



DATE: March 27, 2017

TO: Chris Christopher/Craig McDaniel/Derek Case  
State Construction Engineer  
Headquarters, Mail Stop 47354

THRU: Julie Meredith / Dave Becher  
Program Director, SR 520 Program, Mail Stop NB82-99

FROM: Stephen Strand  
Project Engineer, West Approach Bridge North Project  
Mail Stop TB-93, (206) 770-3565

PROJECT: C-8625 SR 520 West Approach Bridge North Project

SUBJECT: **CO # 101 – Inland Casing Ext & Settlement**

**Requested Action:**

- Review     Review and Region Execution     Review and HQ Execution

**Change Approval**

|                                          |                           |           |
|------------------------------------------|---------------------------|-----------|
| <b>Project Engineer Change Approval:</b> | Stephen Strand            | 3/10/2017 |
| <b>Region Change Approval:</b>           | Dave Becher               | 3/10/2017 |
| <b>HQ Change Approval:</b>               | Craig McDaniel/Derek Case | 2/22/2017 |
| <b>FHWA Change Approval:</b>             | Anthony Sarhan            | 3/16/2017 |
| <b>Program Funding Concurrence:</b>      | Janet Buoy                | 3/14/2017 |

\*See Evolution of Change section below and Attachment A for approvals to issue direction to extend inland casings prior to preparing an executed change order.

**General Description of the Change**

As mutually agreed by WSDOT and the Contractor, this change order resolves numerous outstanding issues and compensates the Contractor in full for all costs, time, delay, impacts, inefficiencies, and risk associated with all issues listed below. This change order also resolves all time, delay, impacts, and inefficiencies for all other known issues and changes as of March 1, 2017, except for specific exceptions described in this document.

**Primary elements covered by this change order:**

- Resolves cumulative effects of all issues to date
- Resolves all Differing Site Condition notices, disputes and protests existing to date
- Changes to drilled shaft casing elevations from Pier 2 to Pier 13
- Changes to 24<sup>th</sup> Avenue bridge demolition

- Transfers ownership of certain Project and Field Office Facilities from the Contractor to WSDOT
- Provides installation of Cement Treated Base (CTB)/Cement Modified Embankment Materials (CMEM) at certain locations on the Project
- Changes concrete placement timing at pier diaphragms, for two bridge frames
- Changes the Corps of Engineers environmental permit
- Allows specific temporary work access pile of non-domestic origin to remain in place
- Changes description of delivery schedule for the Project Bridge Control System (BCS), Fire Protection System (FPS), Intelligent Transportation System (ITS), signing, pedestrian lighting on Regional Shared Use Path (RSUP), and navigation lighting
- Changes final channelization date
- Resolves time and impacts for all outstanding change issues except as noted
- Retracts and fully resolves eight (8) Contractor Notices of Protest, Disputes, and Differing Site Conditions

#### **Evolution of the Change**

This change was initiated to provide an equitable adjustment to the Contractor for owner directed changes to some of the drilled shaft casings. As work progressed, it became apparent that the overall impact to the project schedule and subsequent work activities due to this change was substantial. The scope of this change was adjusted to encompass those impacts and provide an overarching resolution to a multitude of consequent impacts related to the shaft casings change.

This holistic approach to this change was reviewed and endorsed by SR 520 Program, HQ Construction and FHWA. It was agreed that there was value in providing resolution to these outstanding issues that had potential impacts to the project delivery schedule and cost.

This memo will address each of the resolved issues below in further detail.

This change order addresses the following specific items where entitlement for additional compensation, clarification of timeframes, or documentation of Contract requirements is warranted.

1. Inland Casing Extension (CM#158)
2. MOHAI and other Civil Work Delays & Impacts (CM#201 CM#228)
3. 24<sup>th</sup> Bridge Demo Mod (CM#120)
4. Facilities Transfer to WSDOT (CM#227)
5. Cement Treated Base (CM#221)
6. Pier Diaphragm Time Requirement
7. Corps of Engineers Permit Modification (CM#216)
8. Temporary Trestle Pipe Pile
9. Clarification on Completion Timeframes (CM#209)
10. Existing In-Water Pile Backfill (CM#202)

## 11. Cumulative Impacts to Date

### 1. Inland Casing Extension (CM#158)

#### Description

The Contract Plans provide for the construction of drilled shafts to support the WABN Structure. The plans also designate the elevation to which the permanent shaft casings that are to be advanced into underlying soils. During construction, the casings were installed to plan tip elevations. Once drilling operations began to remove soil from inside the casings for Pier 2C, the casing lost vertical stability and began to sink down into the shaft excavation.

The Contractor notified WSDOT of their belief that this was a Differing Site Condition (DSC). Following consultation with the Engineer of Record (EOR), HQ Construction and HQ Geotech, it was agreed that this was a DSC and the Contractor was entitled to an equitable adjustment to the Contract. The sinking shaft casings were a phenomenon that was not encountered on recent WSDOT contracts where drilled shafts were installed in water. In addition, the occurrence of sinking casings was inconsistent and affected only a small portion of the total number of drilled shafts on the project.

Analysis by the Geotechnical EOR, coordinating with WSDOT HQ Geotech, determined that the original plan elevation for Pier 2C was insufficient. Subsequently, additional casings experienced sinking, and there was believed to be a high risk that sinking may occur with future casings as well.

The initial design of the drilled shaft casings was believed to be adequate to maintain casing stability. This was based on accepted engineering practice regarding casing weight and soil properties.

This change order directs the Contractor to extend the tip elevations of the permanent casings for Piers 2-3, 6-8 and 13 to ensure they are properly seated in dense soil to maintain vertical stability of the shaft casings during excavation.

The Casing Extension issue was the genesis of this change order and the majority of costs in this change are a direct or indirect result of it.

#### Timeline

On April 27, 2016, the Contractor submitted FWI SL#245 providing notice of a DSC after the permanent casing for Pier 2C had sunk approximately 1 foot and tipped out of vertical alignment once drilling operations for the shaft began. The Contractor ceased drilling operations awaiting direction from WSDOT. WSDOT responded with WSDOT SL#355 on April 29, 2016 directing the Contractor to extend the tip elevations for all three Pier 2 shaft casings. The Contractor responded with FWI SLs #246 and #249 notifying WSDOT that there would be time and cost impacts as a result of that direction. Approvals are shown below:

Deputy Const. Manager Approval: James VanSteenburg 4/29/2016

Project Engineer Change Approval: Brian Dobbins 4/29/2016  
 Region Change Approval: Dave Becher 5/6/2016  
 HQ Construction Change Approval: Derek Case 5/2/2016

WSDOT reviewed the remaining permanent shaft casing installations and determined that conditions experienced to date may warrant extending casings for Piers 2, 3, 6, 13 and 14. The decision was made in order to mitigate risks inherent with extending casings once installation has begun and to ensure proper seating of these casings in dense soil. On May 1, 2016, WSDOT sent SL#358 directing the Contractor to extend all of the casings for Piers 2, 3, 6 and 13. (Casings did not need to be extended for Pier 14). WSDOT supplemented that direction on May 6, 2016 with SL#364 extending the permanent casing tip elevation for Pier 13A 5.5 feet more than what was initially directed in WSDOT SL#358. On May 23, 2016, WSDOT directed an additional 10-foot casing extension for Pier 13A. Approvals for this work are provided below:

Deputy Const. Manager Approval: James VanSteenburg 4/29/2016  
 Project Engineer Change Approval: Brian Dobbins 4/29/2016  
 Region Change Approval: Dave Becher 5/1/2016  
 HQ Construction Change Approval: Derek Case 5/2/2016

After further review by the WSDOT EOR, it was determined that the permanent casings for Piers 7 and 8 would also need to be extended an additional ten feet to mitigate the same risks previously identified. On May 13, 2016, WSDOT sent SL#363 directing the Contractor to extend permanent casings for Piers 7 and 8. Approvals are shown below:

Deputy Const. Manager Approval: James VanSteenburg 4/29/2016  
 Project Engineer Change Approval: Brian Dobbins 4/29/2016  
 Region Change Approval: Dave Becher 5/12/2016  
 HQ Construction Change Approval: Derek Case 5/31/2016

WSDOT continued to review the permanent casing installation documentation and determined that further extensions were required to ensure proper seating in the required dense material. On June 7, 2016, WSDOT issued SL#387 requiring additional ten-foot casing extensions for Pier 6A and 6C.

Prior Approval

In order to avoid delays to the schedule and cost impacts associated with resources standing by, prior approval in advance of an executed change order was provided by the Project Engineer as follows:

| Date    | Doc #           | Direction                               |
|---------|-----------------|-----------------------------------------|
| 4/29/16 | WSDOT<br>SL#355 | Extend Casings for Pier 2               |
| 5/1/16  | WSDOT<br>SL#358 | Extend Casings for Piers 2, 3, 6 and 13 |

| <b>Date</b> | <b>Doc #</b>    | <b>Direction</b>                               |
|-------------|-----------------|------------------------------------------------|
| 5/6/16      | WSDOT<br>SL#364 | Additional Extension of Pier 13A Casing        |
| 5/13/16     | WSDOT<br>SL#363 | Extend Casings for Piers 7 & 8                 |
| 5/23/16     | WSDOT<br>email  | Additional Extension of Pier 13A Casing        |
| 6/7/16      | WSDOT<br>SL#387 | Additional Extension of Pier 6A and 6C Casings |

Change approvals and Prior Approvals are documented for direction for Piers 2-3, 6-8 and 13 through the WSDOT correspondence noted above. Change approval to proceed with additional casing extensions were received as documented in Attachment A.

A total of 18 casings required extensions between April and June 2016.

#### Entitlement

This change resulted from unanticipated conditions. The Contractor is entitled to compensation for the additional cost of the labor, material and equipment as a result of this change.

The costs associated with this issue include direct costs of labor, equipment and materials for the added work by the Contractor and its major subcontractors. With the delays to the Work came related costs in standby time and schedule recovery. Standby time for crews were caused by waiting for the delivery of the custom fabricated casing extensions and the mobilization of the vibratory pile hammer needed to install them. Schedule recovery costs were realized as the Contractor attempted to recover as much lost time as possible to avoid major impacts to the overall project schedule including those activities that logically followed the affected drilled shaft work. There were also other inefficiencies in work caused by the need to change work sequence from Pier to Pier to avoid further delay while casing extensions were delivered. And finally there are the impacts to unchanged Contract Work as subsequent activities moved to later timeframes and productions were affected due to the dilution of supervision caused by the attention and urgency put on the casings.

## **2. MOHAI and other Civil Work Delays & Impacts (CM#201 CM#228)**

### Description

As permanent shaft casings were extended in change orders 72, 74, and 101, the Contractor had to move back and forth between various Piers so that work did not cease completely when a casing began to sink and work on that shaft was halted. That changed the order in which the Contractor constructed the WABN shafts. In order to maintain their schedule to the maximum extent possible, The Contractor expanded its work area to allow more shaft rebar cages within the staging area where the former Museum of History and Industry (MOHAI) was demolished (MOHAI Staging Area).

The MOHAI Staging Area is located on the north side of SR520 between Lake Washington and 24<sup>th</sup> Ave NE. In addition to being the location of the Contractors project offices, the area is used by the Contractor and their subcontractors to access the temporary work trestle, store equipment and materials, and stockpile native excavated material. There are also electrical, ITS, Drainage, Fire Protection System (FPS), and structural items constructed within the MOHAI Staging Area in the vicinity of the temporary work trestle access.

The reduced space available within the MOHAI Staging Area, in conjunction with increased congestion due to casing extension deliveries and additional mobilization of equipment, resulted in reduced productivity for the Contractor and its subcontractors performing Contract Work in that area. Increased congestion resulted in additional wear and tear on the temporary trestle, the haul routes within the MOHAI Staging Area, and necessitated additional time to repair work areas before resuming Contract work within the MOHAI Staging Area.

In addition to the increased maintenance required as a result of wear and tear to the work trestle, the reduced productivity extended earthwork into wet winter months. Had the work been completed earlier, in dry weather months, additional slope protection and other erosion control measures would not have been required.

#### Entitlement

WSDOT has agreed to compensate the Contractor for the reduced productivity resulting from casing extension work, additional erosion control measures required when working in wet weather, and additional maintenance costs resulting from increased wear and tear on the Contractor's temporary work trestle and to the MOHAI Staging Area in general.

### **3. 24<sup>th</sup> Bridge Demo Mod (CM#120)**

#### Description

The Contract Plans detail the demolition of portions of Bridge 520/5 (24<sup>th</sup> Ave Bridge) which includes the removal of the existing barrier on the west side of the bridge. While demolishing bridge barrier, the Contractor identified vertical rebar from the bridge deck into the barrier that was not anticipated by the Contractor. Due to the location of the rebar, the Contractor was not able to utilize their planned means of demolition, hindering the advancement of the demolition work.

This change order allows the Contractor to leave the existing rebar in place and use that rebar to secure the new cement concrete traffic curb (CCTC) to be installed where the rebar was encountered to offset inefficiencies in the 24<sup>th</sup> Ave Bridge demolition work.

#### Timeline

On November 24, 2015, the Contractor submitted Flatiron West (FWI) SL#191 notifying WSDOT of a Differing Site Condition (DSC) encountered while demolishing barrier on the west side of the 24<sup>th</sup> Ave Bridge. No. 5 vertical bars extended from the bridge deck into the existing barrier. The bars were not shown in the Contract Plans.

On November 30, 2015, WSDOT responded to the notice of a DSC in SL#253 stating the unanticipated rebar appears to be shown in the as-built drawings included with the documents provided to all Bidders. However, the as-built drawings were not particularly clear with the representation of this rebar. WSDOT stated that a determination as to the validity of the DSC had not yet been determined, but directed the Contractor to cut the rebar to a depth that would not interfere with the CCTC to be installed where the rebar was encountered.

