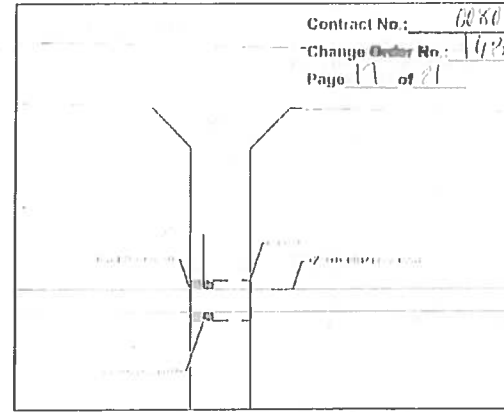
Washington State Department of Transportation BRIDGE AND STRUCTURES OFFICE	APPENDIX M23 OUTFITTING & ASSEMBLY TECHNICAL REQUIREMENTS PONTOON ASSEMBLY DETAILS 5		



**KGM PROPOSED DESIGN
DETAIL A**



**KGM PROPOSED DESIGN
DETAIL C-1**

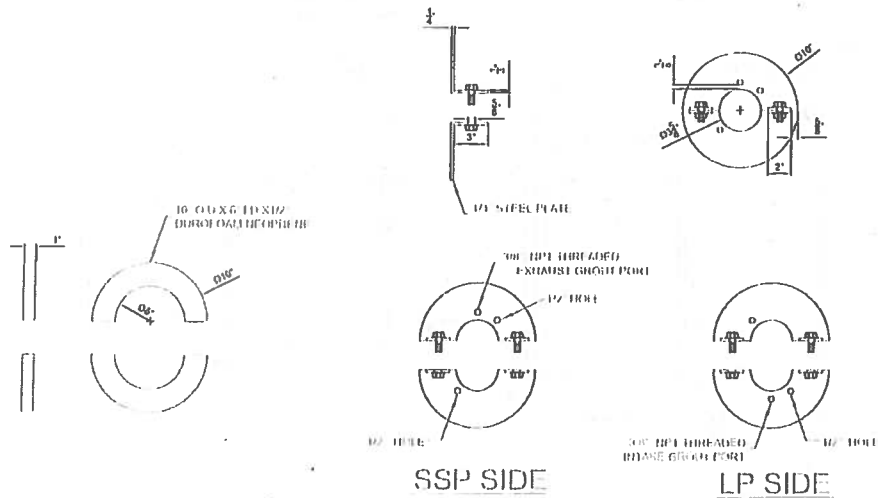


**KGM PROPOSED DESIGN
DETAIL C-2**

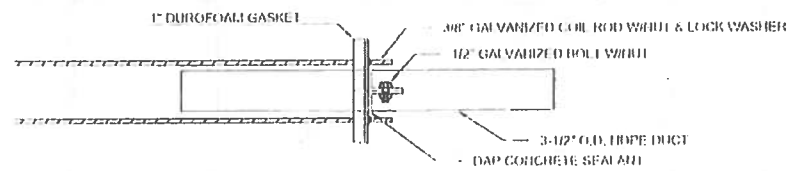
Contract No.: 008046
Change Order No.: 143
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No.	Date	By	Revision



**KGM PROPOSED DESIGN
DETAIL E**

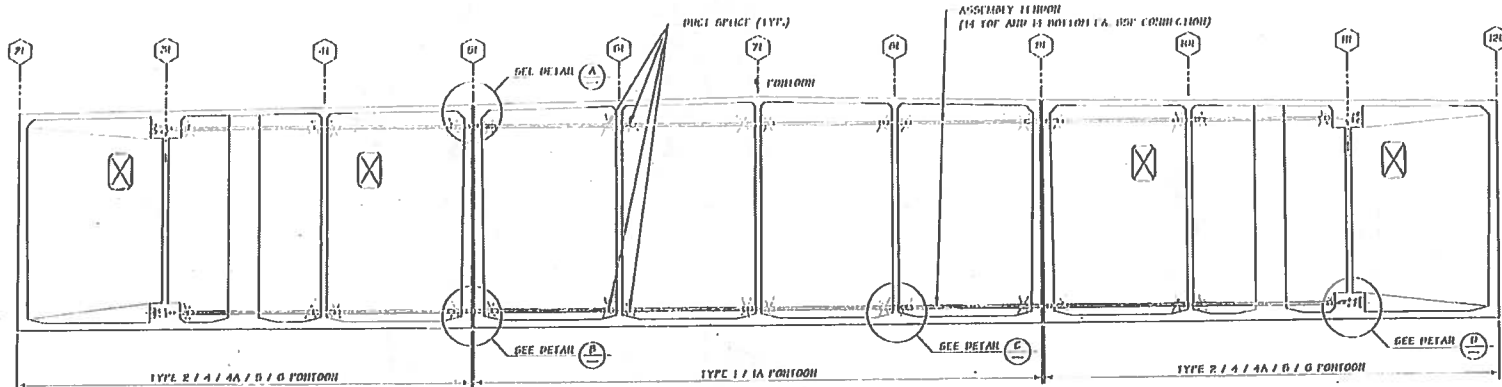


SR 520 Floating Bridge and Landings
Kiewit / General / Manson A Joint Venture
Corporate Campus East
3015 112th Avenue S.E. - Suite 200
Bellevue, WA, 98004

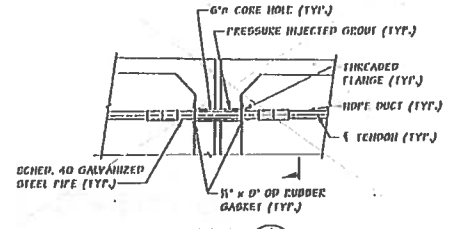
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1 of 1

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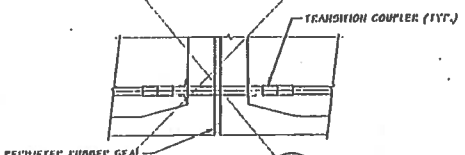
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SECTION A-A
 11/4/11 - RFI #16
 12/19/11 - RFI #55
 6/13/12 - RFI #289

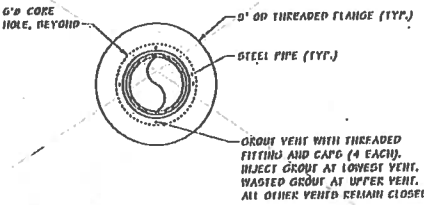


DETAIL A
 FOR DETAILS NOT SHOWN SEE DETAIL B

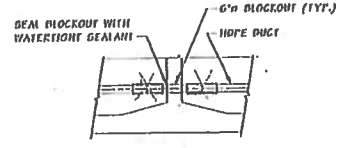


DETAIL B
 FOR DETAILS NOT SHOWN SEE DETAIL A

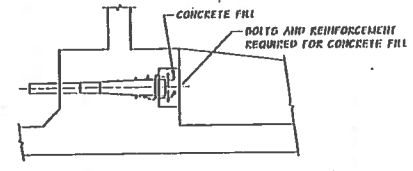
- NOTES:
1. TRANSITION COUPLER SHALL JOIN PIPE TO STEEL PIPE.
 2. IMMEDIATELY AFTER CORING HOLE IN INTERIOR WALL, INSTALL STEEL PIPE THROUGH HOLE AND TIGHTEN THREADED FLANGE TO SEAL GASKETS. STEEL PIPE FABRICATION SHALL BE AVAILABLE WITH CAPS ON CAPS ON GROUT VENTS AND READY FOR INSTALLATION WHEN COING COMMENCED.