On December 4, 2015, the Contractor submitted Request for Information (RFI) 349 – 24th Ave Curb Clarifications regarding the No. 5 vertical rebar. The Contractor proposed using some of the rebar WSDOT directed to be cut in WSDOT SL#253 to install the new CCTC in lieu of drilling into the bridge deck to place new CCTC rebar. WSDOT responded that the proposal was acceptable, and allowed the Contractor to use some of the existing No. 5 vertical bars identified in FWI SL#191.

#### Entitlement

Although the amount owed to the Contractor was reduced by the Contractor's proposal in RFI 349, there is still a net increase in the cost of this work. The Contractor is entitled to compensation for the additional cost of the labor, material and equipment as a result of this change.

#### 4. **Facilities Transfer to WSDOT (CM#227)**

##### Description

The Contractor has established Project Office Facilities within the Contractor's staging area on the Project site. In accordance with the Contract, the staging area is to be returned to its previous condition after Project Completion. This requires the removal of the Project Office Facilities, utilities, and a quarry spall access within the Contractor's staging area. At the beginning of the WABN Project, funding was not yet secured for follow-on SR 520 projects. Now that follow-on projects are funded and moving forward, it is prudent and cost-effective to keep the office facilities in place to be utilized on future projects.

This change order directs the Contractor to transfer the Project and Field Offices, and adjacent improvements, to WSDOT at the end of the Project so that the State can utilize the facilities for follow-on SR520 construction projects.

This particular pay item will be set up in a separate group as a "Non Federal Participating" pay item.

#### Entitlement

Transfer of the facilities reduces the Contractor's removal and restoration work, but results in a net increase in cost due to WSDOT's purchase of the facilities. The Contractor is entitled to compensation for the net additional cost of the labor, materials and equipment as a result of this change.

**5. Cement Treated Base (CM#221)**

**Description**

The Contract Documents detail strength and material requirements for embankment that is placed as subgrade within the roadway sections. This work is located at the west abutment of the WABN structure. The Contractor planned to perform embankment activities during the dry season of late summer, using the existing soils for embankment. But this work was delayed by the drilled shaft issue, forcing it to occur in the fall season where it was more prone to inclement weather. The existing soil was exposed to rainfall and became saturated to the point it became unusable without further effort. The use of CTB was proposed by the Contractor as a less expensive alternative to complete replacement of the native material with gravel borrow. Alternatives were considered for increasing subgrade strength, and the option of utilizing Cement Treated Base (CTB) for the top 12-inch lift of embankment material was selected.

This change order adds the necessary Provisions for the Contractor to place CTB in certain locations, as directed by the Engineer.

**Entitlement**

This change adds a Contract Provision and modifies work within the Contract. The Contractor is entitled to compensation for the additional cost of the labor, material and equipment as a result of this change.

**6. Pier Diaphragm Time Requirement**

**Description**

The Contract Plans require all pier end diaphragm concrete to be placed within a 30-calendar day period. The Contract allows for a longer period, pending review and approval of the Contractor's sequencing plan. On January 18, 2017, the Contractor requested longer durations for two frames (Frames 1 and 2) to facilitate stripping and utility work with their modified schedule. The Project Office and EOR reviewed this request. On January 26, 2017, WSDOT approved the Contractor's proposed time extension for Frames 1 and 2.

This change order documents the revised pier diaphragm requirements for Frames 1 and 2.

**Entitlement**

The Contractor is not entitled to additional compensation as a result of this change. Is it solely to provide documentation within the Contract Documents.

**7. Corp of Engineers Permit Modification (CM#216)**

**Description**



WSDOT obtained Federal environmental permits from the Army Corps of Engineers (COE) and other agencies for performing in-water work as part of the WABN project. The Contract Provisions detail the environmental scope of work necessary to comply with permit requirements. In August 2016, October 2016, and January 2017, WSDOT contacted the COE outlining Best Management Practices (BMPs) for potential in-water work as the Contractor began removal of existing bridge piles as well as temporary work trestle piling. If the piles could not be removed using vibratory means, they were to be cut off below the mud line. That work, which could dislodge milfoil adjacent to the piles, requires invasive plant life containment measures above and beyond what is detailed in the Contract Provisions. In February 2017, the COE issued a revision to the environmental permit (JARPA #NWS-2008-1246), which included additional special conditions for management of Eurasian watermilfoil, Brazilian elodea, and fragrant water lily within work areas. These new requirements were not previously included in the Contract Documents.

This change order adds the requirement that the Contractor remove and dispose of these invasive plant species (to the maximum extent practicable) that are disturbed while performing in-water work and provides compensation for the additional removal and disposal required.

Entitlement

This change adds work to the Contract. The Contractor is entitled to compensation for the additional cost of the labor, material and equipment as a result of this change. This work will be performed on a force account basis and is estimated that this item could cost up to \$100,000.

**8. Temporary Trestle Pipe Pile**

Description

The Contract Provisions require major quantities of steel and iron that are permanently incorporated into the project to be American-made materials. Buy-America does not apply to temporary steel items that are not incorporated into the permanent structure, such as those used in the temporary work trestle. The Contract Provisions also state that piles which cannot be removed without exceeding the specified vibration level can be cut off and removed to two-feet below the mudline or ground surface. During removal of the work trestle, some of the temporary pilings may need to be cut off in order to meet the vibration requirements.

This change order confirms that temporary steel piles that need to be cut off will not count towards the Contractor's Buy America dollar value.

Entitlement

The Contractor is not entitled to additional compensation as a result of this change, as it is a clarification to the Contract Provisions and for the convenience of the Contractor.

**9. Clarification on Completion Timeframes (CM#209)**

### Description

The Contract Provisions identify completion timeframes and operational requirements for the BCS and components of the BCS, which include the FPS, pedestrian lighting on the RSUP, and navigation lighting. The Provisions also identify completion timeframes and operational requirements for signing and ITS. The Contractor requested further clarification of completion dates for each of the components listed above to better plan and schedule their work activities and meet their milestone dates.

The Contract documents provided information on each system listed above, but failed to provide enough detail to determine exactly when each needed to be completed.

This change order clarifies operational and delivery requirements for each of the items described above and also modifies the final channelization date.

### Timeline

Early in the project WSDOT and the Contractor began discussing the schedule for the BCS, FPS, ITS, lighting and signing. WSDOT maintained that certain systems needed to be complete prior to opening the bridge to traffic, both from an operational standpoint and for public safety purposes. Other systems needed to be substantially complete at this stage of the project. It was evident that disagreement existed between the parties as to what level of system completion was required at each key milestone. After numerous discussions and concerns over how the Contractor was presenting its schedule related to these systems, letters were shared on the issue.

On October 28, 2016, WSDOT issued SL#476 regarding Bridge BCS, FPS, and ITS systems. The letter expressed concern over the Contractor's schedule, which showed completion of these systems occurring after the WABN was open to traffic. WSDOT stated that the Contractor's plan was contrary to Contract requirements, and that opening the bridge to traffic was conditioned upon completion of communication and safety features, including testing and commissioning.

On November 4, 2016, the Contractor issued FWI SL#307 in response to WSDOT SL#476. The Contractor disagreed with WSDOT's interpretation of Contract requirements for completion of the BCS, FPS, and ITS. The Contractor proposed milestones for delivery of each system, or system component, that they believed to be in compliance with the Contract.

On November 16, 2016 WSDOT issued SL#485, addressing the Contractor's proposed delivery dates. WSDOT disagreed with the Contractor's interpretation of the Contract and with several of the proposed milestones. WSDOT provided milestones which they stated were in compliance with the Contract. WSDOT requested a meeting with the Contractor to resolve these differing interpretations.

After further discussions with the Contractor and additional review of the Contract documents, WSDOT clarified the necessary completion timeframes for each system that would meet operational and safety requirements at various stages of the project. WSDOT concluded that the Contract documents should have provided more detail to allow the Contractor to properly schedule and execute the work.

Entitlement

The Contractor is not entitled to additional compensation as a result of this change. This change provides clarification of delivery dates for each of the systems described in this section.

**10. Existing In-Water Pile Backfill (CM#202)**

Description

The Contract Plans and Provisions detail piles to be removed. The Provisions detail part of that work under Bridge Demolition and part under Environmental Regulations. Within the Environmental Regulations section, work windows for column and pile removal are provided, which were cut and pasted directly from the HPA environmental permit language.

This protest began with a series of letters between WSDOT and the Contractor, and eight RFI's, all pertaining to backfill requirements for in-water pile removal. The issues were related to the following:

- Backfill materials, and whether or not bentonite clay is permitted
- Timing and installation of the backfill
- Terminology used in the specifications (columns versus piles), and
- Differing interpretations as to whether or not the Contract Provisions included payment provisions for backfilling all of the piles to be removed

The Contract is clear that the existing bridge is on piles. Those piles must be removed and backfilled in accordance with the Contract Plans and Provisions. Payment for that work is included in existing lump sum bid items. There is no column demolition work. The work window for column removal was included in the Provisions because it was in the HPA permit, not because there is column demolition work on the Project.

The Contractor takes the position that there is a difference in column and pile removal with only the temporary work access piles being considered piles and all of the existing bridge foundations are columns. The Contractor also mention the reference in the In-Water Work Window Provision that mentions columns. The Contractor also takes the position that the backfilling requirement as detailed in the Environmental Regulations does not include any Payment section, nor does it or reference the lump sum pay item for bridge demolition included under Division 6 of the Contract Provisions.

Two of the issues in the above list were resolved and mutually agreed upon: the use and application of bentonite clay backfill and clarifications on wait periods for backfill placement.

On August 23, 2016, the Contractor submitted SL#284 Notice of Protest to Backfill Columns. The Contractor disputed that backfilling the hollow voids contained in portions of the existing bridge columns that were cut off and removed was included in the Contract under existing bid items.

On September 6, 2016, the Contractor submitted SL#290 Supplement to Notice of Protest, further describing their position on this issue. On September 21, 2016 WSDOT issued SL#460, stating that additional compensation is not warranted and the protest is invalid.

Subsequent to SL#460, WSDOT further reviewed the Contract language and determined that the Provisions should have been more clear in associating the pile backfill environmental requirement with the bridge demolition lump sum pay item.

**Entitlement**

WSDOT has agreed to compensate the Contractor for the additional cost of labor, materials and equipment to complete backfill of removed piles and to resolve this protest.

**11. Cumulative Impacts to Date**

While compensation is provided for direct costs, there are always slight impacts, not easily quantified, to productivity absorbed by the Contractor that WSDOT considers incidental whenever a change to the Contract is initiated. While those impacts are minimal when considering a single change, they can be exacerbated after multiple changes. To date, 151 change orders have been initiated and 660 requests for information have been processed. As part of this change order, the Contractor has agreed that the total negotiated payment provided in this change order covers cumulative effects of all of the changes made to date. The Contractor has agreed to seek compensation for direct costs only for open change orders and other issues not specifically resolved in this change except for those excluded in this change order.

**Settlement of Outstanding Protests & Disputes**

This change order also fully resolves the following Contractor Notices of Protest, Disputes, and Differing Site Conditions:

- P1. December 17, 2016 Bridge Closure
- P2. Performance of BI No. 115
- P3. Fire Protection Vault Electrical Scope Payment Provisions
- P4. Fire Protection (FPS) Pipe Length
- P5. Stainless Steel Hardware FP System
- P6. Landside Fire Protection System Testing

**P1. December 17, 2016 Bridge Closure**

On November 30, 2016, WSDOT approved the Contractor's request for a full closure of SR520 (December 9 – 12, 2016) to work on demolition of the BR2 structure. The Contractor requested a second closure of SR520 (December 16

– 19, 2016) to complete this demolition work. WSDOT rejected the second closure request because it was the weekend after a previous closure and within a holiday shopping window. These were not contractual reasons to deny a closure even if alternative closure dates were provided. On December 8, 2016, the Contractor submitted SL#314, which was a Notice of Protest reserving their right to recover any additional cost and/or time lost on schedule delays resulting from the closure rejection.

**P2. Performance of BI No. 115**

On November 9, 2016 the Contractor submitted SL#308 Notice of Change During Performance of BI No. 115. The Contractor attached a letter from their Subcontractor describing unsuitable foundation material found in the bottom of a water main trench and providing notice that they would seek compensation for additional work pertaining to this bid item. WSDOT responded with SL#494, rejecting financial responsibility for the unsuitable foundation material, which was ultimately caused by the Subcontractor's failure to control runoff into the trench.

**P3. Fire Protection Vault Electrical Scope Payment Provisions**

On October 25, 2016, the Contractor submitted RFI 567 inquiring about electrical equipment pertaining to the Fire Protection Vault, and requesting clarification on payment provisions for these items. WSDOT responded to the RFI stating that payment for the electrical equipment is included within two existing bid items, per the Contract Provisions.

On November 2, 2106, the Contractor submitted SL#301 Notice of Protest for FP Vault Electrical Scope Payment Provisions. On November 15, 2016, the Contractor followed up with SL#311 Notice of Protest Supplemental Information. WSDOT issued SL#490 on November 21, 2016 stating that additional compensation is not warranted and the protest is invalid.

**P4. Fire Protection (FPS) Pipe Length**

On September 6, 2016, the Contractor submitted SL#287, along with a letter from their Subcontractor, describing a potential schedule delay in grading activities at the MOHAI site due to their inability to procure water main materials and proceed with water main installation. The Contractor claimed that the ductile iron water pipe (fire protection supply line) was only available in 18-foot segments – not 9-foot segments as required by the Contract. As such, the pipe would need to be cut in half and connected with couplings. There were multiple submittals for these couplings, all of which were rejected by WSDOT. The Contractor alleged that delays in site grading activities were realized because excavation from the water main trench was not available for embankment material during the submittal/review process for the water main fittings.

On October 18, 2016 WSDOT responded with SL#470 stating that the Contractor could have avoided the alleged delays if they had procured Contract-compliant water pipe, which was available in 9-foot lengths. Any

delays realized were the responsibility of the Contractor and additional costs are not warranted.

On October 31, 2016 the Contractor issued SL#302 Notice of Protest for MOHAI Civil Work Delays. On November 15, 2016, the Contractor followed up with SL#309 Supplemental Information pertaining to the protest.

On November 29, 2016, WSDOT issued SL#495 refuting the Contractor's claim that WSDOT had suspended, delayed, or accelerated the work in this area at any time. WSDOT considered the protest invalid.

#### **P5. Stainless Steel Hardware FP System**

The Contractor submitted Request for Approval of Material (RAM) 404 Stainless Steel Hardware FP System. WSDOT did not approve the Contractor's proposal to procure grooved couplings supplied with plated carbon steel, as the Contract Provisions require couplings for ductile iron pipe to be stainless steel. The Contractor sought further clarification in RFI 546, and WSDOT responded that couplings are listed under "Ductile Iron Fittings" in the specifications – along with bolts, nuts, and washers – and are required to be stainless steel.

On October 28, 2016, WSDOT issued SL#477, referencing specific areas of the Contract Provisions where stainless steel hardware is required in the water supply systems.

On November 2, 2016, the Contractor issued SL#304 Notice of Protest for Stainless Steel Hardware FP System, disputing that the Contract Provisions require stainless steel bolts for grooved couplings. On November 15, 2016 the Contractor followed up with SL#310 Supplement to Notice of Protest.

On November 29, 2016, WSDOT issued SL#496 re-stating that stainless steel hardware for the fire protection system is required by the Contract, and schedule or cost impacts due to procurement of the required materials is the responsibility of the Contractor. WSDOT considered the protest invalid.

WSDOT discussed acceptance of the plated carbon steel hardware with the EOR and while they did not believe this would be cause for immediate concern, longevity of the parts and lifetime maintenance costs were a factor. Thus, acceptance of an alternative to stainless steel hardware was not a possibility.

#### **P6. Landside Fire Protection System Testing**

The Contract Plans require fire protection inspection and testing to meet WSDOT, Seattle Public Utilities (SPU), and Seattle Fire Department (SFD) requirements. WSDOT utilizes their Standard Specifications for testing, and SPU and SFD utilize National Fire Protection Association (NFPA) requirements. Because realization of the two different criteria occurred after the initial testing, hydrostatic testing of the landside fire protection system required multiple test dates. On January 18, 2017, WSDOT sent an email to

the Contractor regarding testing, stating that WSDOT considers these tests to be part of the Contract, not extra work.

On January 27, 2017 the Contractor issued SL#321 Notice of Protest for Landside Fire Protection System Testing, stating that they do not interpret the Contract to require two separate tests, and they consider the second hydrostatic test to be additional work.

### **Negotiations**

As noted in the Evolution of Change section above, several change orders have been executed to date due to the reoccurring instances of shaft casings slipping. Adjustments made by the Contractor to mitigate the impacts of those occurrences has further impacted other on-land Contract work performed by multiple subcontractors which are also detailed above. As the casing installation work is now complete, Contract work resumed, and impacts to the schedule evaluated, WSDOT and the Contractor deemed it prudent to assess all open change orders, potential issues, and protests to date in order to close or consolidate items wherever possible.

WSDOT and the Contractor grouped the change orders, issues, and protests into 3 groups. The first were those with known cost and schedule impacts, the second included those with unknown cost and no schedule impacts, and the third was those with unknown cost and unknown schedule impacts. That list was reviewed by the WABN Project Office, SR520 Program, WSDOT HQ, and the Contractor on March 7, 2017 at the WABN Executive Oversight Meeting. It was agreed that this change order would completely resolve all of the items in group one for which the Contractor and WSDOT would negotiate a lump sum cost. The Contractor would agree not to seek additional time or future cumulative impacts to the items in the second group. The items in the second group would be issues that have cost impacts, but the costs are either unknown or WSDOT does not agree to their merit. The third group of items are ongoing issues that the Contractor believes may impact their schedule in the future. The items in the third group are included in the Exceptions section below.

The Contractor provided costs were compiled for the items in group one totaling approximately \$6.4M. WSDOT did an independent estimate for all the items proposed in the settlement, many of which WSDOT did not agree to any merit. After several discussions between parties the Contractor agreed to settle this change order for the lump sum amount of approximately \$4.4M less \$1M previously paid through CO #135. The settlement also included a credit to WSDOT to extend the open to traffic date as detailed in the change order text.

### **Time**

The added time included in this change order is for the "Final Channelization and Open to Traffic" date and does not affect working days or other Contract dates.

The mutual decision to extend the Final Channelization and Open to Traffic date is based on several factors including:

1. Direct time lost during the casing extension work

2. Time lost subsequent to the casing extension work on critical path activities
3. Risk to WSDOT of potential time lost for disputed work
4. Disagreement between WSDOT and the Contractor regarding the scope of work required to be completed prior to Final Channelization and Open to Traffic
5. The Contractors offer to reduce the cost of this change order to offset the risk to the Contractor for liquidated damages
6. Risk to WSDOT for alleged cumulative change including time

Substantial time was lost during the casing sinking and extension issues between April 26, 2016 and June 14, 2016. The Contractor and subcontractors were able to recover a considerable amount of schedule through efforts such as added resources and extended work shifts; however not all time lost was recoverable through these efforts and the effects on concurrent activities and subsequent activities was not entirely realized until after the casing work was completed.

Concurrent activities were affected during the casing extension timeframe due to sharing of resources, work access issues, and dilution of supervision.

Subsequent activities were further impacted on critical path work for the Frame 1 and 2 superstructures causing the entire project schedule to slip forcing the Final Channelization and Open to Traffic date projection past the Contract requirement of July 12, 2017. As was the case with concurrent activities the Contractor and subcontractors realized lower than planned productions due to impacts to resources and work access.

A major schedule restriction in the Contract is working around the in-water work window for removing piles East of Foster Island between September 1 and April 15 each year. A key element for the Contractor to consider during this restriction was being able to remove the trestle fingers (piles) at Span 17 prior to erecting the south side girders at Span 17. To set the girders, the trestle fingers at Span 17B had to be removed. However, the Span 17 piles are East of Foster Island and are restricted to the in-water work window and could not be removed until September 1, 2016. Removal of the Trestle Finger to erect the girders at span 17, in order to begin Frame 2, was on the critical path at the time of the casing extension issue began.

Comparison between the plan prior to the casing extension issue in March 2016 and the actual dates realized after completion of the casing extension issue in July 2016 shows the start of Frame 2 work having slipped 12 calendar days, even after the schedule recovery efforts during the casing work.

When considering other issues such as disputed work (8), cumulative effect of previous changes (150), requests for information (660), and current outstanding changes (40) still in development, WSDOT has the risk of eventual time extensions for Final Channelization and Open to Traffic as well as Project Completion beyond the 12 days caused by the casing issue. When evaluating the settlement of this change order WSDOT considered the risk of added time for



these other issues. For the purpose of calculating added time for which WSDOT is responsible WSDOT assigned an additional 5 calendar days to Final Channelization and Open to Traffic.

Final Channelization and Open to Traffic, prior to this change order, is required to occur no later than July 12, 2017, though that date fails to consider that being a Wednesday and therefore previous change orders should have extended the date to July 17, 2017, the Monday following a weekend closure. As a result, 5 additional calendar days will be added as part of this change order to correct this discrepancy.

Through mutual agreement between WSDOT and the Contractor, August 28, 2017 is the revised Final Channelization and Open to Traffic date. This is 47 calendar days later than the current Contract and 42 later than what should have been the current Contract.

The Contractor offered a reduction in the lump sum settlement cost of all issues contained in this change order, which WSDOT accepted and considered as part of the extension of time for Final Channelization and Open to Traffic date. WSDOT's total cost estimate includes a credit value for the additional 25 calendar days provided to the Contractor. This added time is over and above the number of days justified for actual delays to the Work.

**Time Summary**

- Casing extensions = 12 days
- Previous change order correction = 5 days
- Outstanding change orders and cumulative effect = 5 days
- Chargeable days to the Contractor = 25 days
- Total added days to Open to Traffic Milestone = 47

**Payment**

In accordance with Standard Specifications 1-04.4, the Contractor is entitled to compensation for the additional cost of the labor, material and equipment as a result of this change. The total negotiated lump-sum cost of this change order is \$3,275,000, after accounting for a previous interim change order payment in Change Order 135 Interim Pay – Inland Casing Ext. All items contained in this change order are full and final settlement.

This change order also includes a separate time and materials item for the Corps of Engineers Permit Modification, estimated at \$100,000. Costs to complete this work will be paid based on daily force account tracking.

The Engineer's Independent Estimate was based on information provided by industry sources and historical cost data (See Attachment B). The following table provides a summary of WSDOT's estimate for the work included in this change order.

|                                               |             |
|-----------------------------------------------|-------------|
| Casing Extensions                             | \$3,900,000 |
| Casing Extensions – Impact to MOHAI and Civil | \$300,000   |

|                                  |                    |
|----------------------------------|--------------------|
| 24 <sup>th</sup> Ave Bridge Demo | \$15,000           |
| Facility Transfer to WSDOT       | \$310,000          |
| Cement Treated Base              | \$105,000          |
| Corps Permit                     | \$100,000          |
| Existing In-Water Pile Backfill  | \$270,000          |
| Time Credit                      | (\$625,000)        |
| Previous Payment – CO #135       | (\$1,000,000)      |
| <b>Total Change Order Amount</b> | <b>\$3,375,000</b> |

The following table provides a summary of the new pay items and previous payments associated with this change order.

|                                    |               |
|------------------------------------|---------------|
| Total Negotiated Settlement        | \$4,375,000   |
| CO #135 Interim Payment (Previous) | (\$1,000,000) |
| CO #101 Corps Permit Force Account | \$100,000     |
| CO #101 Lump Sum Items             | \$3,275,000   |

**Exceptions**

The following matters are specifically excluded from this change order. These exceptions are an inclusive list of all known outstanding issues, protests, and pending change orders as of March 1, 2017. Inclusion in the list below does not constitute an acknowledgement by WSDOT that entitlement to a particular issue exists.

- CM#150 – Potential claim regarding the Project Modular Expansion Joints
- Pending CO#116 – RSUP Lighting Mod
- Pending CO#140 – Bridge Control System Decoupling
- Pending CO#151 – Expansion Joint Conduit Mods

This Contractor reserves its rights, to the extent provided for under Contract, to seek Equitable Adjustments for direct costs only (not Contract time, not cumulative effects) for the following:

- All non-executed, pending change orders through CO#150 not specifically addressed in this change
- All pending change issues not specifically addressed in this change
- Other known existing issues and protests dated through March 1, 2017 that are not otherwise addressed in this change order

**DBE Statement**

This change order does not affect any Condition of Award bid items. Increased permanent casing installation, bridge demolition and milfoil removal work detailed in the change above was already being performed by non-DBE subcontractors. DBE participation is not affected by this change.

**Attachments**

- CCIS Change Order Document (44 pages)
- Change Order Checklist (2 pages)
- Change Approval Emails (Attachment A)
- Engineer’s Estimate (Attachment B)

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Schedule Analysis (Attachment C)  
Letters (Attachment D)

File: CO Files: CO 101; ProjectWise: 16.05.101

*[Handwritten mark]*

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CONTRACT NO: 008625 FEDERAL AID NO: BR-NHPP-0520 (053)  
CONTRACT TITLE: SR 520, MONILAKE TO EVERGREEN PT. BRIDGE WEST APPR  
CHANGE ORDER NO: 101 INLAND CASING EXT & SETTLEMENT

PRIME CONTRACTOR: SW0178155 FLATIRON WEST, INC  
18702 NORTH CREEK PARKWAY #202  
BOHELL WA 98011-8019

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

Change proposed by Contractor

|                                                                                                                                                         |                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <p><b>ENDORSED BY:</b><br/><i>[Signature]</i></p> <p><b>CONTRACTOR</b> Frank Daams VP <i>Virgil Curtis PM</i></p> <p>March 14, 2017<br/><b>DATE</b></p> | <p><b>SURETY CONSENT:</b></p> <hr/> <p><b>ATTORNEY IN FACT</b></p> <hr/> <p><b>DATE</b></p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|

ORIGINAL CONTRACT AMOUNT: 199,537,370.50  
CURRENT CONTRACT AMOUNT: 206,233,921.00  
ESTIMATED NET CHANGE THIS ORDER: 3,375,000.00  
ESTIMATED CONTRACT TOTAL AFTER CHANGE: 209,608,921.00

Approval Required:  Region  Olympia Service Center  Local Agency

|                                                                                                                                                                                                                             |                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <p><input checked="" type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED</p> <p><i>Stephen Frank</i><br/>PROJECT ENGINEER</p> <p><u>3-15-2017</u><br/>DATE</p>                                         | <p><i>[Signature]</i><br/>EXECUTED:</p> <p><i>Arte [Signature]</i><br/>STATE CONSTRUCTION ENGINEER</p> <p><u>March 31, 2017</u><br/>DATE</p> |
| <p><input checked="" type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED</p> <p>REGIONAL ADMIN: <i>[Signature]</i></p> <p>BY: SR520 Director of Construction</p> <p><u>March 27, 2017</u><br/>DATE</p> | <p>OTHER APPROVAL WHEN REQUIRED</p> <p><i>Anthony [Signature]</i> 3/31/17<br/>SIGNATURE DATE</p> <p><u>FHWA</u><br/>REPRESENTING</p>         |

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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:

**Description:**

This change order as mutually agreed between WSDOT and Flatiron-West, Inc. (FWI) resolves several outstanding issues and extends the Final Channelization & Open to Traffic date.

Unless specifically noted otherwise herein, this change order compensates the Contractor and its subcontractors, suppliers, and others in full for all costs, time, delay, impacts, inefficiencies, and risk associated with all issues included in this agreement, and all time, delay, impacts, and inefficiencies for all other known issues and changes as of March 1, 2017, except for those specifically excluded in the Exceptions section of this change order.