DETAIL E



DETAIL C
 TYPICAL AT INTERIOR WALLS



DETAIL D
 SEE RFP TECHNICAL REQUIREMENTS, CHAPTER 2.12 FOR CONCRETE FILL REQUIREMENTS.

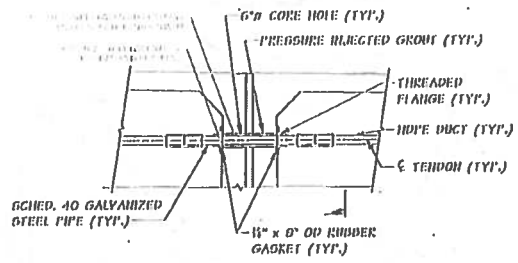
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003	REV. B	07/11	
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005	REV. D	07/11	
006	REV. E	07/11	
007	REV. F	07/11	
008	REV. G	07/11	
009	REV. H	07/11	
010	REV. I	07/11	
011	REV. J	07/11	
012	REV. K	07/11	
013	REV. L	07/11	
014	REV. M	07/11	
015	REV. N	07/11	
016	REV. O	07/11	
017	REV. P	07/11	
018	REV. Q	07/11	
019	REV. R	07/11	
020	REV. S	07/11	
021	REV. T	07/11	
022	REV. U	07/11	
023	REV. V	07/11	
024	REV. W	07/11	
025	REV. X	07/11	
026	REV. Y	07/11	
027	REV. Z	07/11	
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185	REV. GB	07/11	
186	REV. GC	07/11	
187	REV. GD	07/11	
188	REV. GE	07/11	
189	REV. GF	07/11	
190	REV. GG	07/11	
191	REV. GH	07/11	
192	REV. GI	07/11	
193	REV. GJ	07/11	
194	REV. GK	07/11	
195	REV. GL	07/11	
196	REV. GM	07/11	
197	REV. GN	07/11	
198	REV. GO	07/11	
199	REV. GP	07/11	
200	REV. GQ	07/11	
201	REV. GR	07/11	
202	REV. GS	07/11	
203	REV. GT	07/11	
204	REV. GU	07/11	
205	REV. GV	07/11	
206	REV. GW	07/11	
207	REV. GX	07/11	
208	REV. GY	07/11	
209	REV. GZ	07/11	
210	REV. HA	07/11	
211	REV. HB	07/11	
212	REV. HC	07/11	
213	REV. HD	07/11	
214	REV. HE	07/11	
215	REV. HF	07/11	
216	REV. HG	07/11	
217	REV. HH	07/11	
218	REV. HI	07/11	
219	REV. HJ	07/11	
220	REV. HK	07/11	
221	REV. HL	07/11	
222	REV. HM	07/11	
223	REV. HN	07/11	
224	REV. HO	07/11	
225	REV. HP	07/11	
226	REV. HQ	07/11	
227	REV. HR	07/11	
228	REV. HS	07/11	
229	REV. HT	07/11	
230	REV. HU	07/11	
231	REV. HV	07/11	
232	REV. HW	07/11	
233	REV. HX	07/11	
234	REV. HY	07/11	
235	REV. HZ	07/11	
236	REV. IA	07/11	
237	REV. IB	07/11	
238	REV. IC	07/11	
239	REV. ID	07/11	
240	REV. IE	07/11	
241	REV. IF	07/11	
242	REV. IG	07/11	
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260	REV. IY	07/11	
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262	REV. JA	07/11	
263	REV. JB	07/11	
264	REV. JC	07/11	
265	REV. JD	07/11	
266	REV. JE	07/11	
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268	REV. JG	07/11	
269	REV. JH	07/11	
270	REV. JI	07/11	
271	REV. JJ	07/11	

PONTON V. ONLY

Contract No.: 0056444
 Change Order No.: 163
 Page 9 of 21



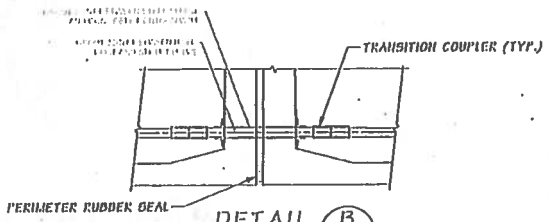
WSDOT DESIGN



DETAIL A
 FOR DETAILS NOT SHOWN SEE DETAIL B

UPPER PONTOON JOINT

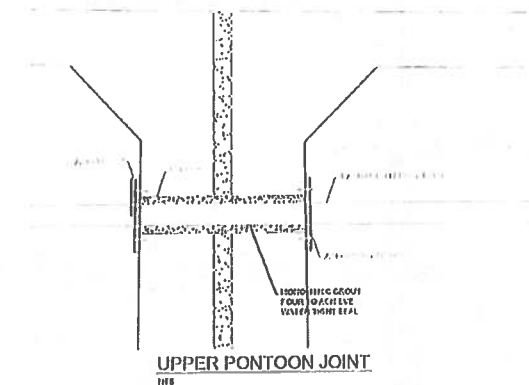
- NOTES:**
- 1) THE HDPE TO STEEL TRANSITION COUPLER WAS ELIMINATED WITH RFI # 016. SCHWAGER DAVIS PROPOSED TO RUN A CONTINUOUS HDPE DUCT. THIS RFI HAS BEEN APPROVED BY WSDOT.
 - 2) AFTER ELIMINATING THE TRANSITION COUPLER WHICH JOINED THE HDPE DUCT & STEEL THREADED PIPE, KGM BELIEVES WE CAN PROVIDE A SUPERIOR PRODUCT BY ELIMINATING THE STEEL THREADED PIPE FLANGE ASSEMBLIES ALL TOGETHER, BY ELIMINATING THE STEEL SLEEVE & FLANGES WE REDUCE THE NUMBER OF GROUT JOINTS WHICH CREATE THE WATER TIGHT SEAL.
 - 3) THE KGM PROPOSED SOLUTION ELIMINATES POSSIBLE AIR POCKETS CAUSED BY A MISALIGNED HDPE DUCT RUNNING THROUGH THE STEEL THREADED PIPE FLANGE ASSEMBLY.
 - 4) THE PROPOSED GROUT POUR BACK WILL BE A MONOLITHIC POUR OPPOSED TO A TWO STAGE POUR; POUR 1 BETWEEN HDPE DUCT AND STEEL SLEEVE AND POUR 2 BETWEEN STEEL SLEEVE AND CONCRETE PONTOON WALL.