The primary elements included in this change order are:

- Resolves cumulative effect of all issues to date
- Resolves all differing site conditions, disputes and protests raised to date
- Changes to infield drilled shaft casings
- Changes to 24th Ave. Bridge demolition
- Transfers ownership of certain Project and Field office facilities from FWI to WSDOT
- Provides installation of cement treated base at certain locations on the project
- Changes concrete placement timing at pier diaphragms
- Changes to Corps of Engineers permit
- Changes specifications to allow specific temporary work access pile of non-domestic origin to remain in place
- Changes description of delivery schedule for BCS, ITS and FPS systems
- Resolves time and impact for all outstanding change issues

**General:**

Included as part of this change order is all compensation, time, or any impacts related to cumulative effects of changes or clarifications made to the Work through any means or direction that may have actual or alleged effects on the Contract for any known issues as of March 1, 2017, whether the issue is included in this agreement, or simply known to exist.

The Contractor agrees by the signing of this change order that all Notices of Protest, Disputes, or Differing Site Conditions are fully resolved and releases the Contracting Agency from any claims or further protests, including but not limited to:

1. The Contractor's protest regarding the December 17, 2016 Bridge Closure, as detailed in FWI SL#314 (included as page 16 of this change order), is

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retracted.

2. The Contractor's Notice of Change During Performance of BI No. 115, as detailed in FWI SL#308 (included as pages 17 through 19 of this change order), is retracted.
3. The Contractor's protest regarding the Fire Protection Vault Electrical Scope Payment Provisions, as detailed in FWI SL#301 and FWI SL#311 (included as pages 20 through 24 of this change order), is retracted.
4. The Contractor's protest regarding the Existing In-Water Pile Backfill, as detailed in FWI SL#284 and FWI SL#290 (included as pages 25 through 27 of this change order), is retracted.
5. The Contractor's protest regarding MOHAI Civil Work delays, as detailed in FWI SL#302, FWI SL#309, and WSDOT SL#495 (included as pages 28 through 33 of this change order) is retracted.
6. The Contractor's protest regarding Fire Protection (FPS) Pipe Length, as detailed in FWI SL#287 and WSDOT SL#470 (included as pages 34 through 38 of this change order), is retracted.
7. The Contractor's protest regarding Stainless Steel Hardware FP System, as detailed in FWI SL#304 and FWI SL#310 (included as pages 39 through 41 of this change order), is retracted.
8. The Contractor's protest regarding Landside Fire Protection System Testing, as detailed in FWI SL#321 (included as pages 42 through 44 of this change order), is retracted.

**Construction Criteria:**

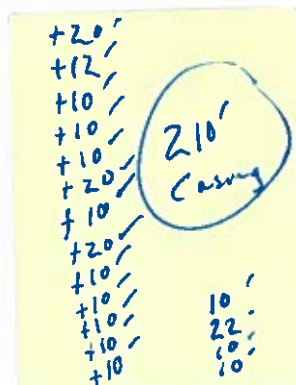
The following Contract Documents are hereby modified as follows:

**Inland Casing Extension (CM #158)**

Contract Provisions Volume 1 of 2, Special Provisions Shaft Excavation, Section 6-19.3(3)B Temporary and Permanent Shaft Casing is supplemented as follows:

"Permanent casings shall be extended from elevations (elev.) shown in the Plans as follows:

|                            |        |               |       |
|----------------------------|--------|---------------|-------|
| Pier 2 Shaft A, Plan Elev. | -2.0,  | Revised Elev. | -22.0 |
| Pier 2 Shaft B, Plan Elev. | 4.0,   | Revised Elev. | -16.0 |
| Pier 2 Shaft C, Plan Elev. | 4.0,   | Revised Elev. | -16.0 |
| Pier 3 Shaft A, Plan Elev. | -23.0, | Revised Elev. | -33.0 |
| Pier 3 Shaft B, Plan Elev. | -23.0, | Revised Elev. | -33.0 |
| Pier 3 Shaft C, Plan Elev. | -20.0, | Revised Elev. | -30.0 |
| Pier 6 Shaft A, Plan Elev. | -23.0, | Revised Elev. | -43.0 |
| Pier 6 Shaft B, Plan Elev. | -23.0, | Revised Elev. | -33.0 |
| Pier 6 Shaft C, Plan Elev. | -23.0, | Revised Elev. | -43.0 |
| Pier 7 Shaft A, Plan Elev. | -35.0, | Revised Elev. | -45.0 |
| Pier 7 Shaft B, Plan Elev. | -35.0, | Revised Elev. | -45.0 |
| Pier 7 Shaft C, Plan Elev. | -35.0, | Revised Elev. | -45.0 |
| Pier 8 Shaft A, Plan Elev. | -47.0, | Revised Elev. | -57.0 |
| Pier 8 Shaft B, Plan Elev. | -47.0, | Revised Elev. | -57.0 |



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Pier 8 Shaft C, Plan Elev. -47.0, Revised Elev. -57.0  
Pier 13 Shaft A, Plan Elev. -12.0, Revised Elev. -34.5  
Pier 13 Shaft B, Plan Elev. -12.0, Revised Elev. -22.0  
Pier 13 Shaft C, Plan Elev. -11.0, Revised Elev. -21.0"

24th Bridge Demo Mod (CM #120)

Contract Plans Volume 5 of 10 is modified as follows:

- Removal Notes on plan sheet BC46 titled "Bridge No. 520/5 Widening Sidewalk Removal Detail" is supplemented with the following note:

"4. Existing No. 5 vertical reinf. (not shown on this sheet) extruding from the bridge deck into the existing barrier located approximately 2" from the western outer edge of the bridge deck may be cut 12" above the top of the bridge deck and field bent to fit within the new cement concrete traffic curb. See Repair Notes on this sheet."

- The following note is added to the detail titled "Typical Section Repair After Removal" on plan sheet BC46 titled "Bridge No. 520/5 Widening Sidewalk Removal Detail":

"Repair Notes:

1. The Contractor may use salvaged existing Bridge 520/5 No. 5 rebar install the new cement curb traffic curb. See removal note 4 on this sheet."

Facilities Transfer to WSDOT (CM #227)

Contract Provisions Volume 2 of 2, Special Provisions Project Office Facilities is modified as follows:

Add:

"Removal is not required for the items listed below which the Contractor shall transfer ownership in good condition, including titles as applicable, to WSDOT. WSDOT agrees to accept ownership once the requirements of this specification are met and Project Physical Completion has occurred.

- Existing Project Office consisting of Eight-unit trailer complex
- Existing Field Office consisting of Two-unit trailer complex
- Existing Furniture, appliances, and office equipment in Project and Field Offices
- Existing Wooden decking and roof between Project and Field Offices
- Existing Quarry spalls throughout Project and Field office areas and adjacent storage and parking areas and temporary roadway to project limits
- Existing Electrical transformer and cabinets for Project Office
- Existing Temporary chain link fence in Project Office and adjacent storage and parking areas
- Existing Silt fence in Project Office and adjacent storage and parking areas
- Existing Temporary light poles in Project Office and adjacent storage and parking areas
- The Contractor will ensure utility service accounts are paid in full and

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will cooperate with WSDOT and COS to transfer from the Contractor to WSDOT following WSDOT acceptance of the facilities and equipment by Project Physical Completion. Transfer of utility service from the Contractor to WSDOT shall be timed to coincide with Project Physical Completion, and Contractor shall be responsible for payment of Contractor's utility service accounts in full within 30 days of receipt of final invoicing by utilities."

Cement Treated Base (CM #221)

Contract Provisions Volume 2 of 2, Special Provisions, Division 5 Surface Treatments and Pavements is supplemented with the following specification:

Add:

"Cement Modified Embankment Materials (CMEM)

Cement Modified Embankment Materials shall be classified on this project as follows:

CMEM ROADWAY EMBANKMENT All Cement Modified Embankment Materials shall be considered as CMEM ROADWAY EMBANKMENT.

Cement-modified embankment material shall consist of soil material, Portland cement, and water uniformly mixed compacted, finished, and cured in accordance with the specifications provided in this change order. It shall conform to the lines, grades, thicknesses, and roadway sections shown in the Plans for the portion of the roadway that the CMEM is placed beneath or as directed by the Engineer. Location of CMEM placement shall be as directed by the Engineer.

Portland Cement:

Portland cement shall comply with the specifications for Type I or Type II Portland cement presented in section 9-01 of the Standard Specifications.

Water:

Water shall be free from substances deleterious to the hardening of the cement-modified soils.

Soil Material:

Soil materials shall consist of material taken from on-site embankments or excavations.

CMEM Equipment

Cement-modified soil may be constructed with any combination of machines or equipment that will produce the results meeting these specifications.

Construction Method for CMEM Classifications:

No CMEM work shall be allowed during excessive precipitation periods.

Engineer's determination of excessive precipitation period shall be final.

The Cement Modified Embankment Materials used in the CMEM ROADWAY EMBANKMENT



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shall be constructed as provided in this change order.

**Cement Application, Mixing and Spreading:**

A minimum cement content of 0.5% of the dry weight of the cement-modified soil mixture is to be mixed in the final 12" lift of embankment material.

Mixing of the soil material, cement, and water shall be accomplished by the mixed-in-place method.

No cement or soil-cement mixture shall be spread when the soil or subgrade is frozen. Cement-modified embankments shall not be constructed unless the temperature is 36 degrees Fahrenheit or higher or at the Engineer's discretion.

The operations of cement application, water application, mixing, hauling, spreading, compacting, and finishing shall be continuous and completed in daylight or with adequate lighting. The material shall be spread and compacted the same day it is mixed.

The specified quantity of cement shall be spread uniformly on the area to be treated or on the top of the windrowed material. Spread cement that has been displaced shall be replaced before mixing is started.

After the cement is applied, the soil material shall be sufficiently pulverized so that at the completion of moist-mixing, 100% by dry weight passes a 1" sieve, and a minimum of 80% passes a #4 sieve, exclusive of gravel or stones retained on these sieves.

Water may be applied through the mixing machine or separately by approved pressure-distributing equipment. The soil material and cement shall be mixed sufficiently to prevent cement balls from forming when water is added. Mixing shall be continued until the mixture is uniform in color and at the required moisture content throughout. Operations of cement spreading, water application, mixing, and spreading mixed material from a windrow shall result in a uniform soil, cement, and water mixture for the full depth and width.

A sufficient amount of cement shall be added (measured in percent by dry weight of the mixture) to produce a minimum unconfined compressive strength for the compacted cement-modified embankment of 90 psi (28 day strength) and a maximum of 500 psi.

The cement content shall not exceed 10 percent of the dry weight of the cement-modified soil mixture.

On-site storage of cement shall not exceed one truck load unless it is delivered in a tanker.

No washing of equipment and machinery exposed to cement shall be performed within the project limits.

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Any unused cement remaining at the end of the work day shall be enclosed with plastic (visqueen). The minimum thickness of the plastic shall be 0.16 mm (6mil).

**Compaction:**

The Contractor shall treat the top 12" of the final lift of embankment in a manner consistent with the moisture content of different locations of placement.

During grading operations, the Contractor shall shape the surface of embankments to uniform cross-sections and eliminate all ruts and low places that could hold water. The Contractor shall raise the center of an embankment above the sides. Prior to compaction, the mixture shall be in a loose condition for its full depth.

The Contractor shall ensure that the 12-inch lift of cement modified embankment is treated in the following manner:

- A roller capable of compacting 12 inches is used, and
- A uniform cement-modified soil mixture is achieved for the full depth of the layer.

At the start of compaction, the percentage of moisture in the mixture and in unpulverized soil lumps shall not be below three percentage points of the specified optimum moisture content. If the material contains too little moisture to compact properly, the Contractor shall add water to the material to bring it to within the specified limits.

The specified optimum moisture content shall be determined in the field by a moisture-density test on representative samples of soil-cement mixture. For material with 30 percent or more, by weight on the #4 sieve, the optimum moisture content shall be determined using WSDOT Test Method No. 606. The optimum moisture content for material with less than 30 percent, by mass, retained on the #4 sieve shall be determined using AASHTO T99 Method A.

In place moisture content shall be determined using WSDOT Test Method No. 613.

The embankment material shall be compacted with a minimum of two passes of sheepsfoot, rubber tired or smooth drum roller. The Contractor shall use compacting equipment and methods that will achieve compaction for the full depth of each layer.

**Finishing:**

When initial compaction is nearing completion, the surface of the soil-cement shall be shaped to the required lines, grades and cross section.

Compaction and finishing shall be done in such a manner as to produce a surface free of ridges or loose material.

**Curing:**

After the cement-modified soil has been finished as specified herein, it

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shall be cured with a moist spray as needed.

Finished portions of soil-cement that are traveled on by equipment used in constructing an adjoining section shall be protected in such a manner as to prevent equipment from damaging completed work.

Sufficient protection from freezing shall be given to cement-modified soil for 7 days after its construction.

**Construction Joints:**

At the end of each day's construction, a construction joint shall be formed by cutting back into the completed work to form a vertical face. Special attention shall be given to joint construction to ensure a vertical joint, adequately mixed material, and compaction up against the joint.

**pH of Surface Runoff:**

Surface runoff from the cement-modified embankment shall be monitored for pH on a daily basis and immediately after all storm events over 0.5" in 24 hours. This monitoring may be discontinued if approved by the Engineer if the measurements indicate that pH of surface runoff from the cement-modified embankment is not a significant concern.

**Acceptable pH requirements:**

The Contractor shall comply with the Contract Special Provisions, Division 8 under the subheading "Treatment of pH for Concrete Work" under section Erosion Control and Water Pollution Control.

**Maintenance and Corrective Repairs:**

The Contractor shall be required, within the limits of this contract, to maintain the cement-modified soil in good condition until all work has been completed and accepted. The Contractor shall repair at no expense to the Contracting Agency any partial or complete embankment that loses stability because of continued hauling across it. The Contractor shall also alter hauling equipment or procedures to prevent further damage.

The surface of the completed embankment constructed with cement-modified embankment materials shall be stable and firm. All yielding or unstable cement-modified embankment materials shall be corrected or repaired. All costs to correct yielding or unstable cement-modified embankment materials shall be at the Contractor's expense and no further payment will be allowed.

**CMEM Cost**

Any and all equipment, materials, engineering, personnel and associated costs for material testing of the Cement Modified Embankment Materials are supplied by the Contractor.

All costs associated with erosion control and storm water runoff from CMEM areas including but not limited to environmental compliance, BMP's, monitoring water quality, treatment for pH or siltation, pumping or transporting away runoff shall be all inclusive in this change order. The

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Contracting Agency will not pay for any costs associated with erosion control, environmental compliance including but not limited to costs associated with permit compliance and/or violation mitigation of the CMEM areas.

**Quality Control**

The contractor shall provide all quality control for the construction of the embankments built with cement modified embankment material. The material testing shall be conducted at a testing facility approved by the Engineer.

**Required Testing**

The contractor shall provide the following testing:

**Testing to Establish Minimum Cement Content**

**1. Moisture Content Tests:**

These are tests to determine the in-situ moisture-content of samples of each type of soil material subjected to other testing described herein. These moisture content tests shall be performed in accordance with ASTM D 2216.

**2. Moisture Control Tests:**

Moisture control test of representative samples of each type of soil material. For material with 30 percent or more, by weight on the #4 sieve, the maximum density and optimum moisture content shall be determined using WSDOT Test Method No. 606. The maximum density and percent, by mass, retained on the #4 sieve shall be determined using AASHTO T99 Method A. The required number of supplemental moisture control tests will be dependent on the variations in the soils used in the embankment construction.

**3. Unconfined Compression Test:**

Unconfined Compression tests shall be performed on cement modified specimens of each type of soil material in general accordance with ASTM D 2166. Test specimens shall be prepared in the laboratory for unconfined compression testing utilizing various combinations of moisture content and cement content. Unconfined compression tests shall be performed on these test specimens. Correlations shall be developed between cement content and unconfined compressive strength for various moisture contents. The required minimum unconfined compressive strength is 90 psi (28-day strength) as indicated elsewhere in these specifications. The number of unconfined compression tests required shall be established by the Contractor's engineer. The range of soil moisture contents evaluated shall be consistent with the expected field conditions.

**Testing During Construction of Cement Modified Embankment**

**4. Moisture Control Tests:**

Supplemental moisture control tests on representative samples of the embankment material. For material with 30 percent or more, by weight on the #4 sieve, the maximum density and optimum moisture content shall be determined using WSDOT Test Method No. 606. The maximum density and optimum

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moisture content for material with less than 30 percent, by mass, retained on the #4 sieve shall be determined using AASHTO T99 Method A. The required number of supplemental moisture control tests will be dependent on the variations in the soils used in the embankment construction.

**5. Moisture Content Test:**

Moisture content test on the compacted cement-modified embankment material in accordance with WSDOT Test Method No 613: A minimum of one moisture content test shall be performed every 2500 cubic yard and no less than one per day.

**6. Unconfined Compression Tests:**

Unconfined compression tests shall be performed on specimens of the cement-modified embankment material in accordance with ASTM D 2166. A set of three test specimens shall be prepared in the field at each location where the unconfined compressive strength of the cement-modified embankment material is to be tested. Unconfined compression tests shall be performed in the laboratory on each set of test specimens after 2, 7, and 28 days of curing. The unconfined compressive strength of the cement-modified embankment material shall be tested a minimum of every 2500 cubic yard of in place embankment material, and no less than one yard of embankment construction, the unconfined compressive strength testing frequency shall be increased to a minimum of one test for every 1300 cubic yard of in place embankment materials, and no less than one test for each day's work.

**Reporting**

A copy of all test reports shall be maintained at the Contractor's job site office or other location acceptable to the Engineer. The test reports shall be made available for review by the Engineer at all times during the Contractor's normal working hours.

The Contractor will provide the Engineer with a summary of all test results on a weekly basis. The weekly summary shall be sent to the Engineer no later than the Monday of the following week.

**Fugitive Dust:**

In addition to requirements detailed in Environmental Regulations and the Contract Plans, the Contractor shall also perform the following to control fugitive dust during the placement of Portland cement for CMEM. While placing CMEM, the spreader truck shall not be allowed to drop the cement more than two inches from the soil surface. Additional skirting shall be added to the spreader if required to control fugitive dust. Water will be added during the mixing operation if required to control fugitive dust. No CMEM work shall be allowed during high winds. The Engineer's determination of high winds shall be final.

**Limits of Work**

CMEM is an approved option to the requirements for establishing subgrade in areas approved by WSDOT."

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**Pier Diaphragm Requirement Time Requirement**

Contract Plans Volume 6 of 10, Plan sheet BA017 titled "Construction Sequence 1 Superstructure Spans 1 thru 40" note 5 is supplement with the following:

"Frame 1 diaphragm concrete shall be placed within a 60-day period.

Frame 2 diaphragm concrete shall be placed within a 40-day period."

**Corp of Engineers Permit Modification (CM #216)**

Contract Provisions Volume 1 of 2, Special Provisions, Division 1 General Requirements, Section 1-07.5 Environmental Regulations, Subsection Environmental Commitments, is supplemented as follows:

**Add:**

"(February 7, 2107)

The Contractor shall provide containment around all sediment-disturbing activities authorized by Permit NWS-2008-1246 and subsequent modifications where Eurasian watermilfoil (*Myriophyllum spicatum*), Brazilian elodea (*Egeria densa*), and fragrant water lily (*Nymphaea odorata*) are present. The containment method must extend from the surface of the water to at least half the water depth to capture floating plant fragments dislodged during construction activities.

(February 7, 2017)

Eurasian watermilfoil (*Myriophyllum spicatum*), Brazilian elodea (*Egeria densa*), and fragrant water lily (*Nymphaea odorata*) plants and fragments floating in the containment area must be removed to the maximum extent practicable, contained, and hauled to an upland disposal site."

**Temporary Trestle Pipe Pile**

Contract Provisions Volume 1 of 2, Special Provisions, Division 6 Structures, Section 6-01.5 Work Access Pile Installation Restrictions and Removal Requirements, Subsection All Other Piles is supplemented as follows:

**Add:**

"Temporary trestle pipe piles that cannot be extracted and are to be left in place at the contractor's convenience will not be subject to the Buy America domestic steel requirements. Piles left in place must be cut off and removed to 2-feet below the mudline or ground surface, and the contractor will as-built all locations in accordance with the Special Provisions related to abandoning pile."

**Clarification on Completion Timeframes (CM#209)**

**Clarification on BCS ITS & FPS - completion timeframes**

Contract Provisions Volume 2 of 2, Special Provisions, Division 8-20 Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and

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Electrical, Section Bridge Control System, Subsection Intended Operations for the WAEN portion of the BCS, is supplemented as follows:

Add:

"A.8. The following timeframes are required for testing and commissioning of the Fire Protection System (FPS):

- Prior to shifting traffic onto permanent Montlake Boulevard ramp: The entire FPS will be hydrostatically tested and flow tested. The line shall be capable of being charged just prior to the ramp opening and remain fully charged until the Bridge Control System (BCS) is commissioned and the FPS can be electronically/remotely controlled, or the line can be left empty and manually charged as needed. WSDOT shall determine when the line is charged and if it remains charged."

- Prior to opening to mainline traffic (final channelization): The entire FPS will be hydrostatically tested and flow tested. The line shall be capable of being charged just prior to the Montlake Boulevard ramp opening and remain fully charged until the BCS system is commissioned and the FPS can be electronically/remotely controlled, or the line can be left empty and manually charged as needed. WSDOT shall determine when the line is charged and if it remains charged."

"B.4. Permanent navigation lighting and pedestrian lighting on RSUP must be completed prior to opening the RSUP."

"E. The following timeframes are required for testing and commissioning of the BCS:

- Prior to opening to mainline traffic (final channelization): The BCS shall be undergoing Field Acceptance Testing as defined in the Bridge Control System subsection Commissioning and Validation and commissioning at this stage except for those areas related to the RSUP."

Contract Provisions Volume 2 of 2, Special Provisions, Division 8-20 Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical, Section 8-20.3(1) General, Subsection ITS Order of Work, is supplemented as follows:

Add:

"The following timeframes are required for testing and commissioning of the ITS:

- Prior to opening to mainline traffic (final channelization): The ITS shall be undergoing Contractor field acceptance testing and commissioning at this stage except for those areas related to the RSUP"

Clarification on Signage completion timeframes

Contract Provisions Volume 2 of 2, Special Provisions, Division 8-21 Permanent Signing, Section 8-21.3 Construction Requirements, Subsection Sign Structures, is supplemented as follows:

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**Add:**

"Timeframe for Completion of Sign Structures:  
All permanent fixed signs shall be installed prior to shifting traffic onto the permanent Montlake Boulevard Ramp. Permanent electronic signs do not need to be functional at this stage of the project."

Open to Traffic Date / Liquidated Damages  
Contract Provisions Volume 1 of 2, Special Provisions, Division 1 Legal Relations and Responsibilities to the Public, Section 1-08 Prosecution and Progress, Subsection 1-08.5 Time for Completion is modified as follows:

**Delete:**

"The final channelization configuration shall be open to traffic no later than July 12, 2017."

**Add:**

The final channelization configuration shall be open to traffic no later than August 28, 2017.

FPS, ITS, and BCS shall be completed prior to project physical completion."

Contract Provisions Volume 1 of 2, Special Provisions, Division 1 Legal Relations and Responsibilities to the Public, Section 1-08 Prosecution and Progress, Subsection 1-08.9 Liquidated Damages is modified as follows:

**Delete:**

"Accordingly, the Contractor agrees to pay the Contracting Agency liquidated damages in the amount of \$25,000 per day for every day that the final channelization configuration is not open to traffic beyond July 12, 2017 as specified in subsection Time for Completion of this Special Provision."

**Add:**

Accordingly, the Contractor agrees to pay the Contracting Agency liquidated damages in the amount of \$25,000 per day for every day that the final channelization configuration is not open to traffic beyond August 28, 2017 as specified in subsection Time for Completion of this Special Provision."

**Measurement:**

There is no specific unit of payment for the new lump sum item "CO#101 Inland Casing Ext & Misc Settlement".

The new item "Corps of Engineers Permit Mod" will be measured on a time and materials basis. This change order includes an estimated amount of \$100,000 for this scope of work.

**Payment:**

The total amount of this change order is \$3,375,000 and includes two new pay



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items:

- The lump sum item "CO#101 Inland Casing Ext & Misc Settlement", in the amount of \$3,275,000, shall be full and final compensation and settlement for all direct, indirect, overhead and other costs, including but not limited to all cumulative impacts or disruption costs of any nature, realized by the Contractor, subcontractors, suppliers and others for all issues described herein and those closed by this change, as listed under the General section of this document.
- The time and materials item "Corps of Engineers Permit Mod" is estimated amount of \$100,000. Costs to complete this work will be paid based on daily force account tracking.

The \$3,375,000 settlement included in this change order is in addition to the interim amount paid in Change Order #135 "Interim Payment for Inland Casing Extensions" which was executed previously, providing partial/timely payment to the Contractor for the Casing Extensions described in this change order. That interim payment in the amount of \$1,000,000, is not affected by this change order.

Time:

There are no changes to Working Days or Physical Completion as a result of this change order. Time for Completion modifications and clarifications for specific Work items are described under Construction Criteria.

Exceptions:

The following matters are specifically excluded from this change order. These exceptions are an inclusive list of all known outstanding issues, protests, and pending change orders as of March 1, 2017. Inclusion in the list below does not constitute an acknowledgement by WSDOT that entitlement to a particular issue exists.

- The potential claim regarding the Project Modular Expansion Joints (OM #150)
- Pending CO#116 RSUP Lighting Mod
- Pending CO#140 Bridge Control System Decoupling
- Pending CO#151 Expansion Joint Conduit Mods

The Contractor reserves its rights, to the extent provided for under the Contract, to seek Equitable Adjustments for direct costs only, (not Contract Time, not cumulative effects,) for the following:

- All non-executed, pending change orders through CO #150 not specifically addressed in this change.
- All pending issues not specifically addressed in this change.
- Other known existing issues and protests dated through March 1, 2017 that are not otherwise addressed in this change order.

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| <b>CONTRACT NO: 008625</b> |          |          |                  | <b>CHANGE ORDER NO: 101</b> |            |                |                |
|----------------------------|----------|----------|------------------|-----------------------------|------------|----------------|----------------|
| ITEM NO                    | GROUP NO | STD ITEM | ITEM DESCRIPTION | UNIT MEASURE                | UNIT PRICE | EST QTY CHANGE | EST AMT CHANGE |

|      |    |  |                                           |      |              |      |              |
|------|----|--|-------------------------------------------|------|--------------|------|--------------|
| 1083 | 01 |  | CO#101 INLAND CASING EXT & MISC SETTLEMEN | L.S. | 2,827,000.00 | 1.00 | 2,827,000.00 |
| 1083 | 09 |  | CO#101 INLAND CASING EXT & MISC SETTLEMEN | L.S. | 323,000.00   | 1.00 | 323,000.00   |
| 1083 | 02 |  | CO#101 INLAND CASING EXT & MISC SETTLEMEN | L.S. | 125,000.00   | 1.00 | 125,000.00   |
| 1084 | 01 |  | CO#101 CORPS OF ENGINEERS PERMIT MOD      | EST. | 50,000.00    | 1.00 | 50,000.00    |
| 1084 | 02 |  | CO#101 CORPS OF ENGINEERS PERMIT MOD      | EST. | 50,000.00    | 1.00 | 50,000.00    |

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3,375,000.00  
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Received by WSDOT 12/08/2016 - FG

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December 8, 2016

SL# -00314

Steve Strand  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Rejected Justification Report for Weekend Full Bridge Closure December 17<sup>th</sup>  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Strand:

Flatiron West, Inc. (FWI) is in receipt of WSDOT's rejection of Submittal S.279.437 Justification Report SR 520 Full Closure 12-17-2016.

Please consider this FWI's notice of protest in accordance with Standard Specification 1-04.5 for this rejection.