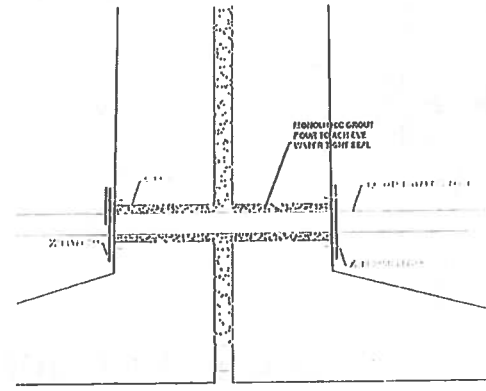
DETAIL B
 FOR DETAILS NOT SHOWN SEE DETAIL A

LOWER PONTOON JOINT

KGM PROPOSED DESIGN



UPPER PONTOON JOINT



LOWER PONTOON JOINT

No.	Date	By	Revised

SR 520 Floating Bridge and Landings

PT GROUT

PT POUR BACK

Kiewit / General / Manson A Joint Venture

Corporate Campus East
 3025 S. 222nd Avenue N.E.
 Bellevue, WA 98008

Date: 7/10/12
 Drawn: BWI
 Checked:
 Scale: N/A

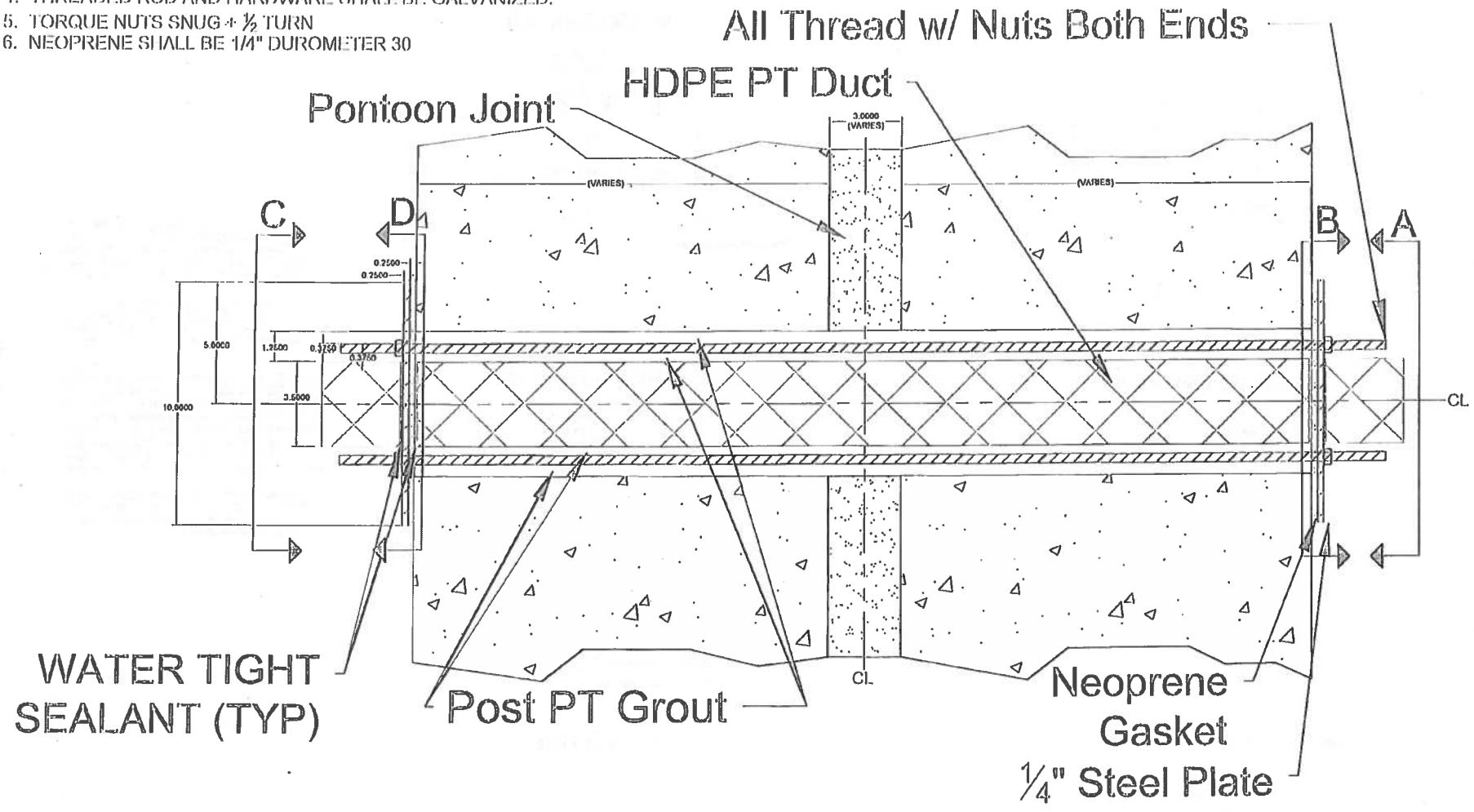
Sheet
 2 of 2

File: I:\eng\520\Drawings\520-520-11\Drawings\520-520-11-01.dwg

Contract No.: 003846
 Change Order No.: 149
 Page 10 of 21

(PONTOON V, ONLY)

- Notes:**
1. GROUT PORTS NOT SHOWN HERE FOR CLARITY (SEE DETAIL A)
 2. STEEL PLATE SHALL BE 1/4" GALVANIZED A588.
 3. ALL THREAD ROD SHALL BE 3/16" DIA. LENGTHS SHALL BE 44" @ BOTTOM AND 36" @ TOP (CORE LENGTH VARIES)
 4. THREADED ROD AND HARDWARE SHALL BE GALVANIZED.
 5. TORQUE NUTS SNUG + 1/2 TURN
 6. NEOPRENE SHALL BE 1/4" DUROMETER 30



No.	Date	By	Revise

IBIC THREADED PIPE FLANGE
 PONTOON V ALTERNATIVE

SR 520 Floating Bridge and Landings

Kiewit / General / Manson A
 Joint Venture

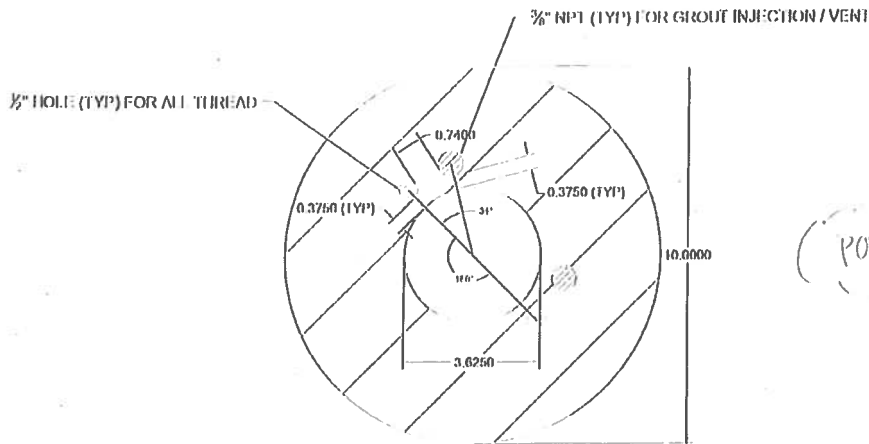
Corporate Campus Bldg.
 2315 13th Avenue N.E. - Suite 100
 Bellevue, WA 98004

SSR TO LP FT CORE
 GROUND LOG FOR
 WATERSTOP DESIGN

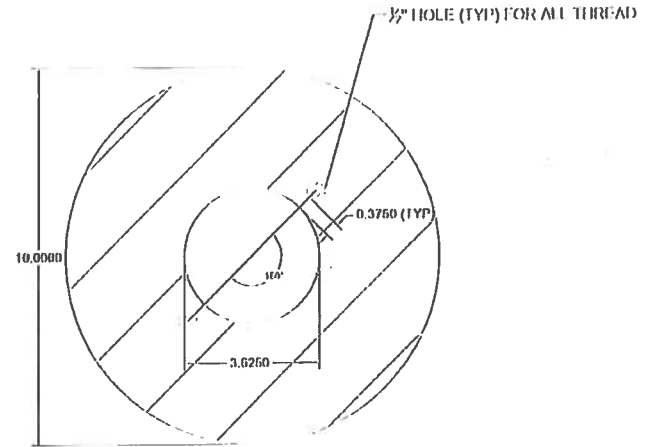
Date: 11/7/12
 Drawn: HKK
 Checked:
 Scale: N/A

Sheet
 1 of 2

Detail A
(STEEL PLATE w/ Grout Ports)