FWI will continue to work with WSDOT to plan upcoming work within traffic closures that are permitted by WSDOT, but reserves our rights to recover any additional cost and/or time lost on schedule delays resulting from this rejection.

Best Regards,

A handwritten signature in blue ink, appearing to read "Steve Strand", is written over a light blue horizontal line.

Project Manager

Received by WSDOT 11/09/2016 - FG

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November 9, 2016

SL# -00308

Steve Strand  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: KLB Serial Letter 090 - Notice of Change During Performance of BI No. 115  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Strand:

Please find the attached serial letter from KLB regarding Notice of Change During Performance of BI No. 115

Best Regards,

A handwritten signature in black ink, appearing to read "Virginia W. L.", with a long horizontal flourish extending to the right.

Project Manager



November 9, 2016

Virgil Curtis- Project Manager  
Flatiron West, Inc.  
1770 La Costa Meadows Drive  
San Marcos, CA 92078

Serial Letter # 090

Re: WSDOT #C8625/KLB Job #214951  
Subject: Notice of Change During Performance of BI No. 115

Dear Mr. Curtis,

Pursuant to Standard Specification Section 1-04.4 Changes, we are requesting the Engineer review the following information/situation and determine if an equitable adjustment should be made.

On Monday morning, November 6th, 2016 during the performance of Bid Item No. 115- Ductile Iron Pipe for Water Main 12 IN. Diam. we exposed unsuitable foundation material in the bottom of our trench. The condition was similar to a quicksand condition, fine silty/sand with the presence of an unknown underground water source. From our investigation, the material encountered had no "bottom" or foundation to it. This was an isolated area of about 20/LF of trench line and was directly below a proposed bend and thrustblock at the SWV Line Sta. 13+55.44. This was the last 30/LF of water main install and up to this point we had not encountered this type of condition previously during the work. Upon identifying this condition we immediately notified the WSDOT Inspection Staff of the condition and requested assistance and direction, this was approximately 9:00 a.m. on Monday morning.

WSDOT management met with KLB and Flatiron management at 12:30 p.m. on Monday afternoon to discuss the details and work towards direction on how to proceed. At this meeting a potential solution was proposed to move the vertical and horizontal alignment to avoid the unsuitable foundation condition versus trying to achieve a fix by removing and replacing the material. We received direction and approval by verbal communication that it was acceptable to proceed with this solution, at approximately 2:30 p.m. on Tuesday November 7th. This was followed up by email direction and approval from the Project Engineer later that afternoon at 3:43 p.m.

We are making this formal request, as we have been told during verbal communications that this is a contractor issue and that we may not be eligible for an equitable adjustment for the impacts and changes as a result of this issue. We disagree with such a position and referenced Standard Specification Sections; 7-09.3(7)C, 7-09.3(8) and 7-09.5 which we believe clearly indicates the responsible party for both direction and payment terms. As the current contract does not have the standard bid items referenced to allow for payment we are requesting an equitable adjustment per 1-04.4. We have also been verbally told that Special Provisions (SP's) in the contract provide contractual specifications that this is "incidental" to the items of work. We have been unable to identify such language in the contract. Specifically we were told page 453 of the SP's contain such language; in regards to this we again disagree as this section does not make the required removal or replacement of unsuitable materials incidental to the bid item. This section further demonstrates our point that

direction from the Engineer was necessary for the identified condition and that it is a change to the contract. Furthermore, this SP section on page 453 pertains to the COS bid items in the contract not Bid Item No. 115.

KLB will be seeking an equitable adjustment for the standby and investigational work performed on Monday November 6th, 2016. We were able to have the crew perform contract work onsite testing drainage on Tuesday November 7th, 2016 but will be requesting standby on the equipment that could not be utilized elsewhere. We would also like to note that both Monday and Tuesday were favorable weather days and we lost these two critical contract days during the performance of the specified work as we awaited necessary direction.

Respectfully,



Jason Cadle  
KLB Construction Inc.

Received by WSDOT 11/02/2016 - FG

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November 2, 2016

SL# -00301

Steve Strand  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Notice of Protest for Issue 352 FP Vault Electrical Scope Payment Provisions  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Strand

Flatiron West, Inc. (FWI) interprets WSDOT's response to RFI 567 as follows:

- payment for Bid Item #118 – Vault, FP Flow Control includes payment for all electrical work in the FP Vault not associated with the Fire Protection Panel, and
- payment for Bid Item #123 – Fire Protection Panel includes payment for all electrical work in the FP Vault associated with the Fire Protection Panel

Based on this interpretation, please consider this letter FWI's notice of protest in accordance with Standard Specification section 1-04.5 for the position taken in WSDOT's response to RFI 567.

Attached please find a copy of KLB SL 089.1. As you are aware, FWI has subcontracted Bid Item #118 to KLB. FWI/KLB's position is that payment provisions for electrical work in the FP Vault not associated with the Fire Protection Panel are not included in Bid Item #118.

We will follow up this notice of protest with supplemental information as required by the contract.

Best Regards,

A handwritten signature in black ink, appearing to read "Vig W. L.", with a long horizontal line extending to the right.

Cc:  
Jason Cadle (KLB)  
Brandon Judge (Elcon)



October 28, 2016

Virgil Curtis- Project Manager  
Flatiron West, Inc.  
1770 La Costa Meadows Drive  
San Marcos, CA 92078

Serial Letter # 089.1

Re: WSDOT #C8625/KLB Job #214951  
Subject: RFI #567- Fire Protection Vault Electrical Payment

Dear Mr. Curtis,

Please consider this a protest of the Project Engineer's decision provided in response to Flatiron RFI #567- Fire Protection Vault Electrical Payment. We disagree with the following statements and provide our response to why the electrical components required in Bid Item #118- Vault, FP Flow Control due not fall under our contractual scope:

*WSDOT: "Payment provisions for the scope described in the request for information (RFI) are included in the following lump sum bid items:*

- *Bid Item #118- Vault, FP Flow Control..."*

**KLB Response:** We disagree as the payment specification do not include or in our opinion reference any electrical scope. Plan Sheet MF02 (sheet 1661 of 1797) provides clear delineation between the different scopes of work. General Notes: #5 provides the following; "*Electrical control devices for power and control including conduit and wiring, and final connections are included in the electrical portion of this contract..."*. I have not found any additional language in the contract provisions that would demonstrate that electrical work was specifically required within Bid Item #118- Vault, FP Flow control and that would take precedent over this delineation in the Contract Plans.

*WSDOT: "Page 4, line 32 through page 6, line 2 describes "components" associated with the FP flow control vault, including but not limited to vault heater, vault insulation, vault lighting, vault convenience receptacle, and vault drain for standpipe drain down. The payment statement for Bid Item #118 includes "materials and components" as shown on Page 471, lines 1 through 4 of the Special Provisions."*

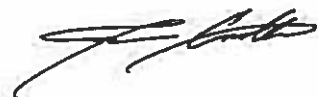
**KLB Response:** We disagree that Page 471, lines 1 through 4 of the Special Provisions which includes the words "materials and components" is specifically in reference to electrical work. We believe that this payment section is absent of any reference to electrical or electrical components. We interpret that "materials and components" are in reference to the various waterline parts and vault features that house and support the water system. The misc. electrical components support the Fire Protection Panel and control systems. They are not necessary for the installation or testing of our scope. This is further supported by the fact that none of the other vaults contain these electrical components or systems. None of this information provides any indication that these materials do not fall under the electrical portion of the contract. I also see this similar to the contract special provisions for Hydrant Stands that provide a complete listing of the materials needed for this component but are not covered in the measurement and payment section of the waterline bid items. KLB has not reviewed the other electrical bid items or bid items not specifically addressed in our



subcontract, so we cannot make the statement that these components were missed. We do believe that they are not included in our subcontract scope.

If you require any additional information or have questions please do not hesitate to contact me. As always I am open to further discussion regarding this clarification of scope. We are continuing to pursue the necessary electrical work, as directed previously by you, as to not delay the progress of the work. As we have been with you, we are continuing to coordinate with Elcon on this scope.

Respectfully,



Jason Cadle  
KLB Construction Inc.

Received by WSDOT 11/15/2016 - FG  
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November 15, 2016

SL# -00311

Steve Strand  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Issue 352 Fire Protection Vault Electrical Scope – Supplemental Information  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Strand:

Flatiron West, Inc. (FWI) provides the following supplemental information further to our notice of protest issued in SL 301.

a. Date and nature of the protest:

November 2, 2016 – FWI SL 301 (and KLB SL 89.1) Notice of Protest for payment associated with providing electrical work in the FP Vault not associated with the Fire Protection System.

b. Full discussion of the circumstances which caused the protest:

Timeline –

October 18, 2016 – FWI submitted RFI 567 requesting clarification on payment provisions for electrical work in the FP Vault.

October 25, 2016 – WSDOT responded to RFI 567 with the position that payment for electrical work in the FP Vault associated with the FP System was included in BI 123, and payment for electrical work in the FP Vault not associated with the FP System was included in BI 118.

November 2, 2016 – FWI SL 301 (and KLB SL 89.1) Notice of Protest for payment associated with providing electrical work in the FP Vault not associated with the Fire Protection System.

c. Estimated dollar cost of the protested Work:

At this point an estimated dollar cost is unknown. As additional information is available, FWI/KLB will supplement this information.

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- d. An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption:

At this point an estimated schedule impact is unknown. As additional information is available, FWI/KLB will supplement this information.

- e. The Work protested is ongoing at this time:

FWI/KLB will track all costs associated with this protested work and will continue to provide supplemental information in support of this protest as required in an effort to resolve the issue through mutual agreement.

Please contact me at the project office if you have any questions on this matter.

Best Regards,

A handwritten signature in black ink, appearing to read "Vig H. L.", written over a light blue circular stamp.

Project Manager



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August 23 2016

SL# -00284

Brian Dobbins  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Issue 261 – Protest Direction to Backfill Columns  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Dobbins:

Flatiron West, Inc. (FWI) is in receipt of SL 0436 directing the contractor to backfill existing Bridge Nos. 520/6B, 5206W-W, 520/6W-S, 520/6N-N, 520/6N-W, and 520/6 in-water piles that have been completely removed or cut off below mudline.

SL 0436 indicates WSDOT's position that this work is not extra to the contract.

Please consider this FWI's notice of protest in accordance with Standard Specification 1-04.5 as FWI considers this work additional scope. We will track our costs for this work per your request, and follow up this notice with supplemental information in accordance with the contract.

Please contact me at the project office if you have any questions.

Best Regards,

A handwritten signature in blue ink, appearing to read "Virgil Curtis".

Virgil Curtis  
Project Manager



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September 6, 2016

SL# -00290

Brian Dobbins  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Supplemental Protest – Direction to Backfill Columns  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Dobbins:

In accordance with Standard Specification 1-04.5, FWI is providing our Supplemental Notice of Protest related to the following WSDOT determination: "WSDOT considers backfilling of existing piles to be Contract work for which FWI is not entitled to additional compensation." This determination was conveyed to Flatiron in WSDOT Letter No. 0436 and initially protested in Flatiron SL# -00284.

**a. Date and Nature of Protested Determination :**

After a series of RFI's and Letters authored by FWI and responses from WSDOT, FWI sent our SL# -00275 to WSDOT. This letter outlined FWI's interpretation of the Contract Scope regarding WSDOT's request to backfill hollow voids contained in portions of existing bridge columns that were saw-cut and removed under Bid Items 15, 16, 17, 18, 19, and 20. WSDOT responded in Letter No. 0436, directing FWI to backfill these resulting voids with prescribed material. WSDOT also made the determination in this letter that no additional compensation would be provided for this work.

The direction to perform this work was given on August 18, 2016. Under the Contract, the Engineer has the Authority to direct work to be performed. FWI is not protesting the performance of this work.

The Engineer made the determination that no additional compensation was due the Contractor for the performance of this directed work. FWI is protesting this determination on compensation.

**b. Full discussion of the circumstances which caused the protest**

FWI SL#-00275 reviewed, specification by specification and line by line, all Contract requirements relating to the cutoff and removal of piling and columns. Flatiron is unable to find any provision in the Contract Special Provisions, Plans, or Standard Specifications that requires the backfill of column voids to be performed. Since it is not required to be performed, there is also no reference to payment.

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WSDOT responded by ordering this work be performed, to which FWI takes no exception. WSDOT's determination that this work is required by our original Contract and Payment is included in our original Contract Scope, is the determination we are protesting.

In WSDOT Letter No. 0436, which contains the determination, no further documentation is given by the State outlining where, in the Contract, this ordered work is scoped or paid for.

FWI is complying with the Order to perform the work, but remains in disagreement with the State's position that no further payment is warranted. Full discourse of the relevant Contract Provisions is contained in FWI SL# - 00275.

c. Estimated dollar cost of the issue:

At this point an estimate has been prepared for the columns on the north side of SR 520 only. As additional information is available, FWI will supplement this information.

d. An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption:

At this point an estimated schedule impact is unknown. As additional information is available, FWI will supplement this information.

e. Protested work is continuing at this time:

At WSDOT's request, FWI is tracking all costs associated with this issue and will continue to provide supplemental information as it is available.

You may contact me at the project office if you have any questions on this matter. Absent any additional information immediately requested by the Engineer, please advise Flatiron West, Inc. as to the Engineer's determination of protest validity.

Best Regards,

A handwritten signature in black ink, appearing to read "Virgil Curtis".

Virgil Curtis  
Project Manager

Received by WSDOT 11/02/2016 - FG

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Seattle, WA 98112  
[www.flatironcorp.com](http://www.flatironcorp.com)

November 2, 2016

SL# -00302

Steve Stand  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: - Issue 316 Delays to Civil Work in MOHAI Area  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Strand

Flatiron West, Inc. (FWI) is in receipt of WSDOT SL 470 wherein WSDOT denies any responsibility for the delays to the civil work in the MOHAI area.

Please consider this FWI's notice of protest in accordance with Standard Specification 1-04.5, as FWI disagrees with WSDOT's position on this matter.

FWI and KLB will track our costs against this issue, and will follow up with supplemental information in accordance with the contract.

Please contact me at the project office if you have any questions.

Best Regards,

A handwritten signature in blue ink, appearing to read "Jason Cadle".

Cc:  
Jason Cadle (KLB)

Received by WSDOT 11/15/2016 - FG  
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Flatiron West, Inc.  
2508 Lake Washington Blvd. E.  
Seattle, WA 98112  
www.flatironcorp.com

November 15, 2016

SL# -00309

Steve Stand  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Issue 316 Delays to Civil Work in MOHAI Area – Supplemental Information  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Strand:

Flatiron West, Inc. (FWI) provides the following supplemental information further to our notice of protest issued in SL 302.

a. Date and nature of the protest:

September 6, 2016 – FWI SL 287 noticed WSDOT of delays to civil work in the MOHAI area beyond the control of FWI and its subcontractors, and FWI's intent to seek recovery for costs associated with this delay.

November 2, 2016 – FWI SL 302 Notice of Protest for recovery of additional costs associated with delays to civil work in the MOHAI area beyond the control of FWI and its subcontractors.

b. Full discussion of the circumstances which caused the protest:

Timeline –

May 3, 2016 – FWI/KLB submitted RAMs 394 (BI 114) & 395 (BI 115) Wedge Action MJ Restraints

August 16, 2016 – WSDOT Rejected RAM 395 (BI 115) Wedge Action MJ Restraints

August 23, 2016 - FWI issued RFI 533 to WSDOT,

August 26, 2016 – WSDOT Responded to RFI 533 requiring a change to the contract

August 26, 2016 – FWI/KLB submitted RAM 445 (BI 114) Romac Grip Ring

August 29, 2016 – WSDOT Approved RAM 445 (BI 114) Romac Grip Ring

September 6, 2016 – FWI/KLB issued FWI SL 287/KLB SL 087



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September 20, 2016 – WSDOT Rejected RAM 394 (BI 114) Wedge Action MJ Restraints

Work on the landside FP system was suspended as KLB waited for direction from WSDOT on material approvals and procurement of the permanent materials needed for work on Bid Item No. 114.

The contract requires that all excavation go to the nearest embankment, and without the waterline work progressing, the nearest and only feasible embankment construction could not continue in an orderly manner.

As a result of this delay, FWI/KLB will incur additional costs accelerating the civil work in the MOHAI area to mitigate the working days lost due to this delay. FWI/KLB will also incur additional costs resulting from performing this work throughout the winter weather season to ensure completion in April 2016.

c. Estimated dollar cost of the protested Work:

The contract provides for the use of native materials for embankment of the mainline and ramps in the MOHAI area, capped with .35' of CSBC prior to base course pavement. The native material is extremely sensitive to moisture, rendering it highly susceptible to localized degradation and failure in all but the best weather conditions. Proceeding with roadway construction in accordance with the current design in the weather conditions between present and April is virtually impossible. Essentially, the design provided cannot be built between now and April, unless favorable weather is encountered and sustained for extended periods of time.

**Proposed Solution A:** The estimate provided along with this narrative is based on a means to optimize the use of fairly short breaks in the winter weather conditions between now and April. These means include the following course of action when weather breaks allow:

- Uncovering and grading the embankment to remove a quantity of native material to within 0.1' (subgrade)
- Immediately placing .5' (+\-.1') of CSBC, without hubbing
- Immediately placing base course of pavement to preserve the area of work

This method eliminates a full day from the process as outlined in the contract, eliminating the hubbing after the initial grading. It also provides for a more substantial 0.5' section of CSBC, in lieu of the .35' specified in the contract that will hold up much better in the weather conditions we will experience between now and April. It also allows us to perform small sections of the work at a time, taking advantage of unpredictable weather forecasts and shorter durations of dry weather patterns as they arise.

FWI/KLB have estimated additional quantities of Roadway Excavation, Including Haul and CSBC to accommodate the means described above, as well as additional costs associated with this work pushing into the winter months. Total estimated cost for Solution A is approximately \$347,000.

**Solution B:** This option would be more expensive, but would be necessary if WSDOT does not permit the work to proceed without hubbing the native material before placement of CSBC. If WSDOT does not remove the requirement for this hubbing step, FWI/KLB believe even greater quantities of Roadway Excavation, Including Haul and CSBC will be required to complete the roadway construction this season. We estimate an additional

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cost of approximately \$80,000 just for these two components of the work. There would be even more costs associated with a greater amount of weather related inefficiencies, repeat mobilizations, increased localized failures, TESC costs, etc. FWI estimates these costs to be an additional \$60,000. Total estimate cost for Solution B is approximately \$487,000.

**Note: Solution A requires a change to the contract.** If WSDOT does not issue a change to the contract to accommodate the "no-hubbing" option outlined in Solution A, above, FWI/KLB will be forced to proceed with the more costly Solution B.

- d. An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption:

At this point an estimated schedule impact is unknown. As additional information is available, FWI will supplement this information.

- e. The Work protested is ongoing at this time:

FWI will track all costs associated with this protested work and will continue to provide supplemental information in support of this protest as required in an effort to resolve the issue through mutual agreement.

Please contact me at the project office if you have any questions on this matter.

Best Regards,

A handwritten signature in blue ink, appearing to read "Vig P. L.", written over a light blue circular stamp.

Project Manager



November 29, 2016

Letter No. 0495

Flatiron West, Inc.  
2700 24<sup>th</sup> Ave E  
Seattle, WA 98112  
Attn: Virgil Curtis

Contract 8625  
SR 520 Montlake to Evergreen Pt. Bridge  
West Approach Bridge North  
Fed Aid Number: BR-NHPP-0520(053)

**Subject: Alleged Delays to Civil Work in MOHAI Area**

Dear Mr. Curtis:

WSDOT is in receipt of Flatiron West, Inc. (FWI) SL#-00302, which protests, and SL#-00309, which supplements the protest, WSDOT's determination regarding alleged delays to civil work in the MOHAI area.

FWI's statements contained in the supplemental information are:

1. *Work on the landside FP system was suspended as KLB waited for direction From WSDOT on material approvals and procurement of the permanent materials needed for work on Bid Item No. 114.*
2. *The contract requires that all excavation go to the nearest embankment, and without the waterline work progressing, the nearest and only feasible embankment construction could not continue in an orderly manner.*
3. *As a result of this delay, FWI/KLB will incur additional costs accelerating the civil work in the MOHAI area to mitigate the working days lost due to this delay. FWI/KLB will also incur additional costs resulting from performing this work throughout the winter weather season to ensure completion in April 2016.*
4. *At this point an estimated schedule impact is unknown. As additional information is available, FWI will supplement this information.*

WSDOT's responses to each of the FWI statements are:

1. At no time has WSDOT issued a notice to suspend work. The Contract requires that the Fire Protection Line under Pier 1 be supplied in 9 foot segments (Plan Sheet MF19) and without restrained joint connectors that use "gripping teeth". The Contractor sought approval for "gripping teeth", through the submittal process, which were rejected by WSDOT.
2. WSDOT did not delay the work. It is the contractor's responsibility to manage the work including coordination of excess excavation embankment or disposal.

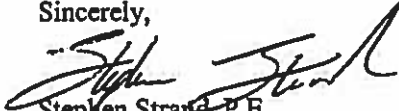
West Approach Bridge North  
Alleged Change of Conditions – Water Main Trench  
Page 2

3. WSDOT did not direct the contractor to accelerate the work. Any delay realized by the contractor is the sole responsibility of the contractor, including any associated costs.
4. FWI states that an estimated schedule impact is unknown though FWI's protest is related to delays.

FWI has failed to provide any new information to support its protest and therefore WSDOT finds it to be invalid.

If you have any questions, please feel free to contact this office.

Sincerely,



Stephen Strand, P.E.  
Construction Project Engineer

SS:JD:fg

cc: SR 520 Program Document Control via email  
Project File

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September 6, 2016

SL# -00287

Brian Dobbins  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Delays to KLB Civil Work in the Mohai Area  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Dobbins:

Attached please find a copy of KLB Serial Letter #087. This letter describes a delay beyond the control of Flatiron West, Inc. (FWI) and KLB, to portions of the civil work in the Mohai area which need to be completed prior to the winter of 2016.

FWI and KLB will seek recovery of all costs and impacts associated with recovering from this delay to ensure that the civil work is progressed to at least the installation of base course material prior to the 2016 winter season.

We understand that WSDOT is actively engaged in resolving the issues that gave rise to this delay and we will continue to work with your team to ensure the impact of this delay is minimized and that the schedule is recovered as efficiently as possible.

Please let me know if you have any questions on this matter.

Best Regards,

A handwritten signature in blue ink, appearing to read "Virgil Curtis".

Virgil Curtis  
Project Manager



September 2, 2016

Virgil Curtis - Project Manager  
Flatiron West, Inc.  
1770 La Costa Meadows Drive  
San Marcos, CA 92078

Serial Letter # 087

Re: WSDOT #C8625/KLB Job #214951  
Subject: Notice of Delay

Dear Mr. Curtis,

As we have been discussing; delay to the material procurement of the watermain fittings has caused a delay in the work. The watermain work has been suspended from 8/22/16 to 9/6/16 as we wait for direction on materials, approved submittals and procurement of the permanent materials needed for the furnish and install of work on Bid Item No. 114. This suspension and subsequent delay has also compounded the work schedule as the excavation and embankment activities had to be suspended in correlation with the watermain during the week of August 22, 2016. The contract requires that all excavation go to the nearest embankment and without the waterline work progressing, the nearest and only feasible embankment construction could not continue in an orderly manner.

The delay to the material approval is a result of RAM #0394 which has yet to be returned to us. KLB received a response to RAM #0395 for Bid Item No. 115 on 8/16/2016 after continued persistence from our staff to receive responses to the open and outstanding material submittals. RAM #0395 is the same product addressing the same issue for the 12' Watermain section. Upon receipt of this information we tried effortlessly to work directly with Flatiron and WSDOT staff to find a solution to this matter on Bid Item No. 114 and 115. The solution was not achieved until 8/26/2016 when a response to Flatiron RFI No. 533 was received providing approval to use a metal-to-metal locking system within the casing portion of the watermain in Bid item No.114. The casing portion of the watermain includes the work area suspended on 8/22/2016.


As a result of this delay we have been unable to accomplish the work set forth in Flatiron's Project Schedule. The utility, excavation, embankment, grading and CSBC work were forecasted to be completed by the end of this summer season and prior to the unfavorable and adverse weather conditions the fall and winter months impact the work. From our recent discussions it appears we will need to accelerate the work to help mitigate the loss of working days. It is our understanding that we will need to work additional overtime, including weekends as part of this acceleration. We also understand that there is a request to see if additional crews and equipment could help in this effort.

We would also like to provide notice that as of the submittal of this letter, we are still awaiting direction on the acceptable materials for bid item #115 for the buried section of pipe as it relates to the mechanical joint accessory kits needed for the install. We understand that WSDOT is working as diligently as possible to get direction from the designer, as we met with them this morning and went

through available options as well as sent material catalog cuts and information. We need to resolve this matter as quickly as possible to avoid additional delays in the near future.

If you require any further information or clarification on this matter, please do not hesitate to contact me.

Respectfully,



Jason Cadle  
KLB Construction Inc.

October 18, 2016

Letter No. 0470

Flatiron West, Inc.  
2700 24<sup>th</sup> Ave E  
Seattle, WA 98112  
Attn: Virgil Curtis

Contract 8625  
SR 520 Montlake to Evergreen Pt. Bridge  
West Approach Bridge North  
Fed Aid Number: BR-NHPP-0520(053)

**Subject: Alleged Delays to KLB Civil Work at MOHAI**

WSDOT is in receipt of Flatiron West, Inc. (FWI) SL0287, which states FWI and KLB will seek costs associated with recovering from a delay described in KLB's letter attached to SL0287.

FWI's letter provides no justification for its allegations of delay and simply refers to KLB's letter dated September 2, 2016 that includes the following statements:

1. *"The watermain work has been suspended from 8/22/16 to 9/6/16 as we wait for direction on materials...."*
2. *"The solution (to material submittal) was not achieved until 8/26/16 when a response to Flatiron RFI No. 533 was received providing approval to use a metal-to-metal locking system within the casing portion of the watermain in Bid Item No. 114 (10" water main)."*
3. *"The ....work was forecasted to be completed by the end of this summer season.... it appears we will need to accelerate the work to help mitigate the loss of working days."*

At no time has WSDOT issued a notice to suspend work or to accelerate the work and therefore WSDOT is not responsible for any delays or costs related to schedule recovery.

The Contract requires that the Fire Protection Line under Pier 1 be supplied in 9 foot segments (Plan Sheet MF19) and without restrained joint connectors that use "gripping teeth". The Contractor sought approval for "gripping teeth", through the submittal process, which were rejected by WSDOT.

FWI submitted RFI 0533 on August 23, 2016 that states:

*Fire protection supply pipe shall be limited to 9' segments for pipe removal purposes. As the pipe is only available in 18' segments the pipe must be cut in half and couplings must be used to create 9' segments. KLB has submitted multiple options for these couplings and all have been rejected. KLB requests clarification on what coupling should be used to create the 9' segments of pipe.*



West Approach Bridge North  
Alleged Delays to KLB Civil Work at MOHAI  
Page 2

WSDOT responded to RFI 0533 on August 26, 2016 stating:  
*The use of metal to metal locking system with gripping teeth is allowed only for the restrained joints along the portions of the fire protection pipe contained within casing pipe.*

Upon receipt of FWI's SL 287 on September 6, 2016 WSDOT again reviewed the contract requirements and contacted U.S. Pipe (a supplier of TR FLEX pipe). They confirmed that material approved in RAM 0069 on March 13, 2015 is available in 9-foot lengths. This contradicts the statement made in RFI 0533 proclaiming that *"the pipe is only available in 18' segments"*.

FWI and KLB would have avoided their alleged delays if contract compliant material, which is available, had been procured. WSDOT's agreement to allow the gripping teeth on the pipe run in question helps the Contractor out of a bind. Had the Contract remained as advertised, additional time and cost impacts would have been realized by FWI.