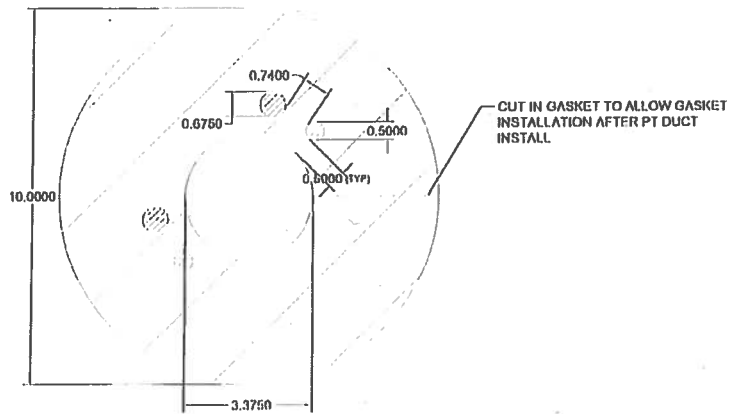


Detail C
(STEEL PLATE w/out Grout Ports)

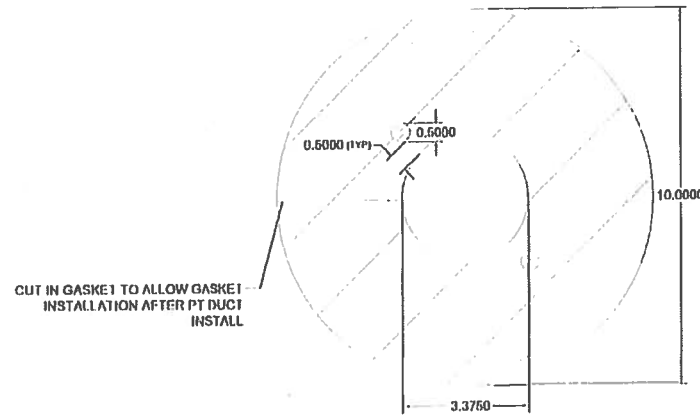


PONTON V, ONLY

Detail B (NEOPRENE GASKET)



Detail D (NEOPRENE GASKET)



Contract No. 00160116
Change Order No. 162
Page 71 of 71

No.	Date	By	Revision

DBIC THREADED PIPE FLANGE
PONTON V ALTERNATIVE

SSP TO U.S. FT. COUSE
GRADING FOR
WATERSTOP DESIGN DETAILS

SR 520 Floating Bridge and Landings
Kiewit / General / Manson A
Joint Venture

Corporate Office:
9015 132nd Avenue N.E. - Suite 100
Bellevue, WA 98007

Date: 11/7/12
Drawn: IKK
Checked:
Scale: N/A

Sheet
2 of 2

Contract 08066

Change Order 191 – 11-13-2014 Project Resolution

Change Order 180 - 9/12/14 Project Resolution


**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 12/17/14
Page 1 of 12

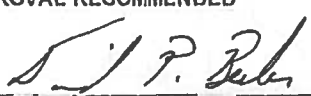
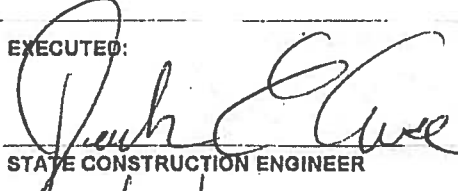
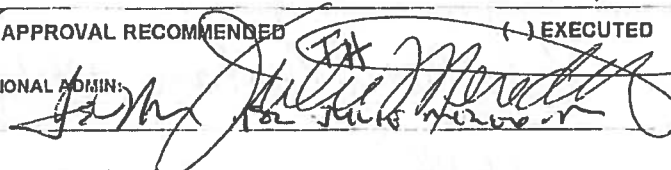
CONTRACT NO: 008066 FEDERAL AID NO: BR-0520 (047)
 CONTRACT TITLE: SR 520 / I-5 TO MEDINA - EVERGREEN POINT FLOATING
 CHANGE ORDER NO: 180 09/12/2014 PROJECT RESOLUTION
 PRIME CONTRACTOR: SW0106139 KIEWIT/GENERAL/MANSON, A JOINT
 33455 6TH AVE S
 FEDERAL WAY WA 98003-6335

Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications

Change proposed by Contractor

ENDORSED BY:  _____ CONTRACTOR 12/18/14 _____ DATE	SURETY CONSENT: _____ ATTORNEY IN FACT _____ DATE
---	---

ORIGINAL CONTRACT AMOUNT: 586,561,000.00
 CURRENT CONTRACT AMOUNT: 752,826,574.00
 ESTIMATED NET CHANGE THIS ORDER: 550,000.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 753,376,574.00
 Approval Required: () Region Olympia Service Center () Local Agency

<input checked="" type="checkbox"/> APPROVAL RECOMMENDED () EXECUTED  PROJECT ENGINEER - Engineering Manager December 28, 2014 _____ DATE	EXECUTED:  STATE CONSTRUCTION ENGINEER 12/31/14 _____ DATE
<input checked="" type="checkbox"/> APPROVAL RECOMMENDED () EXECUTED REGIONAL ADMIN:  BY: 12/31/14 _____ DATE	OTHER APPROVAL WHEN REQUIRED _____ SIGNATURE DATE _____ REPRESENTING


**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 12/17/14
Page 1 of 2

CONTRACT NO: 008066 FEDERAL AID NO: BR-0520 (047)
CONTRACT TITLE: SR 520 / I-5 TO MEDINA - EVERGREEN POINT FLOATING
CHANGE ORDER NO: 180 09/12/2014 PROJECT RESOLUTION

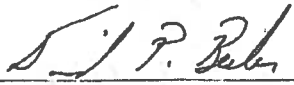
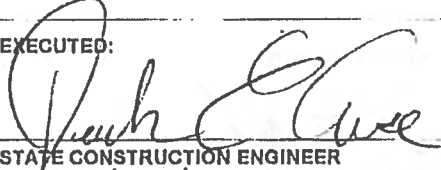
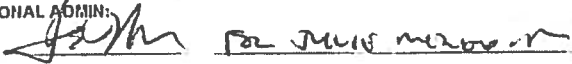
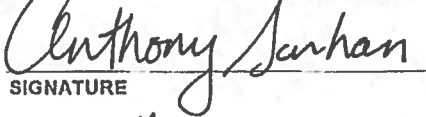
PRIME CONTRACTOR: SW0106139 KIEWIT/GENERAL/MANSON, A JOINT
33455 6TH AVE S
FEDERAL WAY WA 98003-6335

- Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications
 Change proposed by Contractor

<p>ENDORSED BY:  _____ CONTRACTOR 12/18/14 _____ DATE</p>	<p>SURETY CONSENT: _____ ATTORNEY IN FACT _____ DATE</p>
---	--

ORIGINAL CONTRACT AMOUNT: 586,561,000.00
CURRENT CONTRACT AMOUNT: 752,826,574.00
ESTIMATED NET CHANGE THIS ORDER: 550,000.00
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Approval Required: () Region Olympia Service Center () Local Agency

<p><input checked="" type="checkbox"/> APPROVAL RECOMMENDED () EXECUTED  _____ PROJECT ENGINEER - Engineering Manager December 28, 2014 _____ DATE</p>	<p>EXECUTED:  _____ STATE CONSTRUCTION ENGINEER 12/31/14 _____ DATE</p>
<p>() APPROVAL RECOMMENDED <i>TH</i> () EXECUTED REGIONAL ADMIN:  _____ BY: 12/31/14 _____ DATE</p>	<p>OTHER APPROVAL WHEN REQUIRED  _____ SIGNATURE 12/31/14 DATE FHWA _____ REPRESENTING</p>

WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER

DATE: 12/17/14
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CONTRACT NO: 008066

CHANGE ORDER NO: 180

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The first paragraph above is revised to read:

All work, materials, and measurements to be in accordance with the request for proposal (RFP) and the contract documents for this project.

DESCRIPTION:

This change order incorporates both WSDOT-Initiated Changes and Design-Builder Initiated Changes in accordance with General Provisions Section 1-04.4 to provide for the resolution of potential change order (PCO) issues associated with Contract No. 008066 as agreed to on September 12, 2014 between WSDOT and the Design-Builder, and as described in this change order.

CONTRACT REQUIREMENTS

PCO 142H Modifications for Temp and Perm Tolling Pads for Generator

WSDOT Standard Specification Section 8-20.3(4) Foundations shall be revised as follows:

In the first paragraph, after the sentence:

"Concrete for posts, standards, pedestals, and cabinets shall be constructed of concrete Class 3000."

Insert:

"The concrete for the generator foundation for the tolling structures shall be constructed of concrete Class 4000."

The dimensions for the generator foundation shall be as shown in sheet 11 of 12 of this change order.

PCO 219A OIC Bird Ramp Furnish and Install

008066 Change Order No. 114 shall be supplemented as follows:

After the paragraph which reads:

"The Design-Builder shall submit a draft of the permanent bird ramp design to WSDOT for review and comment. The Design-Builder shall submit the final design to WSDOT within two weeks of the Design-Builder's receipt of WSDOT's review comments."

Add:

"The Design-Builder shall construct the permanent bird ramps in the drainage wells of the Type 2 and Type 5 SSPs in accordance with the final design."

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CONTRACT NO: 008066

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PCO 315 Flagging Spec for Temp Freeway Off Ramp

Technical Requirements Section 2.22.4.3.2.2, Controlled Access, shall be modified as follows:

After the paragraph:

"For an approved break in limited access, the Design-Builder shall use flaggers to prohibit unauthorized use during working hours, and physical means such as barriers or locked gates during non-working hours."

Insert the paragraph:

"At Evergreen Point Road, the Design-Builder shall be responsible for prohibiting unauthorized access to the westbound construction off-ramp and eastbound construction on-ramp during working hours. Physical means such as barrier or locked gates shall be required during non-working hours."

PCO 335A OIC Insurance Requirements USDOT Changes with Cost

Any cost issues associated with 008066 Change Order No. 151 Rev. 2 which added the United States Department of Transportation (USDOT) as an Indemnified Party on the Project shall be considered as resolved.

PCO 337 ECC Conduit at Temporary Toll Facility

The Design-Builder shall develop a plan to mitigate impacts associated with the construction of the following temporary AET infrastructure foundations between Evergreen Point Road and 84th Ave NE;

- * South leg of the eastbound ATM gantry
- * ATM cabinet foundation,

resulting from the as-built condition of the ITS duct bank at 84th Ave NE as installed under the SR 520 Eastside Transit and HOV Project.

PCO 337A ECC Conduit at Temporary Toll Facility Acceleration for Aug 1 Tolling Date

The Design-Builder shall re-sequence construction schedule activities related to the fabrication and installation of the temporary and permanent AET gantries and support infrastructure between Evergreen Point Road and 84th Avenue NE.

PCO 350 Anchor Gallery Bushing Keeper Plate Incorrect Dimension

The following paragraph shall be inserted at the end of Technical Requirements Section 2.12.5.16.5 Anchor Gallery Hardware:

"The bolt hole diameter for the Bushing Keeper Plate on Bridge Sheet No. AG7 of the Outfitting and Assembly Minimum Technical Requirements (Appendix M23) shall be increased from 1-inch to 2-inch as shown on sheet 12 of 12 of 008066 Change Order No. 180. Washers for the keeper

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Page 4 of 17

CONTRACT NO: 008066

CHANGE ORDER NO: 180

plates shall be sized accordingly to account for the 2-inch bolt hole diameter. Anti-seizing compound shall be applied to the threads of the stainless steel keeper plate bolts in accordance with the manufacturer's written instructions."

PCO 359 DBIC Eliminate Mix Design Test for Mix Design 4846SE CTC Wall Mix

Technical Requirements Section 2.12.5.10.2 Concrete for pontoons shall be modified as follows:

Delete the sentence in the third paragraph that reads:

"The Design-Builder shall perform the following tests as part of the concrete mix design submittal."

And replace with the sentence:

"The Design-Builder shall perform the following tests as part of the concrete mix design submittal for all mix designs except for Pontoon concrete mix design 4846 SE."

After the bulleted test for concrete mix design submittal which reads as follows:

"* Visual Stability Index (VSI) in accordance with the Appendix to ASTM C1611."

Insert the following:

"The Design-Builder shall perform the following tests as part of the Pontoon concrete mix design 4846 SE submittal:

- * Compressive strength at one, two, seven, 14, 28 and 56 days in accordance with AASHTO T22.
- * Rapid chloride permeability at 28 and 56 days in accordance with AASHTO T277.
- * Shrinkage in accordance with AASHTO T 160.
- * Splitting tensile strength at 28 days in accordance with ASTM C496.
- * Large batch in accordance with AASHTO R39.
- * Passing ability of SCC by J-ring in accordance with ASTM C1621.
- * Permeability test in accordance with AASHTO T 277.
- * Maximum slump and maximum slump spread in accordance with ASTM C1611.
- * Visual Stability Index (VSI) in accordance with Appendix to ASTM C1611."

PCO 371 Open East Navigation Channel July 2014

Technical Requirements Section 2.21.3.1.2.1 General Marine Work Restrictions shall be supplemented at the end of the section with the following bulleted restriction:

"* Friday July 18, 2014 through Monday, July 21, 2014:"

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CONTRACT NO: 008066

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- * The Design-Builder shall reopen the east navigation channel, at the Floating Bridge as shown in Appendix M1 between the hours of Friday 6:00 p.m. and 9:00 p.m.
- * The closure or blockage of the east navigation channel as defined in Section 2.12.3.5 will be allowed to be reinstalled prior to Monday 6:00 a.m.
- * Draw span openings during the daytime will not be allowed, and will be restricted to the hours of 11:00 p.m. through 5:00 a.m. of following day.

PCO 374 WSDOT Directed Work Suspension 7-22-14

The Design-Builder shall suspend all work operations and vacate the worksite on Lake Washington along the SR 520 corridor and in the City of Medina by 2:00 p.m. Tuesday, July 22, 2014.

All work operations may resume after 7:30 p.m. Tuesday, July 22, 2014.

This suspension of work will not be considered to include worksites located at Kenmore or the Port of Tacoma.

PCO 377 Mageba Joint Width

Technical Requirements Section 2.12.4.2.9.2.1 Modular Expansion Joint Systems shall be modified as follows:

Delete the last two bulleted design requirements listed after the sentence in the first paragraph that reads as:

"Modular expansion joints at both ends of the Transition Spans shall be designed to accommodate the following:"

and replace with:

- * Installation of the RSUP and HCT expansion joints in the future with minimum disruption to vehicular traffic.
- * Adequate block out dimensions to accommodate the installation of larger modular expansion joint systems if required for the RSUP area and for the Future Six-Lane Plus Two HCT Configuration.
- * Installation of a skid-resistant steel plate to cover the joint across the RSUP area."

Delete the paragraph:

"The modular expansion joints for the East Transition Span / North Bridge shall be sized, designed, and fabricated to accommodate movements of the Future Six-Lane Plus Two HCT Configuration without need for replacement."

and replace with:

"The modular expansion joints for the East Transition Span / North Bridge shall be sized, designed, and fabricated to accommodate movements of the the RSUP area and the Future Six-Lane Plus Two HCT Configuration."

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CONTRACT NO: 008066

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Technical Requirements Section 2.12.4.2.9.2.1 as revised by 008066 Change Order No. 163 shall be modified as follows:

Delete the paragraph:

"The bottom and all sides of each modular expansion joint shall be contained in a complete concrete enclosure, full length and width of each joint, to mitigate traffic noise from the modular expansion joint. Gaps in the enclosure shall be minimized, and are only allowed so as to provide clearance for required movements between the Floating Bridge and Transition Spans. Enclosure access doors that are provided for maintenance and inspection access may use alternative sound mitigation materials with a minimum STC rating of 30."

and replace with:

"The bottom and all sides of each modular expansion joint shall be contained in a complete concrete enclosure, full length and width of each joint including the section of the joint that extends through the RSUP area, to mitigate traffic noise from the modular expansion joint. Gaps in the enclosure shall be minimized, and are only allowed so as to provide clearance for required movements between the Floating Bridge and Transition Spans. Enclosure access doors that are provided for maintenance and inspection access may use alternative sound mitigation materials with a minimum STC rating of 30."

Modify Technical Requirements Section 2.12.4.2.9.14 West Transition Span and Pier 36N&S as follows:

Delete the last paragraph of this section and replace with the following:

"The Design-Builder shall design all connections of the WCB superstructure to Pier 36S utilizing embedded anchor bolts or anchor bolt sleeves and reinforcing steel. These anchor bolts or anchor bolt sleeves and reinforcing steel, including the construction joint surface preparation, shall be furnished and installed in Pier 36S by the Design-Builder."

Technical Requirements Section 2.12.5.17.5 West Transition Span and Pier 36N&S as revised under 008066 Change Order No. 085 shall be modified as follows:

The first bulleted element listed after the paragraph:

"The Design-Builder shall be responsible for the installation and construction of the elements as shown on the Conceptual Plans (Appendix M1), the West Connection Bridge Drawings (Appendix M3), and as indicated below:"

shall be deleted and replaced with:

"* Modular expansion joint between the WCB and the West Transition Spans at Pier 36S."

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CONTRACT NO: 008066

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The Structures Minimum Standards (Appendix B2), Division 6 - Structures, Section Concrete Structures, supplementing the Construction Requirements of Section 6-02.3 for Modular Expansion Joint System shall be modified as follows:

Delete the sentence on page 37, lines 5-7 which reads:

"The modular expansion joint system shall extend continuously across the full width of the bridge deck and up into the traffic barrier as shown in the Plans."

and replace with:

"The modular expansion joint system shall extend continuously across the full width of the bridge deck and up into the traffic barriers as shown in the Plans except for the RSUP area."

PCO xxx Disputed Gerwick Invoices

This change order resolves all payment issues related to the following three Ben C. Gerwick related invoices submitted to WSDOT for reimbursement under the item, "CO #58 FA PPS Add'l Underwater Insp/Repair Plan":

- * KGM Change Order Proposal Dated 3/4/14 for PCO #177C
Description: Cofferdam Barge / Launching / Cofferdam Operation and Contingency Plan (February 2014)
Proposal Total = \$25,922.
- * KGM Change Order Proposal Dated 4/11/14 for PCO #177C
Description: Cofferdam Barge Launching / Cofferdam Operation and Contingency Plan (February 2014)
Proposal Total = \$6,935
- * KGM Change Order Proposal Dated 5/2/14 for PCO #177C
Description: Cofferdam Barge Launching / Cofferdam Operation and Contingency Plan (April 2014)
Proposal Total = \$1,031

PCO xxx Brown-Del Bene Settlement

All issues associated with impacts to the Brown / Del Bene property (State Parcel #1-23165) located at 3201 Evergreen Point Road, Medina, WA by the Design-Builder are considered resolved as of July 22, 2014. Any future Design-Builder impacts to the Brown/Del Bene property which occur after this date and result in additional costs will be the responsibility of the Design-Builder.

PAYMENT:

As mutually agreed for the Work as described in this change order, WSDOT will reimburse the Design-Builder under the new lump sum item "09/12/2014 Project Resolution" in the amount of \$550,000. The lump sum amount shall be full compensation for all direct and indirect costs related to Work addressed under this change order.

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CONTRACT NO: 008066

CHANGE ORDER NO: 180

TIME:

There shall be no extension of Contract Time as a result of this change order.

RELEASE:

The Design-Builder, Kiewit/General/Manson, A Joint Venture (KGM), by the signing of this change order agrees and certifies that:

Upon payment of this change order in the amount of \$550,000 any and all requests for compensation for direct and indirect costs or additional time set forth in the following Potential Change Order (PCO) issues and associated documents including but not limited to, those documents listed herein arising out of or pertaining to Contract No. 008066, have been satisfied in full and the State of Washington is discharged and released from any additional requests for extra compensation or time related to the listed PCO issues.

- * PCO 142H Modifications to Temp and Penn Tolling Pads for Generator
- * PCO 219A OIC Bird Ramp Furnish and Install
KGM Serial Letter 0554 dated May 20, 2014
WSDOT Letter 0283 dated February 28, 2013
- * PCO 315 Flagging Spec for Temp Freeway Off Ramp
KGM Serial Letter 0498 dated January 21, 2014
KGM Serial Letter 0598 dated September 4, 2014
WSDOT Letter 0470 dated August 22, 2013
WSDOT Letter 0590 dated April 3, 2014
- * PCO 335A - OIC Insurance Requirements USDOT Changes with Cost
- * PCO 337 ECC Conduit at Temporary Toll Facility
- * PCO 337A ECC Conduit at Temporary Toll Facility Acceleration for Aug 1 Tolling Date
KGM Serial Letter #0525 dated April 2, 2013
KGM Serial Letter #0528 dated April 15, 2013
KGM Serial Letter 548 dated May 8, 2014
KGM Serial Letter #558 dated May 27, 2014
KGM Serial Letter 559 dated May 29, 2014
KGM Serial Letter 572 dated July 1, 2014
KGM Serial Letter 0589 dated August 19, 2014
WSDOT Letter 0624 dated May 19, 2014
WSDOT Letter 0632 dated May 29, 2014
WSDOT Letter 0661 dated July 28, 2014
WSDOT Letter 0673 dated August 8, 2014
- * PCO 350 Anchor Gallery Bushing Keeper Plan Incorrect Dimension
KGM Serial Letter dated July 7, 2014
WSDOT Letter 0669 dated August 8, 2014
- * PCO 359 DBIC Eliminate Mix Design Test for Mix 4846SE CTC Wall Mix
KGM Serial Letter #0549 dated May 13, 2014

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DEPARTMENT OF TRANSPORTATION
CHANGE ORDER

DATE: 12/17/14
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CONTRACT NO: 008066

CHANGE ORDER NO: 180

WSDOT Letter 0582 dated March 28, 2014
WSDOT Letter 0622 dated May 15, 2014

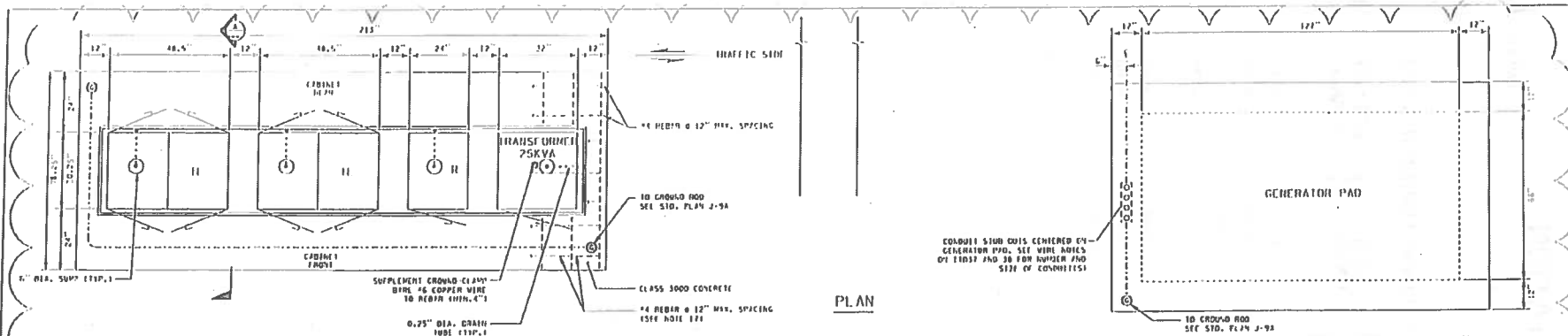
- * PCO 371 Open East Navigation Channel July 2014
KGM Serial Letter #0582 dated July 17, 2014
WSDOT Letter 0652 dated July 15, 2014
- * PCO 374 WSDOT Directed Work Suspension 7-22-14
WSDOT Letter 0654 dated July 22, 2014
- * PCO 377 Mageba Joint Width
- * PCO xxx Brown-Del Bene Settlement
WSDOT Letter 0712 dated October 9, 2014
- * PCO xxx Disputed Gerwick Invoices CO 58

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DEPARTMENT OF TRANSPORTATION
CHANGE ORDER

DATE: 12/17/14
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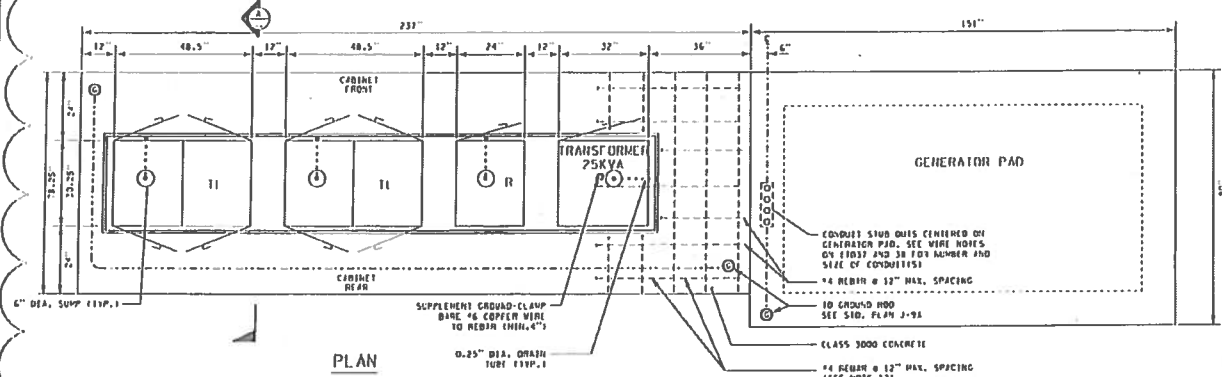
CONTRACT NO: 008066				CHANGE ORDER NO: 180			
ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE
1093	01		09/12/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	237,800.00
1093	02		09/12/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	3,400.00
1093	03		09/12/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	178,200.00
1093	04		09/12/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	18,700.00
1093	05		09/12/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	6,800.00
1093	06		09/12/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	28,400.00
1093	07		09/12/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	1,700.00
1093	18		09/12/2014 PROJECT RESOLUTION	L.S.	0.00	0.00	75,000.00

550,000.00



TEMPORARY TOLL CABINETS WITH TRANSFORMER FOUNDATION
NOT TO SCALE

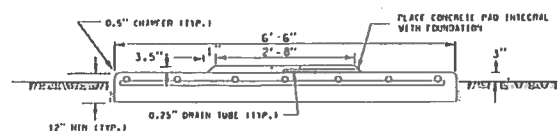
Contract No.: 008060
Change Order No.: 180
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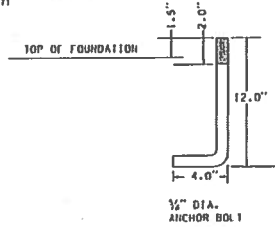
PERMANENT TOLL CABINETS WITH TRANSFORMER FOUNDATION
NOT TO SCALE

NOTES:

1. INSTALL CONDUITS PER 11031 AND 30.
2. CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE FEET OF LEVEL WORK ZONE AROUND THE GENERATOR WITHIN THE FENCE.
3. CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE FEET FOR TEMPORARY CABINETS, FIVE FEET FOR PERMANENT CABINETS OF LEVEL WORK ZONE AROUND ALL SIDES WITHIN THE FENCE.
4. ALL REINFORCING STEEL SHALL HAVE A MIN. OF 2" CLEAR COVER.
5. CONDUITS TO BE CLUSTERED IN THE CABINETS AS SHOWN ON CABINET FOOTPRINT & CONDUIT PLACEMENT LOCATIONS DETAILS.
6. SLOPE FOUNDATION 0.25"/FT. TO THE EDGE.
7. SLOPE PADS 0.25"/FT. TO THE SWMP IN CENTER.
8. ALL CONDUITS SHALL HAVE A COUPLING FLUSH WITH THE SURFACE OF THE FOUNDATION AND A HIPPLE THAT EXTENDS 2" UP.
9. ALL CONDUITS SHALL BE HOT DIPPED GALVANIZED OR PVC.
10. USE SILICONE BEADED SEALANT AROUND CABINETS AND PAD.
11. BOLT PATTERN IS PROVIDED BY CABINET MANUFACTURER. BOLTS SHALL BE 3/4" DIA. AND EXTEND A MIN. OF 1.5" ABOVE CONCRETE PAD.
12. FOR EACH ADDITIONAL CABINET, ADD CABINET WIDTH PLUS 12" TO FOUNDATION WIDTH.
13. CONCRETE SHALL BE CLASS 3000.
14. ANY OTHER DIMENSION MUST BE APPROVED BY THE ENGINEER.
15. ALL ANCHOR BOLTS SHALL BE HOT DIPPED GALVANIZED. BOLT SHALL EXTEND A MIN. 1.5" ABOVE THE CONCRETE PAD.
16. JUNCTION BOXES SHALL BE SIZED AS SHOWN IN THE ITS PLAN SHEETS.
17. WHEN FOUNDATION THICKNESS EXCEEDS 18" A SECOND MAT OF #4 REBAR @ 12" O.C. WITH 3" CLEAR FROM BOTTOM OF FOUNDATION SHALL BE INSTALLED.



FOUNDATION DETAILS
NOT TO SCALE

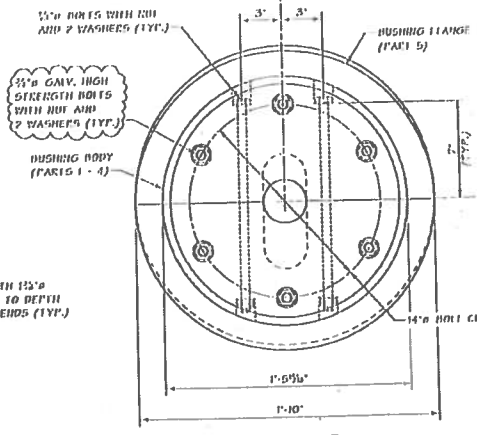
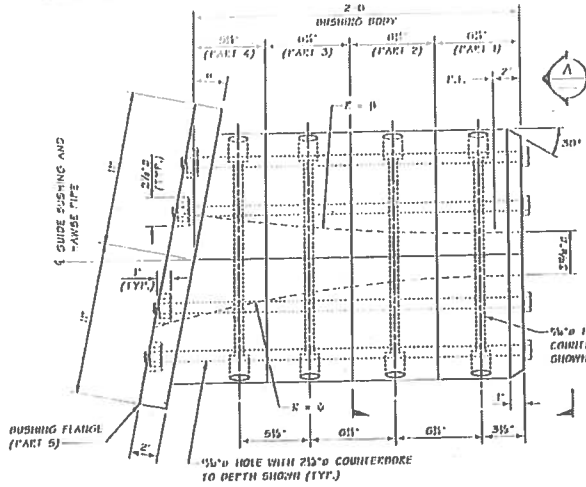


FILE NAME: c:\projects\sub\bbm or 326\dms012682046_DE TS_33.dgn	RELEASE FOR CONSTRUCTION RECORD	PROJECT NO. 10 WABI	FED.AID PROJ.NO.	Washington State Department of Transportation	SR 520	PLAN REF NO. ITD35
TIME: 2:35:28 PM		JOB NUMBER: 0066		Kpff	I-5 TO MEDINA- STG.1 EVERGREEN PT. FLOATING BRIDGE AND LANDINGS	DATE: 77
DATE: 7/24/2013		CONTRACT NO.		BerggrAAM	TOLL CABINET FOUNDATION DETAIL	200 SHEETS
DESIGNED BY: smitchell						
ENTERED BY: S. MITCHELL						
CHECKED BY: L. MANOH						
DGAM AUDIT DATE:	NDC 74	07/08/13				
DESIGN MOR:	DESCRIPTION	DATE	NO.			

VOLUME 2 - FBEL ROADWAY/CIVIL - ITS NBG-SUBMITTAL - FEBRUARY 7, 2013

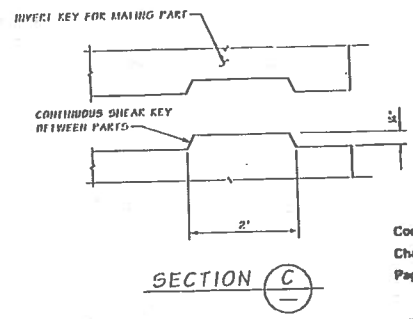
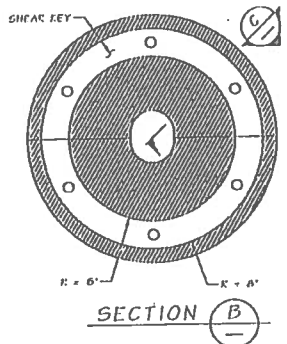
POTHOON TYPE	α	β	γ
1 & 1A	12°	12°	0°
3 & 3A	12°	12°	0°
4 & 4A	15°	10°	10°

W112 - RFL #120



SPLIT GUIDE BUSHING ASSEMBLY - ELEVATION

ASSEMBLY CONSISTS OF 5 PARTS, EACH PART HAS TWO HALVES.
VERTICAL BOLTS NOT SHOWN FOR CLARITY.
POTHOON TYPES 1, 1A, 3 & 3A SHOWN, TYPES 4 & 4A SIMILAR.

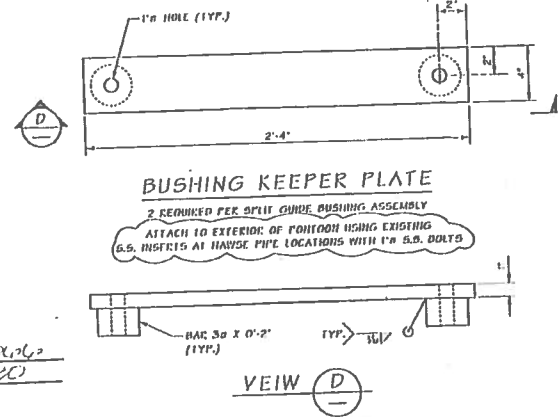


GUIDE BUSHING NOTES

1. GUIDE BUSHING SHALL BE 100% HIGH MOLECULAR WEIGHT POLYETHYLENE (HDPE) (POLYETHYLENE) AND SHALL CONFORM TO ASTM D4960. THE HDPE POLYETHYLENE SHALL BE COMPOSED OF 100 PERCENT HIGH MOLECULAR WEIGHT POLYETHYLENE MATERIAL, SHALL BE 100 PERCENT CROSS LINKED FOR ADHESION RESISTANCE, SHALL BE FULLY OXYGENATED (FVO) STABILIZED AND SHALL CONFORM TO THE FOLLOWING MATERIAL REQUIREMENTS.

PROPERTY	TEST METHOD	VALUE
DENSITY	ASTM D 792	50.0 TO 50.8 PCF
HARDNESS	ASTM D 705	63 TO 69 SHORE D
ELONGATION AT BREAK	ASTM D 638	30.0 TO 45.0 PERCENT
IMPACT	ASTM D 256	NO BREAK
ADHESION WEAR	SAND SURRY	7 TO 16
COEFFICIENT OF FRICTION	ASTM D 1094	0.11 TO 0.20
ULTIMATE TENSILE STRENGTH	ASTM D 638	5,000 TO 6,500 PSI

- HDPE POLYETHYLENE WILL BE ACCEPTED BY WSDOT BASED ON THE MANUFACTURER'S CERTIFICATE OF COMPLIANCE THAT THE MATERIAL FURNISHED CONFORMS TO THESE SPECIFICATIONS.
- BOLTS DESIGNATED AS HIGH STRENGTH SHALL CONFORM TO ASTM A 193 TYPE 3 AND THE REQUIREMENTS OF SECTION D 06-5(3) OF THE STANDARD SPECIFICATIONS.
- "TOP" AND "BOTTOM" SHALL BE STAMPED ON THE INSIDE FLAT SURFACE OF EACH GUIDE BUSHING PART ALONG WITH THE PART NUMBER.
- BUSHING KEEPER PLATE SHALL CONFORM TO ASTM A 500.
- BOLTS FOR KEEPER PLATE SHALL BE STAINLESS STEEL AND CONFORM TO ASTM A 193 CLASS 2 GRADE BALL WASHERS SHALL CONFORM TO ASTM A221 TYPE 316.
- FIELD VERIFY EXISTING INSERT LOCATIONS BEFORE FABRICATING BUSHING KEEPER PLATE.



BUSHING KEEPER PLATE

2 REQUIRED PER SPLIT GUIDE BUSHING ASSEMBLY
ATTACH TO EXTERIOR OF POTHOON USING EXISTING 6.5" INSERTS AT HAUSE PIPE LOCATIONS WITH 1" 6.5" BOLTS

SECRET

DESIGNED BY	CHECKED BY	DATE	REVISION	BY	APP
khaleghi, B	Clarke, P	11/30			
feringa, C		03/11			
feringa, C		10/10			

Contract No. CA260062
Change Order No. 180
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Washington State
Department of Transportation
BRIDGE AND STRUCTURES OFFICE

APPENDIX M23
OUTFITTING & ASSEMBLY
TECHNICAL REQUIREMENTS
ANCHOR GALLERY HARDWARE
SPLIT GUIDE BUSHING

SHEET NO. **AG7**