WSDOT is not responsible for the alleged delays and costs and will not participate in the related costs or time that may be realized due to the decisions and lack of planning by the Contractors.

If you have any questions, please feel free to contact this office.

Sincerely,



Stephen Strand, P.E.  
Construction Project Engineer

SS:JD:fg

cc: SR 520 Program Document Control  
Project File

Received by WSDOT 11/02/2016 - FG  
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Flatiron West, Inc.  
2508 Lake Washington Blvd. E.  
Seattle, WA 98112  
[www.flatironcorp.com](http://www.flatironcorp.com)

November 2, 2016

SL# -00304

Steve Strand  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Notice of Protest for Issue 339 / RFI 546 / RAM 404 Stainless Steel Hardware FP System  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Strand

Flatiron West Inc. (FWI) is in receipt of WSDOT SL 477 requiring that Bridge Standpipe coupling hardware shall be stainless steel.

Please consider this Flatiron West, Inc.'s (FWI) notice of protest with this direction in accordance with Standard Specification section 1-04.5.

We will follow up with supplemental information in accordance with the contract.

Best Regards,

A handwritten signature in black ink, appearing to read "Vig D. L.", written over a light blue horizontal line.

Cc: Matt Garrett (HD Fowler)

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2508 Lake Washington Blvd. E.  
Seattle, WA 98112  
www.flatironcorp.com

November 15, 2016

SL# -00310

Steve Stand  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Issue 339 Stainless Steel Hardware for Bridge Standpipe – Supplemental Information  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Strand:

Flatiron West, Inc. (FWI) provides the following supplemental information further to our notice of protest issued in SL 304.

*a. Date and nature of the protest:*

November 2, 2016 – FWI SL 304 Notice of Protest for recovery of additional costs associated with providing stainless steel hardware for the Bridge Standpipe.

*b. Full discussion of the circumstances which caused the protest:*

Timeline –

May 20, 2016 – FWI submitted RAM 404 (BI 117)

September 14, 2016 – WSDOT returned RAM 404 (BI 117) Approved As Noted (with a note that stainless steel hardware would be required in place of the plated steel hardware submitted)

September 15, 2016 – FWI Submitted RFI 546 seeking clarification that plated steel hardware as submitted in RAM 404 would be acceptable

October 4, 2016 – WSDOT responded to RFI 546 taking the position that stainless steel hardware is required by the specifications

October 10, 2016 – FWI issued SL 295 disagreeing with WSDOT's position taken in RFI 546 that stainless steel hardware is required by the specifications, alerting WSDOT to a potential Buy America compliance concern, and requesting direction

October 28, 2016 – WSDOT issued SL 477 directing FWI to provide stainless steel hardware

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2508 Lake Washington Blvd. E.  
Seattle, WA 98112  
www.flatironcorp.com

c. Estimated dollar cost of the protested Work:

See attached Estimated Costs

d. An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption:

At this point an estimated schedule impact is unknown. As additional information is available, FWI will supplement this information.

e. The Work protested is ongoing at this time:

FWI will track all costs associated with this protested work and will continue to provide supplemental information in support of this protest as required in an effort to resolve the issue through mutual agreement.

Please contact me at the project office if you have any questions on this matter.

Best Regards,

A handwritten signature in blue ink, appearing to read "Vig W. L.", is written over a light blue circular stamp.

Project Manager



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2508 Lake Washington Blvd. E.  
Seattle, WA 98112  
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January 27, 2017

SL# -00321

Steve Strand  
Washington Dept. of Transportation  
2510 Lake Washington Blvd E  
Seattle, WA 98112

RE: Notice of Protest – Landside Fire Protection System Testing  
Project: SR 520 Montlake to Evergreen West Approach Bridge North (WABN)

Dear Mr. Strand:

FWI has been notified by KLB and Wood Harbinger of their disagreement with WSDOT's position that the retesting scheduled for February 1, 2017 is not extra work as outlined in the attached email dated January 18, 2017.

Accordingly, please consider this FWI's notice of protest for this issue in accordance with Standard Specification 1-04.5. Both KLB and Wood Harbinger will track their costs for this retesting effort against this issue.

Best Regards,

A handwritten signature in black ink, appearing to read "Vig P. L.", is written over a light blue horizontal line.

Project Manager

CC:

Jason Cadle (KLB)  
Nick Baker (Wood Harbinger)

Enclosures:

2017.01.18 KLB SL 093  
2017.01.18 WSDOT Email



January 18, 2017

Virgil Curtis- Project Manager  
Flatiron West, Inc.  
1770 La Costa Meadows Drive  
San Marcos, CA 92078

Serial Letter # 093

Re: WSDOT #C8625/KLB Job #214951  
Subject: WSDOT email 1.18.2017 Regarding Pipe Testing Requirements

Dear Mr. Curtis,

In response to the WSDOT email received on January 18, 2017, *Subject:SR 520 WABN Landside FP Hydrostatic Retest*, KLB disagrees with WSDOT's position that the additional testing required by WSDOT is not "extra work". We provide the following information for your review:

1. The waterline installation that we are now performing additional acceptance testing on was installed using WSDOT Standards per the contract requirements. The contract specifications and bid items provides clear definition between the COS and WSDOT work. The testing using the new performance requirements issued by WSDOT this past month is now being adopted for previously installed WSDOT Bid Item Work. The contract special provisions (SP's) and contract documents do not provide any information that would direct the contractor to deviate from the Standard Specifications for these WSDOT bid items. As such, KLB used the requirements provided in the Standard Specifications. Please note that the Special Provisions do provide additional "special" language for the waterline testing on the COS Bid Items. There is an entire section of the SP's dedicated to providing these requirements. These COS testing requirements in the SP's do not conform to the NFPA 24 requirements that were recently issued.
2. The NFPA 24 Specifications Requirements were issued after the testing was performed on the WSDOT system using the Standard Specification Requirements.
3. KLB identified prior to performing the initial testing. General Note #7 on sheet MF02 (1661), *"Fire protection inspection and testing include WSDOT, SPU, and SFD requirements"*. As such KLB discussed the lack of information regarding testing requirements for the landside WSDOT bid items with the WSDOT Inspection staff. This includes specifically identifying that the COS items have specific requirements in the SP's and that the SP's for the WSDOT items do not contain any specific language or indicators other than what is listed in the Standards. We verbally asked and received concurrence from WSDOT inspections that we default to the WSDOT Standard Specifications. During these discussions KLB provided feedback to WSDOT that we did not take exception to whatever requirements that were needed for the testing, we just wanted to assure we had the correct requirements and planned accordingly.
4. As this situation still seemed unclear and from our perspective we wanted to assure we had done everything in our power to conform to General Note #7 and the rest of the coordination requirements in the contract we discussed at length our plan and the requirements we would be using at the Thursday November 17, 2016 commissioning meeting. WSDOT, SFD, BFD and SPU all attended or conferenced in via telephone. I specifically pointed out the lack of testing requirement clarity and that we would be using the Standard Specifications requirements for our Hydrostatic Pressure Testing of this line. At this meeting I also read out loud and paraphrased from the following information on our DRAFT Plan Procedure that we had prepared in a handout for the meeting; *"The underground land side fire protection system will*

*be tested per WSDOT standard specification 7-09.3(23). Water main appurtenances and service connections to the meter shall be tested in sections of convenient length under a hydrostatic pressure equal to 150 psi in excess of that under which they will operate or in no case shall the test pressure be less than 225 psi. Plan sheet MF02 states Water supply is based on having a 12 inch tap off the 12 inch main for 1500 GPM @ 108.7 psi. Using this information the system will be tested at 258.7 psi. The mains shall be filled with water and allowed to stand under pressure a sufficient length of time to allow the escape of air and allow the lining of the pipe to absorb water. The test shall be accomplished by pumping the main up to the required pressure, stopping the pump for 15 minutes, and then pumping the main up to the test pressure again. During the test, the section being tested shall be observed to detect any visible leakage. There shall not be an appreciable or abrupt loss in pressure during the 15-minute test period"* at no time during this meeting did anyone from WSDOT, SFD, BFD or SPU provide any indication that this would not be acceptable. We followed this reading with each organization providing who they would or would not have at attendance for the actual testing and provided notice that we had scheduled the testing for 11/28/16. This handout also included a highlighted plan sheet specifically identifying the three runs of pipe that would be tested.

5. As good practice and to assure we were being as transparent about this matter as practical, KLB met with the WSDOT Chief Inspector directly following the commission meeting and went through our written plan to make necessary adjustments from the previous meetings comments and discussion points. We then finalized this document and sent this to Flatiron on November 18, 2016 to be incorporated into the commissioning documentation. It is our understanding that Flatiron not only sent this to the commissioning agent and that it was incorporated into the commissioning plan documentation but that the final document was made available to WSDOT, SFD, BFD and SPU for their review and use prior to the first test taking place.
6. During the performance of the actual testing, at no time was it identified by any party taking place that the requirements being used were not per the contract nor to their satisfaction. It was only after we requested final signatures for the commissioning paperwork was notice provided that the testing did not meet their requirements for approval.

As we have discussed on several occasions since early November, both KLB and Flatiron identified this potential deficiency in contract language and requirements well before the original testing took place. As such, we extended extra efforts to get input from WSDOT and all of the stakeholders to avoid such a situation that we are in currently. When our verbal efforts yielded little feedback except to go by what the "contract says" we decided to put together a special work plan that would provide our sequencing of work including the testing requirements we were going to use. We met with the commissioning agent ahead of time, then discussed this at length in the next commissioning meeting and finally we issued a plan with this specific language that was then incorporated into the overall commissioning plan documentation and sent to all necessary parties. SFD attended the commissioning meeting and field testing and at no time were we made aware that our plan didn't meet the contract requirements or expectations of anyone involved. Furthermore, the contract makes no indication anywhere of the NFPA 24 requirements.

In summary, we believe we have gone above and beyond the requirements in the contract to avoid this unnecessary situation. We requested assistance and feedback from multiple parties and received and documented our efforts and intentions. We request that the contractor now be compensated for the additional work necessary to provide the testing per the recently issued NFPA 24 requirements. If you require any additional information or have questions please do not hesitate to contact me.

Respectfully,



Jason Cadle  
KLB Construction Inc.



|                                                                                                                                                                     |                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Cont. #: <u>8625</u> Cont. Title: <u>SR 520 West Approach Bridge North (WABN)</u><br>C.O. #: <u>101</u> C.O. Title: <u>Inland Casing Ext. &amp; Settlement</u>      | If yes, State<br>Construction Office<br>Approval Required.          |
| <b>I. Executed by the State Construction Office</b>                                                                                                                 |                                                                     |
| 1. Cost or credit equal to or exceeding \$500,000. *1, *3                                                                                                           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. Change in the contract documents beyond the scope, intent or termini of the original contract. *2                                                                | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 3. Any proposed revision or deletion of work that affects the condition of award requirements. (Must be coded "CO" in CCIS, Includes changes to goal or commitment) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 4. Change in contract time greater than 30 working days, or a change in contract time not related to any change order. *1                                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <b>II. Executed by the Region</b>                                                                                                                                   |                                                                     |
| 5. Determination of impacts and/or overhead.                                                                                                                        | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 6. Change to Contract Provisions or Standard Plans.                                                                                                                 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 7. Material or product substitution. (Excludes materials associated with Std. Specification Sections 6-07, 8-01, 8-02, 8-12, 8-18 & 8-20)                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 8. Structural design change in the roadway section. (Requires concurrence from designer)                                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 9. Determination of changed condition. (Section 1-04.7 of the Standard Specifications)                                                                              | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 10. Settlement of a claim. (Section 1-09.11(2) of the Standard Specifications)                                                                                      | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 11. Repair of damage regarding "acts of God" or "acts of the public enemy or of government authorities". (Section 1-07.13 of the Standard Specification)            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 12. Structural change to structures                                                                                                                                 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

**Approvals obtained:**

Project Engineer: Stephen Strand Date: 3/10/2017

Region: Dave Becher Date: 3/10/2017

State Construction Office: Derek Case Date: 2/22/2017

Other (Local Agency, FHWA, Surety, etc.): Anthony Sarhan Date: 3/16/2017

**To be completed by the Project Engineer :**

CO Reason(s) (See "2008 Codes and Definitions" on State Construction Office web page): AL-04 UC, AW & DS

Change Order Prepared By: Marcy Gustafson Date: 2/20/2017

Is this project under full FHWA stewardship oversight (Project Of Division Interest)? \*1  Yes  No

**To be completed by the Region :**

Is the change eligible for Federal participation where applicable?  Yes  No

Change Order Reviewed by: Jon Danks Date: Multiple

- \*1 Change (Cost or Credit) greater than \$200,000 or greater than 30 days on Projects of Division Interest (PODI) requires FHWA approval. (see Construction Manual - Chapter 1-00.10, Chapter SS 1-04.4, and State Construction Office web page)
- \*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 Engineering error changes over \$500,000 requires reporting (See reporting instructions & template on State Construction Office web page)

This form represents the minimum information required by the State Construction Office. If you wish to supplement this information, you may do so on a separate sheet of paper.





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

Cont. #:

C.O. #:

**To be completed by the Project Engineer:**

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 checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Name: <input type="text" value="N/A"/> | Date: <input type="text"/> |
| Pontoon Mitigation | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Name: <input type="text" value="N/A"/> | Date: <input type="text"/> |
| Pontoon Moorage    | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Name: <input type="text" value="N/A"/> | Date: <input type="text"/> |
| Eastside HOV       | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Name: <input type="text" value="N/A"/> | Date: <input type="text"/> |
| Evans Creek        | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Name: <input type="text" value="N/A"/> | Date: <input type="text"/> |
| FB&L               | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Name: <input type="text" value="N/A"/> | Date: <input type="text"/> |
| WCB                | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Name: <input type="text" value="N/A"/> | Date: <input type="text"/> |
| WABN               | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Name: <input type="text" value="N/A"/> | 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: Date:

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: