



July 9, 2026

Letter No. 478
BY-CRE-05901

Evelyn Pao, P.E., Project Director
Washington State Department of Transportation
I-405/SR 167 Program
18911 N Creek Pkwy S, Suite 150
Bothell, WA 98011

Project: I-405/Brickyard to SR 527 – Improvement Project
Contract No.: 009727

Subject: Notice of Protest 021 – Issue SKA-0320 - Fish Passage Streambed Material Gradation – Supplemental QB405

Dear Ms. Pao:

This letter and its enclosure are submitted in response to WSDOT Serial Letter No. 9727-380, dated June 25, 2026, in which WSDOT invoked the one-time correction provision of GP 1-04.5 and directed Skanska to separate Protest 021 (Issue SKA-0320, Fish Passage Streambed Material Gradation) into individual crossing-specific letters within 14 calendar days. This letter transmits the corrected supplemental information for the Queensborough 405 Fish Passage. Corresponding letters for the Juanita Creek, Queensborough SR-527, and North Fork Perry Creek crossings are being submitted concurrently under separate Skanska letter numbers.

Skanska submits the following for the record:

1. This submittal is corrected supplemental information provided pursuant to GP 1-04.5 in response to WSDOT SL 9727-380. It is not a withdrawal of Protest 021, and it is not a new or separate protest, request for change, or Owner-Initiated Change request. Protest 021 remains open and active in full.
2. Skanska's Notice of Protest and all prior supporting submittals remain incorporated by reference and are not superseded, including LTR 411, LTR 459, and the AECOM supplemental information dated June 2, 2026. Nothing in this correction limits, narrows, or waives any position, right, or remedy previously asserted under Protest 021.
3. The enclosed crossing-specific letter documents the circumstances, contract basis, cost, and schedule impact for the Queensborough 405 Fish Passage, consistent with the content elements identified in GP 1-04.5. Skanska notes that the four crossings arise from a common course of WSDOT direction and reversal, and the crossings remain interrelated notwithstanding their separation into individual letters at WSDOT's direction.
4. The cost and schedule impacts stated herein are preliminary and are based on information available to date. Skanska expressly reserves the right to supplement and revise both the cost analysis and the delay/disruption analysis as impacts are actualized, and to submit a request for a time extension upon completion of the delay analysis.

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5. Skanska requests WSDOT's written determination on this corrected submittal within 21 calendar days of receipt, consistent with GP 1-04.5.
6. The cost table in the enclosed letter reflects AECOM's design cost of \$131,206 for this crossing. Inclusive of Skanska's 15% markup on AECOM's cost, the Design-Builder's cost for this crossing is **\$150,886.90**. This figure reflects design cost only. Consistent with LTR 459, construction cost impacts are not yet provided and cannot be quantified until RFC drawings are issued; those impacts, together with Skanska's own costs, are reserved and will be provided as they are identified. All figures stated herein are preliminary and subject to revision as impacts are actualized.

This letter is submitted without prejudice to, and with full reservation of, all of Skanska's rights, remedies, and defenses under the Contract, at law, or in equity. Nothing herein shall be construed as a waiver, modification, or estoppel of any such right.

Respectfully,



Patrick Prendergast, Vice President

Skanska USA Civil
18911 N Creek Parkway S, Suite 300
Bothell, WA 98011

Attachments:

AECOM Response to WSDOT SL No. 9727-318 - Streambed Material Gradation - Supplemental Information - Queensborough 405 dated July 8, 2026

7/8/2026

Via E-mail

Patrick Prendergast
Contractor's Representative
Skanska USA Civil West California District Inc.
18911 N Creek Pkwy, Suite 300
Bothell, WA 98011
Patrick.Prendergast@skanska.com

**RE: I-405-Brickyard to SR 527 Improvement Project
Contract No:009727
AECOM Response to WSDOT SL No. 9727-318 - Streambed Material Gradation - Notice of Protest (PCN 00148 – WDFW Sediment Size) – Supplemental Information – Queensborough 405**

Dear Mr. Prendergast:

I am writing on behalf of AECOM in response to WSDOT's Serial Letters No. No. 9727-318, dated April 10, 2026, No. 9727-333, dated April 30, 2026, and No. 9727-380 dated June 25, 2026. In accordance with the protest procedures outlined in Section 1-04.5 of the RFP: Procedure, Protest, and Dispute by the Design-Builder, AECOM hereby disputes WSDOT's statement that after review of Skanska LTR 388, Notice of Equitable Adjustment - Owner-Directed Changes to Fish Passage Streambed Material Gradation (Issue SKA-0320), dated March 27, 2026 and Skanska LTR 392, dated April 3, 2026, providing supplemental exhibits, "No OIC or equitable adjustment is warranted" regarding the streambed material gradation at the I-405 Fish Passages. As required per the agreement between Skanska USA Civil West California District Inc. ("Skanska") and AECOM Technical Services, Inc. ("AECOM"), dated October 25, 2022 (the "Design Subcontract"), please forward this to WSDOT as soon as possible, but no later than the WSDOT provided deadline of July 9, 2026.

As a supplement to AECOM's Notice of Protest, dated April 22, 2026, entitled, "AECOM Response to WSDOT SL No. 9727-318 - Streambed Material Gradation - Notice of Protest (PCN 00148 – WDFW Sediment Size)," AECOM's original supplemental information provided on June 2, 2026, and at the request of WSDOT to separate the four fish passage crossings into individual letters for evaluation as stated in WSDOT SL No. 9727-380 and dated June 25, 2026, AECOM provides additional information as requested by WSDOT for the Queensborough 405 Fish Passage:

a. The date and nature of the protested order, direction, instruction, interpretation, determination:

Date of Protested Order: April 10, 2026

Nature of Protested Order: The Design-Build team is protesting WSDOT's assertion in letter SL No. 9727-318 that after review of Skanska Serial Letter 388, RE: Notice of Equitable Adjustment - Owner-Directed Changes to Fish Passage Streambed Material Gradation (Issue SKA-0320), WSDOT believes "No OIC or equitable adjustment is warranted."

b. A full discussion of the circumstances which caused the protest, including names of Persons involved, time, duration and nature of the Work involved, and a review of the Contract Documents/Design Documents referenced to support the protest.

Section 2.30.5.2.1 of the Technical Requirements Table 2.30-B, Structure and Channel Design Characteristics, provides a table stating the proposed [stream]bed material at all fish passages must be,

“20% (max.) coarser than existing” at all Fish Passage locations. It is widely understood that streambed material is an aggregation of individual particles, having a variety of particle sizes and shapes. The variation in particle size is represented by a gradation that indicates the size of the streambed material. WSDOT has elected to use the diameter of the median particle size-represented as ‘D50’-as a proxy for the streambed gradation. Therefore, this document refers to both ‘gradations’ and ‘D50’ when discussing this streambed material design requirement. AECOM worked to adhere to all contract requirements including the Table 2.30-B gradation. Following the Streambed Material Decision Tree (WSDOT Hydraulics Manual, March 2022), constraints due to streambed stability were identified to support a streambed sediment mix coarser than the 20% increase from the existing gradations at all Fish Passages on the I-405 Brickyard Project. The design team initially notified WSDOT that the 20% maximum gradation could not fully be met while maintaining a non-eroding streambed in the July 30, 2024 Fish Passage Task Force Meeting (TFM). This was continually discussed in TFM from July 2024 through October 2024. On October 29, 2024, AECOM requested direction on how to progress design with the streambed sediment gradation being over the 20% maximum allowable size, via email correspondence. WSDOT responded to AECOM’s email (see attached) on November 1, 2024, providing direction for AECOM to:

- Provide our calculations showing we need upsized material
- Document that AECOM followed WSDOT directives from the sediment tree (Streambed Material Decision Tree, Page 7-34 WSDOT Hydraulics Manual, March 2022)
- Provide documentation showing that due to items out of AECOM’s control, we are currently in a sediment starved system and if we were to place material, our findings show the material will transport out of the crossing, and the crossing will immediately be placed back on the injunction list
- Provide documentation showing that in an effort to keep this crossing passable, and not having the sediment wash out, it is appropriate to upsize our material per WSDOT guidelines (WSDOT Hydraulics Manual, March 2022).

In WSDOT’s Serial Letter No. 9727-318, WSDOT alleges an Owner Initiated Change (OIC) is not warranted to the design builder regarding the sediment size at the Juanita Creek, North Fork Perry Creek, Queensborough 527, and Queensborough 405, fish passages. However, meeting minutes from the fish passage task force meetings and above described email demonstrates WSDOT directed the design team to provide a design differing from contract requirements. Additionally, WSDOT accepted RFC (Release for Construction) for 3 of the 6 fish passage designs with sediment size in excess of 20% for portions of the streams. WSDOT’s concurrence to release design for construction at Par Creek, North Fork Perry Creek, and Queensborough 405 fish passages acknowledged they were amenable to the increased sediment sizes and update to the contract.

As the project progressed, WSDOT retracted their original direction and provided new instruction for the design team to follow Table 2.30-B with no deviations, making sediment sizes at maximum 20% throughout all streams. WSDOT provided this new direction via RCSR comments on the Final design of Queensborough 527 and Juanita Creek Fish Passage Final Hydraulic Design (FHD). The majority of comments regarding sediment size stated concern for Tribal and WDFW acceptance. When AECOM received these comments, AECOM again explained the sediment size was unable to meet contract requirements in portions of the streams while maintaining a stable streambed, and the design followed original WSDOT guidance. AECOM also noted the three other fish passages that had been released for construction with over-coarsened material. WSDOT did not acknowledge their previous direction, nor AECOM’s explanation that the streambed would be unstable if design fully met the 20% maximum gradation requirement.

In accordance with TR Section 2.30.7.3.1, “For each fish passage being replaced, the Design-Builder shall submit a PHD (preliminary hydraulic design) to WSDOT for Review and Comment. After WSDOT’s comments are addressed by the Design-Builder, WSDOT will submit the PHD to the Tribe(s) and WDFW for Review and Comment. The Design-Builder shall address the comments of the Tribe(s) and WDFW.”

To confirm the proceeding designs were sent to the Tribe(s) and WDFW, AECOM submitted RFI 559 on August 28, 2025, to WSDOT. WSDOT responded on September 12, 2025, “The FHD for all fish passages submitted to date have been shared with the tribe and WDFW as required by contract. The preliminary comments were never closed with WSDOT acceptance. The RCSR form was submitted with the FHD with codes of “R” Resolve comment in the next submittal phase. The FHD contained similar comments to the PHD that to date are not closed. Juanita Creek was sent to WDFW on February 26, 2025. WDFW has not responded with comments.”

WSDOT’s response notified AECOM they had not provided the PHD for fish passages as required by contract. The response specifically states “the FHD” for fish passages had been provided to the Tribe and WDFW. Additionally, WSDOT responds in bad faith stating that “preliminary comments were never closed with WSDOT acceptance.” If these comments were not closed, WSDOT would not have allowed the design to progress to FHD and certainly not to RFC.

Because WSDOT failed to adhere to the requirements of the contract that they developed, AECOM was hindered in their design delivery. When WSDOT finally submitted AECOM’s design to WDFW and the Tribe (MIT), WDFW notified AECOM that no permit would be issued for the three RFC’d plan sets until the over-coarsened material was removed from the design. WSDOT expressed concern that if the previously RFC’d design was not updated, WDFW would not remove the fish passages from the state injunction list, which is a project requirement.

After months of back and forth, WSDOT refused to acknowledge their prior direction and AECOM was forced to redesign the two fish passage designs submitted for Final, Juanita Creek and Queensborough 527, prior to submitting RFC, and provide NDC’s revising design for Queensborough 405 and North Fork Perry to update the sediment size in areas that did not meet 20% maximum.

Although WSDOT and WDFW made comments regarding increased sediment size at Juanita Creek Fish Passage, WSDOT agreed the sediment size could not be decreased below a 20% maximum gradation. Additionally, the last fish passage hydraulic design AECOM provided, Stream 25.0L, also included over coarsened (greater than 20% of existing) material in the design. WSDOT has requested increasing the sediment size design for this fish passage.

WSDOT has requested the design team provide individual letters for each fish passage crossing. This segregation is provided in this letter, and corresponding letters. However, AECOM feels it is also important to show the chronology of all fish passage designs and approvals cohesively because of the timing of WSDOT’s decisions and inconsistencies throughout the design processes. The following provides a timeline of fish passage milestones on the I-405 Brickyard Project:

- November 2023 – Par Creek Preliminary Hydraulic Design (PHD) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - **No comments related to oversized streambed material size were provided by WSDOT or other comanagers.**
- March 2024 – Par Creek Draft Final Hydraulic Design (FHD) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - **WSDOT comments are provided in March 2024 and were fully resolved, including those related to streambed sediment sizing, in the May 2025 RFC submittal.**

- April 2024 – North Fork Perry Preliminary Hydraulic Design and Queensborough 405 Preliminary Hydraulic Design (PHD) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - Streambed material is noted as being unstable at the design flood, which is consistent with Appendix H08 of the Contract, and indicates a risk analysis and coordination with WSDOT is required. AECOM's design also proposes coarser material for stability and resistance to scour.
 - **No comments related to streambed material size were provided by WSDOT throughout these design reviews.**
- May 2024 – Par Creek Release for Construction Design (RFC) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - The design includes WSDOT standard streambed sediment, which is approximately 60 times larger than existing material, and provides stability of the streambed at the design flood.
 - **Concurrence is reached on all RCSR comments, including those related to streambed sediment sizing.**
- June 2024 – Juanita Preliminary Hydraulic Design (PHD) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - The design includes WSDOT standard streambed sediment, over coarsened material. Justification for over coarsened sediment is provided by AECOM in the PHD and is consistent with Appendix H08, WSDOT's Draft Preliminary PHD.
- June 2024 – Queensborough 527 Preliminary Hydraulic Design (PHD) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - Streambed material is noted as being unstable at the design flood, which is consistent with Appendix H08 of the Contract, and indicates a risk analysis is required, and that coordination with WSDOT will be needed. Additionally, coarser material is proposed for stability and resistance to scour.
- July 30, 2024 – Brickyard – Fish Passage Task Force Meeting Minutes: Meeting #16:

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
3.5	16	Streambed Material Sizing				Open
Description						
• Streambed Material Sizing / Risk Assessment						
Official Documented Meeting Minutes						
• Design analysis indicates that the streambed material sizes need to be increased for stabilization. • Tribes have noted that over coarsening does not allow for natural streambed operation. Upstream is not providing coarse enough material to provide stabilization. • ACTION: WSDOT to provide direction for path forward on gradation. • Gradation provided in FHD's does meet technical requirements. Need resolution through RCSR process.						

- August 2024 – Queensborough 405 Draft Final Hydraulic Design (FHD) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - A risk assessment is included in AECOM's FHD Appendix S, which indicates an over coarsened channel is required. Therefore, additional, coarser material is proposed for stability and resistance to scour. **WSDOT comments are provided in September 2024 and were fully resolved, including those related to streambed sediment sizing, in the September 2025 RFC submittal.**

- August 13, 2024 – Brickyard – Fish Passage Task Force Meeting Minutes: Meeting #17

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
2.5	16	Streambed Material Sizing				Open
Description • Streambed Material Sizing / Risk Assessment						
Official Documented Meeting Minutes • Will know if this is an issue when comments on FHD's are received. • ACTION: WSDOT to discuss internally how to respond if it is an issue. • Is there a template for streambed material risk assessment?						
No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
						• WSDOT not aware of one but will inquire internally.

- August 27, 2024 – Brickyard – Fish Passage Task Force Meeting Minutes: Meeting #18

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
2.6	16	Streambed Material Sizing				Open
Description • Streambed Material Sizing / Risk Assessment						
Official Documented Meeting Minutes • Par Creek to remain as designed in RFC • Per WSDOT: Northfork Perry, Queensborough 405, Queensborough 405, Stream 25L, and Juanita proceed with 20% larger sediment than existing showing that it will scour and will be mobile with narrative within document that Shields equation does not take into account wood. Will likely not see the depth of scour that the Shields shows. Need to confirm structure is deep enough. • Design team risk assessment found some risk to be reviewed by design-build team.						

- August 2024 – North Fork Perry Draft Final Hydraulic Design (FHD) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - A risk assessment is included in Appendix Q, which indicates an over coarsened channel is required. Therefore, additional, coarser material is proposed for stability and resistance to scour. **WSDOT comments are provided in September 2024 and were fully resolved, including those related to streambed sediment sizing, in the April 2025 RFC submittal.**

- September 10, 2024 – Brickyard – Fish Passage Task Force Meeting Minutes: Meeting #19

No.	Mtg Origin	Title	Assignment	Due Date	Priority	Status
2.5	16	Streambed Material Sizing				Open
Description Streambed Material Sizing / Risk Assessment						
Official Documented Meeting Minutes - Shields Equation doesn't account for LWM / other complexity components - Models represent LWM through increased Manning's n values - Models include riffles and pools in terrain, riffles double as steep as average slope used in prelim WSDOT models - WSDOT's current direction to use streambed sediment mix within 20% of the existing stream gradation - Ultimate Goal is Fish Passage: - Compromise between engineering analysis (coarser material) with more fine material? 1-foot lift at finished grade of the type 1 sediment with coarser/stable material under? - Path Forward: Continue with over-coarsened channel for Juanita and SR 527 FHD's						

- November 2024 – Juanita Draft Final Hydraulic Design (FHD) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - The design includes WSDOT standard streambed sediment and over coarsened material. A risk assessment is included in AECOM's FHD Appendix P, which indicates an over coarsened channel is required.
- January 2025 – Queensborough 527 Draft Final Hydraulic Design (FHD) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - A risk assessment is included in Appendix Q, which indicates an over coarsened channel is required. Therefore, following an alternatives analysis per guidance in Appendix 7A of the WSDOT Hydraulics Manual, additional coarser material is proposed for stability and resistance to scour.
 - WSDOT comments are provided in March 2025.
- March 2025 – Stream 25.0L Preliminary Hydraulic Design (PHD) submitted to Skanska and WSDOT
 - The design includes streambed sediment 20% larger than existing.
 - WSDOT Comments provided in April 2025. **No comments were related to streambed sediment sizing.**
- April 2025 – North Fork Perry Release for Construction Design (RFC) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - A risk assessment is included in Appendix Q, which indicates an over coarsened channel is required. Therefore, following an alternatives analysis per guidance in Appendix 7A of the WSDOT Hydraulics Manual, additional coarser material is proposed for stability and resistance to scour.
 - Concurrence is reached on all RCSR comments, from both WSDOT and the Tribe (MIT), including those related to streambed sediment sizing.

- August 28, 2025 – AECOM submits RFI 559_Juanita Creek WDFW PHD Review Question and Response shown below:

Question from Meredith Cote (AECOM (Seattle)) at 08:49 PM on 08/28/2025 Per technical requirement section 2.30.7.3.1 - Preliminary Hydraulic Design Report, 'After WSDOT's comments are addressed by the Design-Builder, WSDOT will submit the PHD to the Tribe(s) and WDFW for Review and Comment.' For Juanita Creek PHD, comments were returned to AECOM on 7/29/2024 and comments were resolved (as returned from WSDOT on 1/7/2025) and incorporated into a Draft Final Hydraulic Design (FHD) report sent to WSDOT on 1/24/2025. Please confirm and provide documentation that the Juanita PHD was sent to WDFW for review and comment as required in the Contract. If confirmed, please identify if WDFW had no comments or was unresponsive. Additionally, please confirm the PHD's for the other Project fish passages were sent to WDFW in accordance with 2.30.7.3.1.
Official Response: Nancy Alpuche (Washington State Department of Transportation) responded on Friday, September 12th, 2025 at 1:18PM PDT As indicated in your question – the FHD as submitted by AECOM is the document that resolves WSDOT's comments on the PHD. The FHD for all fish passages submitted to date have been shared with the tribe and WDFW as required by contract. The preliminary comments were never closed with WSDOT acceptance. The RCSR form was submitted with the FHD with codes of "R" Resolve comment in the next submittal phase. The FHD contained similar comments to the PHD that to date are not closed. Juanita Creek was sent to WDFW on February 26, 2025. WDFW has not responded with comments. Per the approved Hydraulic Project Approval for Juanita Creek, Appendix P04, an HPA modification is required prior to construction. To date WSDOT has not been asked or provided with the information to submit a permit modification in accordance with RFP Section 2.8.5.2.2, <i>Permit Compliance, Modifications, and Additional Approvals</i>, "The Design-Builder shall work with WSDOT to identify changes to the methods and means previously described as part of the original environmental documents and permit applications. WSDOT will bring final detailed proposals provided by the Design-Builder to the Federal, State and Local regulatory agencies for document updates, permit applications and modifications, and ESA consultation or Section 106 consultation updates or re-initiations, as required." Please note the following: • RFP Section 1-04.1(2), <i>General Obligations of the Design-Builder</i>, "The Design-Builder, in addition to performing all other requirements of the Contract Documents, shall...Construct the Project and maintain it during construction in accordance with the requirements of the Contract Documents, each applicable Contract Schedule, all applicable Legal Requirements, all Governmental Approvals..." • RFP Section 1-04.4(5), <i>Matters Not Eligible for Change Orders</i>, "Changes of any nature to the Environmental Commitments List (Appendix C) that are imposed by, or agreed to by a Governmental Body having jurisdiction, that are the result of the Design-Builder's design choices within the Design-Builder's control."

- September 2025 – Queensborough 405 Release for Construction Design (RFC) submitted to Skanska and WSDOT.
 - The design includes streambed sediment 20% larger than existing.
 - A risk assessment is included in Appendix Q, which indicates an over coarsened channel is required for streambed stability. Therefore, following an alternatives analysis per guidance in Appendix 7A of the WSDOT Hydraulics Manual, additional coarser material is proposed for stability and resistance to scour.
 - **Concurrence is reached on all RCSR comments, from both WSDOT and the Tribe (MIT), including those related to streambed sediment sizing.**

- March 2025 to December 2026 – Queensborough 527 and Juanita Creek Release for Construction Designs (RFC) are delayed by RCSR comments, primarily those related to sediment sizing. AECOM continued to have discussions with WSDOT / WDFW to resolve comments to progress design at WSDOT's direction.
 - **WSDOT eventually retracted their original direction and refused to close comments on the design packages.**
- February 20, 2026 – WSDOT (Gabe Ng) requested a meeting with AECOM. WSDOT stated they wanted more open conversation with the design team only. In this meeting WSDOT provides approval for AECOM to revise designs for fish passages:

2/20/2026

- Juanita Creek
 - Briefly discussed utility crossing upstream at Juanita Creek. The utility line is several feet below the scour depth. WSDOT recommended not including this discussion of the utility crossing in the justification for sediment sizing.
 - AECOM to coordinate a follow-up meeting to continue conversation on Juanita
- Stream 25L
 - Gabe shared comments on the streambed justification. In general, feedback is to **lessen the engineering justification**, lean on the existing stream condition for design. Photos are strongest piece for this justification.
 - WSDOT will share the RCSR form with comments closed, with the understanding that comments related to the step-pool design will be points of further discussion.
- Queensborough
 - **AECOM shared revised mix is 100% streambed sediment, 100% mobile**
 - **WSDOT agreed with this approach and stated the existing conditions match this closely**
 - AECOM to share revised gradation with WSDOT to close comments related to sediment mix
 - Discussed adjusting depth of material below 3 ft. Difficult to justify anything below that without documentation of the material below the streambed, borings must be taking in the stream. Can adjust in the field if possible.
 - WSDOT is preparing responses to the QB527 RCSR form and will send to AECOM
- North Fork Perry Creek
 - **AECOM shared revised mix is 90% streambed sediment, 10% 4" cobbles, 100% mobile.**
 - **WSDOT generally agreed with this approach**
 - WSDOT shared photos of natural meander bars in the stream and could share photos

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Ng, Gabe <Gabe.Ng@jacobs.com>

To: Cote, Meredith; Jones, Curtis; Raheem, Yacoub; Boyce, Samuel

Cc: Sam Michels-Boyce <smichelsboyce@hntb.com>

Fri 2/20/2026 12:12

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Thanks Meredith for taking these notes. They align with what we discussed.

Thanks,

- May 4, 2026 – Queensborough 527 Release for Construction Design (RFC) submitted to Skanska.
 - The design includes streambed sediment 20% larger than existing.
 - The design includes the following statement, “through coordination with WDFW and WSDOT HQ Hydraulics, it has been determined that no significant constraints exist to justify an over coarsened channel. **Because the risks described in Appendix Q are considered acceptable to the Project's co-managers, [unstable bed material] is selected for this crossing.**”
 - Concurrence is reached on all RCSR comments, including those related to streambed sediment sizing.

- May 14, 2026 – Queensborough 405 NDC 152 was submitted to Skanska.
 - The design includes streambed sediment 20% larger than existing.
 - The design includes the following statement, “through coordination with WDFW and WSDOT HQ Hydraulics, it has been determined that no significant constraints exist to justify an over coarsened channel. **Because the risks described in Appendix Q are considered acceptable to the Project’s co-managers, [unstable bed material] is selected for this crossing.**”
- May 14, 2026 – North Fork Perry NDC 152 submitted to Skanska.
 - The design includes streambed sediment 20% larger than existing.
 - The design includes the following statement, “through coordination with WDFW and WSDOT HQ Hydraulics, it has been determined that no significant constraints exist to justify an over coarsened channel. **Because the risks described in Appendix Q are considered acceptable to the Project’s co-managers, [unstable bed material] is selected for this crossing.**”

General Notes:

AECOM’s original Supplemental Information Letter regarding the PCN-00148 WDFW Sediment Size issue contained additional information for Par Creek and 25L Fish Passages. Neither of these fish passages were impacted by WSDOT’s misdirection regarding the streambed sediment size requirements, however both crossing’s designs contained sediment size in excess of the 20 percent existing and are very similar in concept to those fish passages that were impacted. Because of this, it is necessary to provide a general overview of both of these fish passages to reiterate the inconsistencies and arbitrary enforcement of contract requirements by WSDOT. Please see below for an overview and timeline of both the Par Creek and 25L Fish Passage Crossings.

Par Creek:

Overview

AECOM submitted the Par Creek Preliminary Hydraulic Design (PHD) in November 2023. In this document, AECOM provided engineering analyses conducted in accordance with the WSDOT Hydraulics Manual, and consistent with the Preliminary Hydraulic Design Report prepared by WSDOT (included as Appendix H08 of the Contract). The preliminary design proposed by AECOM recommended streambed material size to be coarser than a 20 percent increase over the observed existing sediment. This was in conflict with the Technical Requirements Table 2.30-B to provide streambed stability. No comments were provided by WSDOT on the streambed material size. Because of this, AECOM proceeded with gradations over 20% of the existing sediment size in the Final Hydraulic Design (FHD) in March 2024. Through multiple subsequent submittals and comment review cycles, still no comments were provided regarding the increased sediment size. After Final submission, AECOM proceeded with design, completing the RFC submittal in May 2024. While other fish passage sites were delayed or required significant rework, Par Creek has not been impacted by issues related to streambed sediment sizing, even though it does not meet the 20% maximum RFP requirement, proving WSDOT’s inconsistent direction and arbitrary enforcement of the design requirements.

Timeline of Relevant Events

- Meeting minutes pertaining to sediment size are shown on the cohesive timeline above.
- January 2021: Below is text from Section 9.3 Bed Material of Appendix H08, which was included as a reference document as part of the contract, and was the basis of the HPA:

9.3 Bed Material

In accordance with Chapter 7 of the WSDOT Hydraulics Manual, the combined streambed material will have a D_{50} that is within 20 percent of the reference reach D_{50} , or be 100% streambed sediment if streambed sediment is larger than the reference reach material, unless otherwise approved by WSDOT. Given the over-abundance of sands and silts in the existing channel, the WSDOT-approved streambed sediment will be used in the proposed design.

- 11/02/2023 – AECOM submitted Par Creek Preliminary Hydraulic Design (PHD) to Skanska and WSDOT. Section 4.3.1 Bed Material included the following statement:

4.3 Streambed Design

This section describes the streambed design developed for Par Creek at SR 522 MP 11.26.

4.3.1 Bed Material

The WCDG contains methodologies for five different types of crossings: No-Slope Culverts, Stream Simulation Culverts, Bridges, Temporary Culverts or Bridges, and Hydraulic Design Fishways. The permanent federal injunction allows for the use of the stream simulation method and bridge design method unless extraordinary circumstances exist on site. According to the WCDG, a bridge should be considered for a site if the FUR is greater than 3.0, the stream has a bankfull width of greater than 15 feet, the channel is believed to be unstable, the slope ratio exceeds 1.25 between the existing channel and the new channel, or the culvert would be very long. Using these design criteria, a modified stream simulation criteria was deemed the most appropriate method for this crossing due to unique characteristics not typically seen in Western Washington streams that provide potential salmonid habitat.

In compliance with Chapter 7 of the WSDOT *Hydraulics Manual*, the composition of the combined streambed material must either closely align with the reference reach D_{50} , within a 20 percent deviation, or entirely consist of streambed sediment if the sediment is equal to or larger than the reference reach material. Deviations from this standard require approval from WSDOT. Due to the abundance of sands and silts in the current channel, the proposed design will be 100 percent WSDOT-approved streambed sediment as shown in Table 4-5.

Comments from WSDOT and other comanagers were provided in November 2023, but none related to streambed material sizing.

- 03/06/2024 – AECOM submitted Par Creek Final Hydraulic Design (FHD) to Skanska and WSDOT. Section 4.3.1 Bed Material included the following statement:

4.3 Streambed Design

4.3.1 Bed Material

In compliance with Chapter 7 of the WSDOT *Hydraulics Manual*, the composition of the combined streambed material must either closely align with the reference reach D_{50} , within a 20 percent deviation, or entirely consist of streambed sediment if the sediment is equal to or larger than the reference reach material. Deviations from this standard require approval from WSDOT. Due to the abundance of sands and silts in the current channel, the proposed design will be 100 percent WSDOT-approved streambed sediment as shown in Table 4-5.

Table 4-5. Proposed Streambed Material (WSDOT Streambed Sediment)

Streambed Sediment	
Sieve Size	Percent Passing
2 ½"	99-100
2"	85-100
1"	50-82
½"	28-68
No. 40	10-20
No. 200	5-10

Note: WSDOT = Washington Department of Transportation

Comments from WSDOT and the Tribe were subsequently provided, including comments related to existing sediment size (but not proposed), that were resolved as the design progressed.

- 05/08/2024 – AECOM submitted RFC Design to Skanska. Section 4.3.1 Bed Material was consistent with the Final Design and included the following statement regarding stability of the proposed bed material:

For systems under 4 percent gradient, such as Par Creek, WSDOT requires the Modified Critical Shear Stress Approach for sediment sizing, as specified in Section 7-4.7 of the WSDOT *Hydraulics Manual*. This guideline indicates that a system is considered stable if the D_{84} is stable at the design flow event. Based on the WSDOT-approved streambed sediment standard specifications, the D_{84} is between 1 to 2 inches, and the D_{50} can be as low as 0.5 inches up to 1 inch. Since a range of particle sizes is specified, for the purpose of sediment mobility evaluation, the end members of these ranges were used in the modified shear stress approach. Two cases were evaluated—a larger particle size condition with a D_{84} of 2 inches and a D_{50} of 1 inch, and a smaller particle size condition with a D_{84} of 1 inch and a D_{50} of 0.5 inches, which resulted in a modified critical shear stress for D_{84} of 0.49 pounds per square feet (lb/ft^2) and 0.23 lb/ft^2 , respectively. Hydraulic modeling results for the 100-year design flow showed maximum active channel shear stress value of 0.19 lb/ft^2 . The D_{84} particle is stable at the 100-year flow because both modified critical shear stress values are greater than the modeled maximum active channel shear stress (see Appendix C). According to the Streambed Material Decision Tree in Appendix 7A of the WSDOT *Hydraulics Manual*, since the D_{84} of the designed streambed is not mobile at the 100-year flow, no risk analysis is required.

Concurrence was reached on all comments, including those relating to existing sediment size as shown below (9 and 10):

9	Section 2.7.3	ATS	It would be helpful to include a photo of the substrate to corroborate this sediment discussion and would be informative when the proposed sediment is discussed later in this report.	A	Agree, will include if available	A
10	Section 2.7.3	ATS	A brief discussion of the lack of boulders within the system would assist in the proposed sediment later in the report.	A	Agree, FHD updated to include.	A

- WSDOT / WDFW has since not required any changes to the Par Creek streambed design.

Stream 25.0L:

Overview

Stream 25.0L did not have direct schedule delay or rework specifically associated with over-coarsened streambed material. Stream 25.0L is included in this letter to highlight the inconsistencies in WSDOT / WDFW approval of streambed materials between 25.0L, North Fork Perry Creek, Queensborough 405, Queensborough 527, and Juanita Creek fish passages. Stream 25.0L PHD was provided to WSDOT in March 2025. This design contained over coarsened material exceeding the 20% gradation requirement listed in Table 2.30-B of the technical requirements. AECOM received no comments from WSDOT regarding the sediment size in the 25.0L PHD. In February and March 2026, the design team met with WSDOT / WDFW multiple times and discussed the over coarsened streambed material. At these meetings, WSDOT / WDFW were amenable to the increased sediment size at 25.0L and even stated the design should be composed of larger sediment, boulder type material, to support a stable cascade stream morphology. The large gradations requested by WSDOT conflict with Table 2.30-B.

Timeline of Events:

- Meeting minutes pertaining to sediment size are shown on the cohesive timeline above.
- May 2020: Below is text from Section 9.3 Bed Material of Appendix H08, included as a contract reference document, and is the basis of the HPA:

To provide D_{84} stability at the 100-year flood flow, preliminary calculations indicate that the resultant D_{50} would be 1.48 inches, with the existing D_{50} of 1.18 (25 percent increase), and the D_{84} would be 3.55 inches, with the existing D_{84} of 3.14 inches (13 percent increase). With this mix, the D_{50} would be mobile

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in events greater than the 2-year event and the D_{84} would become mobile in greater than the 100-year flow (Appendix B).

With the proposed streambed material at the D_{50} just over allowed 20 percent increase, the streambed sediment mix will be increased by the WSDOT Hydraulics Manual prescribed 20%, as shown in Table 17 below. The final sediment mix will be calculated by the Design Build contractor.

Table 17. Comparison of Observed and Proposed Streambed Material for Riffle Pool System

Particle	Observed Material Diameter (inches)	Proposed Material Diameter (inches)
D_{15}	0.46	0.55
D_{50}	0.83	1.00
D_{84}	1.18	1.42
D_{95}	3.14	3.77

To provide the needed channel stability, meander bars and/or other stability features are needed within the structure to prevent streambed sediment from being washed out. These meander bars, composed of a higher percentage small to medium cobbles and large gravels, would be placed within the structure that would provide additional stability. In addition, Large Woody Material (LWM), will be arranged within the structure to provide additional roughness, channel stability, and habitat variability.

For the slopes greater than 4 percent, the Bathurst Method is used for the streambed design. A spreadsheet for this method developed by WSDOT HQ Hydraulics is included in Appendix B. This method indicates that proposed material is stable at the 25-year flow rate inside of the proposed step-pool sections of the proposed design. Table 18 shows the bed material needed for the proposed slopes greater than 4 percent.

Table 18. Comparison of Observed and Proposed Streambed Material for Step Pool System

Particle	Observed Material Diameter (inches)	Proposed Material Diameter (inches)
D_{15}	0.46	0.75
D_{50}	0.83	2.41
D_{84}	1.18	6.03
D_{100}	3.14	15.08

Streambed cobbles, sediment, and boulder sizing for the design of fish passable structures shall be in accordance with the WSDOT Hydraulics Manual and the Standard Specifications. The final streambed material size and streambed mix configuration will be developed by the Design-Build Contractor and will be constructed using materials as described in WSDOT Standard Specifications.

- 3/25/2025 – Stream 25.0L Preliminary Hydraulic Design (PHD) submitted to Skanska and WSDOT.
- 4/8/2025 – Received RCSR comments from WSDOT on PHD design. No comments received on streambed material gradations despite the design including sediment 20% coarser than existing material.
- 7/29/2025 - Responses to comments sent with updated documents. Comment concurrence process concluded 3/27/2026 with all comments closed. This process took 8 months due to WSDOT refusing to close comments. None of these comments were related to sediment size.
- 2/13/2026 – AECOM (Samuel Boyce) held meeting with WSDOT consultant (Gabe Ng) where sediment size at 25L was discussed. WSDOT indicated they are in support with the sediment sizes proposed although coarser than 20% of the existing material. WSDOT requested justification for why

the over-coarsened material is necessary. See internal meeting minutes taken by Meredith Cote for documentation:

- Stream 25L Streambed Gradation
 - AECOM provided understanding of where we left off for 25.0L after last meeting with WDFW, WSDOT was we were OK with the streambed gradations proposed but the justification for oversizing was missing
 - AECOM presented background information on existing gradation based on pebble counts (D50 of 2.2 inch), proposed gradations through upstream step-pool reach (D50 of 2.1 inch), riffle-pool reach (D50 2.2 inch), and downstream step-pool reach (D50 of 1.2 inch)
 - AECOM sent Stream 25L Risk Assessment 2/12 for over the shoulder to Gabe, Sam, asked for feedback on the document
 - Gabe identified biggest gap in justification is the slope. We need to document that pebble counts were taken in a reach ranging between 9-10.5%, the proposed step pool reach is much steeper. Also document larger boulders in the stream that are not captured in the pebble count (ranging from 12-24", average of 18" (Type 1 boulder)
 - Gabe also identified propose design features are not valid constraints (e.g. proposed structure design, wingwalls, etc.). Consider existing constraints, those are the constraints to document. Provided examples of utilities where previous designs had overcoarsened the streambed in specific reaches where underground utilities are present, not appropriate to overcoarsen an entire streambed because of one area like this
 - Gabe identified the best constraint we identified is the sediment deposition in the wetland reducing flood storage capacity; however, it's missing quantification and further explanation (e.g. do we expect over time that sediment will deposit there?)
 - Gabe suggested starting with our constraints, then doing the alternatives assessment, then justifying the design. (In the example of the sediment depositing in the wetland, other alternatives could have been grade control, overcoarsening the streambed, a detention pond)
 - Meredith asked if this was the right location to document this (Appendix R of the FHD)
 - Gabe thinks is OK to have in Appendix R, summarize in the FHD, refer to Appendix R for detail
- Gabe also identified that we do not have a reference reach for this site, it's wrong to compare the existing gradations to proposed. Also, when we get to the sediment tree, it means we were unable to geomorphically justify sizing of the material, because it focuses on infrastructure constraints.
- Gabe asked about the design of the three reaches looking odd because the riffle-pool reach is larger than the step-pool reaches.
- Curtis clarified riffle-pool reach was designed using mod critical shear for 3%, bathurst for steeper reaches.
- Meredith asked about how to include larger boulders into design
- Gabe offered that boulders should be taken out of the streambed mix, approximately upper portion of the streambed could be mixed in with approximately 10% of Type 1 boulders. Placement would be as determined by the engineer in the field.
- Gabe indicated that the risk assessment may not be needed and adequate justification could be completed with better documented existing sediment and proposed slope differences. If additional constraint justification is needed, then the risk assessment could be used.

- 2/20/2026 – AECOM and WSDOT met again to discuss sediment size justifications for other sites and minor revisions to the Stream 25.0L sediment justification memo. WSDOT consultant (Gabe Ng) provided comments and suggested changes but concurred on approach. WSDOT consultant (Gabe Ng) stated he would not need to review an updated version of the justification.
- 2/25/2026 – AECOM sent updated sediment justification memo to WSDOT to send to WDFW for over the shoulder review.
- 3/12/2026 – WDFW meeting to discuss a revision to the profile upstream of I-405 and alignment downstream of I-405. Sediment size was not discussed beyond WDFW stating that they would need to review to confirm the design meets stream simulation. Action items include WDFW, Duncan P., discussing the profile revisions and any follow-up comments or meetings.

Meeting Minutes

1. AECOM clarifies meeting goals are to present high-level preliminary concepts of profile adjustment to get feedback prior to proceeding with changes.
2. AECOM presents potential upstream profile adjustment.
 - a. Presented adjustment concept.
 - i. Raise profile by approximately 6 ft. Reduction of ~164 LF of stream grading and impacts.
 - ii. Change would reduce number of step-pools from ~70 to ~50 upstream of I-405.
 - b. WDFW feedback
 - i. Discussed concerns with a less gradual transition from steep 14% slope to the 3% profile through the structure.
 - ii. Generally supportive of the reduction in impacts to the existing stream.
 - iii. Step-pools should meet criteria of drop heights and minimize drop heights to less than the currently designed 0.7 ft if possible (WAC requirement of 0.8 ft). Tribes prefer 0.5 ft drops. Pool sizes should be large enough for fish use.
 - iv. Main concern is velocity. Hydraulic modeling has not been conducted to support velocities being acceptable as this was a preliminary idea.
 - v. Large tree near adjusted tie-in location discussed. Preference would be to keep the tree in place for stream stability.
 - vi. Design to provide large resting pools.
 - vii. Discussed whether the design will meet stream simulation. WDFW indicated that confirming slope, sediment size, velocities and hydraulics will help determine this. WDFW to meet with Duncan P. to discuss.

- 3/18/2026 – WSDOT (Alicia Toney) provided comments via email from WDFW on the step-pool design and potential alternative considerations including a change to cascade morphology. Comments included that the current proposed streambed sediment does not meet the 20% requirement. Alicia Toney agreed to schedule a follow-up meeting with WDFW as soon as possible.

FW: 522/527 HPA next steps

TA Toney, Alicia (Consultant) <Alicia.Toney@consultant.wsdot.wa.gov>
 To: Jen Shore; Austin Danforth; Cote, Meredith; Jones, Curtis; Gaffney, Erin; Beriz, Sonia (Consultant); Ng, Gabe;
 Michaels-Boyce, Sam (Consultant)
 Cc: Schoettler, David (Consultant); Kane, Betty (Consultant)
 You forwarded this message on 3/18/2026 10:48 AM.

This message came from outside your organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi All,

Please see below for written acceptance of our sediment sizes for the QB's and NFP. The email also outlines what the permit still requires prior to construction of the streams and provides additional feedback on Stream 25L. I will get a meeting with WDFW set up for ASAP to continue the Stream 25L discussion.

See one question from me in red inline below too.

Let me know if you have any questions or would like to chat.

Thanks!
 Alicia

From: Dykstra, Jesse F (DFW) <Jesse.Dykstra@dfw.wa.gov>
 Sent: Tuesday, March 17, 2026 4:52 PM
 To: Drochak, Terry <Terry.drochak@wsdot.wa.gov>; Kucharski, Margaret <margaret.kucharski@wsdot.wa.gov>; Toney, Alicia (Consultant) <Alicia.Toney@consultant.wsdot.wa.gov>; Gross, Tricia (Consultant) <Tricia.Gross@consultant.wsdot.wa.gov>; Reinbold, Stewart G (DFW) <Stewart.Reinbold@dfw.wa.gov>; Reeves, Marcus A (DFW) <Marcus.Reeves@dfw.wa.gov>; Pfeifer, Duncan E (DFW) <Duncan.Pfeifer@dfw.wa.gov>
 Subject: FW: 522/527 HPA next steps

Hey Elizabeth,

Thank you for sending over the notes from today's meetings. I have provided the next steps regarding this project. Please let me know if you have any questions or need clarification.

Project Name: I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project additional information needed.

- Bypass and fish exclusion plans for each crossing must be submitted and approved prior to installation.
- Provide final design/plan set for the westernmost bridge over the Sammamish River. – can someone from DB team please check on the status of this?
 - o Include fish exclusion and isolation methods for the four in-water piers associated with the existing Sammamish River bridge.
- Sediment gradation specifications have been reviewed and approved; updated plan sheets reflecting the approved gradations are required.
 - o Queensburgh Creek 527 crossing
 - o Queensburgh Creek 405 crossing
 - o North Fork Perry

Stream 25L Design comments for future meeting:

- Sediment: The current proposed stream bed sediment does not meet the 20% requirement.
- Upstream Profile & Design Approach:
 - o Continued discussions on how the design will meet stream simulation criteria.
 - o The revised profile proposes fewer step pools and reduced disturbance; however, no hydraulic analysis has been provided. Evaluation is needed for slope, step height, velocity, turbulence

- 3/23/2026 – WDFW and WSDOT meeting to discuss step-pool design comments and alternative design considerations. Sediment size was discussed in context of the current step-pool design and in changing the design to cascade morphology. WDFW stated significantly larger sediment (boulder sizes) to achieve a stable cascade morphology is acceptable. WDFW stressed the importance of properly sized and stable material even if it is coarser than 20% of the existing material. See meeting minutes taken by AECOM (Curtis Jones) below:

1.	Review WDFW comments on step-pool design (provided by email on 3/18/2026).
a.	Design concerns
i.	WDFW stated that step-pools shouldn't be present at 14%, cascade morphology would be more appropriate.
ii.	WDFW stated that the current step-pool design does not meet Stream Simulation and would be permitted as fishway.
iii.	AECOM stated willingness to adjust the design per WDFW recommendations.
b.	Design details
i.	WDFW and AECOM discussed pebble counts and proposed sediment size.
ii.	WDFW: Sediment should adjust based on different reach slopes – ok to have larger sediment than existing (up to bolder sizes) in the steeper reaches if necessary.
iii.	If some version of a step-pool design remains, WDFW will want to see hydraulic criteria <u>is</u> met.
c.	Step height and maintenance
i.	WSDOT indicated that when natural steps are greater than 0.8 ft, site specific drop height exemptions have been granted in the past for design/maintenance.
ii.	WDFW stated exemptions have been granted in the past and could be considered. We shouldn't move forward with the assumption that higher than 0.8 ft drops will be approved. Stick to 0.8 ft maximum drops, tribes prefer 0.5 ft.
2.	Downstream of I-405 channel realignment
i.	WDFW prefers the alternative longer stream alignment with lower slope.
ii.	WSDOT indicated there is no property access and the alignment will not be altered.
iii.	WDFW raised concerns of the stream being too steep and confined by the levee and proposed retaining wall and those elements being at risk of erosion.
iv.	Alluvial fan development may reduce the slope naturally over time.
3.	Design considerations and changes
i.	Cascade morphology with properly sized and stable streambed material. Include roughness elements like boulders and wood.
ii.	WDFW prefers design changes to be made for the FHD submittal to avoid redundant comments/communication.
iii.	WDFW indicated willingness to have periodic check-ins as design progress.

- 3/27/2026 – WSDOT consultant (Gabe Ng) closed remaining 25.0L PHD comments
- 5/5/2026 – 25.0L Final Hydraulic Design submitted to WSDOT / Skanska via Procore with over coarsened sediment size as directed by WSDOT / WDFW.

As stated above, the inconsistent direction provided by WSDOT affected the North Fork Perry Creek, Queensborough 405, Queensborough 527, and Juanita Creek fish passage projects at various stages of design. However, these impacts are interconnected, with decisions and resulting effects on one fish passage project creating a cascading or domino effect on the others. At WSDOT's request, these impacts have been separated and documented by location. Presented below is an overview of the impacts specific to the Queensborough 405 fish passage project, along with the corresponding timeline.

**Queensborough 405:
Overview**

AECOM submitted the Queensborough 405 PHD in April 2024. In this document, AECOM provided engineering analyses conducted in accordance with the WSDOT Hydraulics Manual. Results indicated the need for a portion of streambed material size to be coarser than a 20 percent increase over the observed existing sediment to maintain streambed stability. This conflicted with the Technical Requirements Table 2.30-B. AECOM notified WSDOT of this conflict; however, WSDOT directed AECOM to proceed with the gradations of over 20% of the existing sediment size.

AECOM progressed design at Queensborough 405 as directed by WSDOT through Final and RFC submittals. Approximately three months after RFC acceptance, WSDOT and WDFW informed AECOM that the approved streambed design must be revised to reduce the proposed sediment sizes. This direction was provided despite the previously documented engineering analyses supporting the coarser material and streambed stability objectives, as well as WSDOT's earlier direction to proceed with the design. AECOM worked collaboratively with WSDOT and WDFW to explain the hydraulic and geomorphic basis for the proposed gradations, including the reduced potential for streambed erosion and improved long-term stability associated with the coarser material. Despite these efforts, AECOM was directed to revise the design.

In response, AECOM complied with WSDOT and WDFW direction and prepared NDC 152 to revise the streambed sediment sizing. The resulting redesign required additional engineering analyses, design revisions, documentation updates, coordination, and rework beyond the scope of the accepted RFC design. This effort resulted from a post-acceptance design change directed by WSDOT and WDFW, this additional work was performed under NDC 152.

Timeline of Relevant Events

- Meeting minutes pertaining to sediment size are shown on the cohesive timeline above.
- January 2021: Below is text from Section 9.3 Bed Material of Appendix H08, which was included as a reference document as part of the contract, and was the basis of the HPA:

9.3 Bed Material

Proposed streambed material sizing will be similar to that of the gradation provided in the pebble count (Appendix B) and will be coordinated as design continues by the Design-Build Contractor. In accordance with Chapter 7 of the WSDOT Hydraulics Manual, the combined streambed material will have a D_{50} that is within 20 percent of the reference reach D_{50} , or be 100% streambed sediment if streambed sediment is larger than the reference reach material, unless otherwise approved by WSDOT.

Given the uniform slope of less than 4 percent, the Modified Shields Methodology was selected for the streambed design. Analysis indicates that the reference reach sediment sample would be mobile during all flood events. This conclusion is consistent with the channel stability analysis that described the streambed sediment consisting of only gravels and smaller material. For this project, streambed material would need to have a similar resistance to scour or it would be transported downstream. To achieve this level of resistance the bed materials must be substantially coarser than the sediment transported through the system.

To provide D_{84} stability at the 100-year flood flow, preliminary calculations indicate that the resultant D_{50} would be 2.11 inches, with the existing D_{50} of 0.70 (201 percent increase), and the D_{84} would be

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nearly 5.76 inches, with the existing D_{84} of 2.10 inches (174 percent increase). With this mix, the D_{50} would be mobile in events greater than the 2-year event and the D_{84} would become mobile in greater than the 100-year flow (Appendix B).

It is not desirable to increase the streambed sediment by this amount. Therefore, the streambed sediment mix will be increased by the WSDOT Hydraulics Manual prescribed 20%, as shown in Table 20 below. The final sediment mix will be calculated by the Design Build contractor.

Table 20. Comparison of Observed and Proposed Streambed Material

Particle	Observed Material Diameter (inches)	Proposed Material Diameter (inches)
D_{15}	0.32	0.38
D_{50}	0.70	0.84
D_{84}	1.42	1.70
D_{95}	2.10	2.52

To provide the needed channel stability, meander bars and/or other stability features are needed within the structure to prevent streambed sediment from being washed out. These meander bars, composed of a higher percentage small to medium cobbles and large gravels would be placed within the structure that would provide additional channel diversity.

Streambed cobbles, sediment, and boulder sizing for the design of fish passable structures shall be in accordance with the WSDOT Hydraulics Manual and the Standard Specifications. The final streambed material size and streambed mix configuration will be developed by the Design-Build Contractor and will be constructed using materials as described in WSDOT Standard Specifications.

- 04/2024 - AECOM submitted Queensborough 405 PHD Design to Skanska. Section 4.3.1 Bed Material included the following:

4.3.1 Bed Material

Although the stream simulation method bases the proposed bed material gradation on the native material found in reference reaches, analysis indicates that the average Wolman Pebble Count D_{84} (Table 2-5) would be mobile during all flood events. As a result, the designed streambed mix must be increased.

In accordance with Chapter 7 of the WSDOT Hydraulics Manual, the designed streambed material must have a D_{50} that is within 20 percent of the reference material D_{50} , unless otherwise approved by WSDOT.

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Because preliminary analysis indicates that the reference material is unstable during all flood events, the proposed streambed material is increased by the maximum allowable 20 percent over the observed reference material gradations (Table 4-4). This proposed streambed gradation will meet the WSDOT-approved streambed sediment mix shown in Table 4-5.

The proposed streambed sediment mix is then evaluated using the Modified Shields Methodology because the proposed slope is less than 4 percent. Based on the WSDOT-approved streambed sediment standard specifications, the D_{84} is between 1 and 2 inches, and the D_{50} can be as low as 0.5 inches up to 1 inch. Because a range of particle sizes is specified, for the purpose of sediment mobility evaluation, the end members of these ranges were used in the modified shear stress approach. Two cases were evaluated: a larger particle size condition with a D_{84} of 2 inches and a D_{50} of 1 inch, and a smaller particle size condition with a D_{84} of 1 inch and a D_{50} of 0.5 inch. These resulted in a modified critical shear stress for D_{84} of 0.49 pound per square foot (lbs/ft²) and 0.23 lbs/ft², respectively. If the boundary shear stress of the stream's discharge exceeds these critical shear stress values, then the sediment will be mobilized.

As shown in Appendix C, boundary shear stress results from the proposed model (Section 5.3) exceed the critical shear stress. Thus, the proposed streambed D_{84} is still mobile at the 100-year discharge.

Appendix 7A Streambed Material Decision Tree in Chapter 7 of the WSDOT Hydraulics Manual indicates that a risk analysis is needed due to the expected mobility of the proposed D_{84} streambed material. Based on a preliminary risk assessment using the Criticality Matrix provided in Appendix 7A and considering a moderate likelihood of long-term degradation (discussed in Section 7.2) impacting the I-405 crossing structure with a resulting major impact to the I-405 crossing, it is possible that an overcoarsened channel may need to be considered in design. The design described in Section 4.3.2 coarsens the channel using habitat complexity features (e.g., coarse bands, meander bars, and LWM). These complexity features will help provide the needed channel stability within the structure to prevent streambed sediment from being washed out. Further consultation with WSDOT will be conducted in the next phase of design regarding this risk assessment process.

- 05/2024 - PHD comments were received from WSDOT in Excel file "Segment-3-Preliminary-Fish-Passage-Water-Crossings_RCSR_WSDOT.xlsx". No comments were received regarding streambed sediment sizing.

- 08/2025 - AECOM submitted FHD Design to Skanska. Section 4.3.1 Bed Material stated:

4.3.1 Bed Material

The proposed channel follows a pool-riffle morphology, and different bed material is designed for the distinct "pool" and "riffle" segments. Sediment used for pools is designated as Type I Streambed Sediment and is based on native streambed material per the stream simulation design methodology. Sediment used for riffles is designated as Type II Streambed Sediment and is designed to be stable at the 100-year discharge (i.e., the design flow). Both bed materials follow the design guidance in Chapter 7 of the WSDOT *Hydraulics Manual*. **Table 4-5** summarizes and compares existing and proposed streambed material gradations.

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Analysis indicates that Type I Streambed Sediment is mobile at flows less than the 100-year discharge (see **Appendix C**). This is accepted, as pools are designed to naturally scour and regrade, thus replicating natural conditions. The Type I Streambed Sediment gradation falls within the range defined by WSDOT's standard streambed sediment as shown in **Table 4-6**. Therefore, WSDOT's standard streambed sediment will be used as the Queensborough I-405 Type I Streambed Sediment.

Type II Streambed Sediment is coarser than existing reference reach material (**Table 4-5**) and is also used for bank and overbank areas within the structure to ensure overall channel stability. The design of Type II Streambed Sediment and Meander Bar Material can be found in **Appendices O** and **P**, respectively. Note that Type II Streambed Sediment and Meander Bar Material have the same gradation, as both are designed for stability at the 100-year discharge.

A risk assessment regarding streambed material can be found in **Appendix S**. The *Hydraulics Manual* (WSDOT 2024) indicates that habitat complexity features are required. Additional coarsening of the channel is accomplished with complexity features such as LWM, meander bars, and deformable grade control. These features are described further in the following sections.

- 09/2025 - AECOM submitted RFC Design to Skanska. Concurrence was reached on all comments, including those relating to streambed sediment size as shown below (#42 and #66):

42	QB Section 4.3.1	ATS	How are the meanders meant to be built if they are the same size as the streambed material? This statement is not consistent with what is shown in the plans.	R	JT	Additional description in section 4.3.2.3 to explain building of meander bar head with boulders to be added for RFC submittal.
66	QB - Pg. 36, Sec. 4.3.1 Bed Material	MIT	"Type II Streambed Sediment is coarser than existing reference reach material (Table 4-5) and is also used for bank and overbank areas within the structure to ensure overall channel stability."	D	SB	Extent of Type I and Type II Streambed Sediments will be more clear in RFC plans. As described above for comment #57, sizing of streambed sediment has followed guidelines set in the WSDOT Hydraulics Manual including the Streambed Material Decision Tree in Appendix 7A. While consideration was made to limit all streambed sediment to within 20% of the existing pebble count size, calculations show that this streambed material would be undersized and mobile at the 100-year discharge, posing unacceptable risk to the crossing infrastructure as well as increasing the potential of a plane-bed geomorphic condition that may entrain flows along the structure walls, limiting fish passage. The proposed channel design still includes sediment within 20% of the existing pebble count size (Type I Streambed Material) to be included in the pools of the design pool riffle sequence. The coarser Type II Streambed Material reduces the risk of undersized sediment mobilizing and undercutting creek banks and infrastructure while also being conducive to creating fish habitat by allowing the stream to develop and maintain riffles, that are different in geometry and bed material from pools, creating hydraulic diversity and allowing for microhabitats and multiple pathways for juvenile fish during low flows. The Type II Streambed Material is not expected to sieve low flows as fines have been included in the sediment gradation and the streambed will be constructed in lifts and sealed with flows to ensure flows do not permeate into the streambed.

- 11/20/2025 – WDFW requests WSDOT provide missing key information from the fish passage hydraulic designs, which are needed for the Hydraulic Project Approval permit application:

From: Dykstra, Jesse F (DFW) <Jesse.Dykstra@dfw.wa.gov>
 Sent: Thursday, November 20, 2025 12:33 PM
 To: Toney, Alicia (Consultant) <Alicia.Toney@consultant.wsdot.wa.gov>
 Cc: Pfeifer, Duncan E (DFW) <Duncan.Pfeifer@dfw.wa.gov>; Reinbold, Stewart G (DFW) <Stewart.Reinbold@dfw.wa.gov>
 Subject: HPA 45158 I405 SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project

Hey Alicia,

Reaching out regarding the recent application (App ID: 45158). Do you have an updated and consolidated plan set for this project? The final JARPA plan set drawings are missing key information that should be included in the design package (meander bars, LWM, step pools, ect.). With six PHD/FHD documents, it is difficult to identify and extract the information needed for permit review. Some of the FHD/PHDs sheets are missing some important information for a formal review.

Thanks again for your time.

- 12/29/2025 – WSDOT provides WDFW with FHDs and RFC plans:

From: Toney, Alicia (Consultant) <Alicia.Toney@consultant.wsdot.wa.gov>
 Sent: Monday, December 29, 2025 12:00 PM
 To: Dykstra, Jesse F (DFW) <Jesse.Dykstra@dfw.wa.gov>
 Cc: Pfeifer, Duncan E (DFW) <Duncan.Pfeifer@dfw.wa.gov>; Reinbold, Stewart G (DFW) <Stewart.Reinbold@dfw.wa.gov>; Schoettler, David (Consultant) <david.schoettler@consultant.wsdot.wa.gov>; Cote, Meredith <meredith.cote@aecom.com>; Mika Miyamoto <mika.miyamoto@oneatlas.com>; Berriz, Sonia (Consultant) <Sonia.Berriz@consultant.wsdot.wa.gov>; Kane, Betty (Consultant) <Betty.Kane@consultant.wsdot.wa.gov>
 Subject: RE: HPA 45158 I405 SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project - response to comments

External Email

Hi Jesse,

We have compiled information to respond to the comments below and it's been uploaded into APPS. There is a PDF package for design questions for each of the streams. There is also an FHD with all appendices and RFC plans for each stream except QB at 527 which is not RFC yet. There are also plans for the Sammamish River and USCG permitted drawings and the WQMPP that provide supporting information. Please also look inline below for some summary of information and also for places we discussed that we do not have the information at this time.

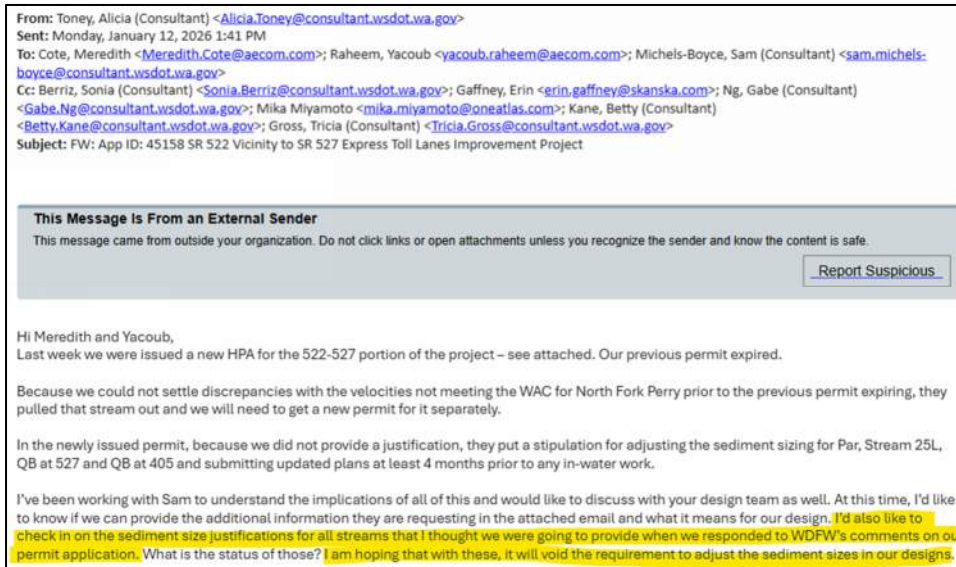
Once you've had a chance to review, let me know if you need anything else.

Thanks!

- 01/02/2026 – WDFW replies with follow-up questions, including those related to sediment size, and states additional justification was needed:

The alternatives analysis in the FHD indicates that sediment within the ±20 percent median particle size range was considered to pose an unacceptable risk due to its potential mobility, including the likelihood of undercutting and development of a plane-bed morphology. While that concern is noted, the currently proposed sediment gradation appears to be considerably larger than the reference condition and may introduce the opposite risk—insufficient retention of surface water and reduced hydraulic connectivity across the culvert. Additional justification is needed to demonstrate that the proposed sediment mix will maintain stable surface flow conditions, achieve stream-simulation objectives, and balance the competing risks of sediment mobility and excessive coarseness.

- 01/12/2026 – WSDOT shares with AECOM that WDFW has issued a new Hydraulic Project Approval permit with a stipulation for adjusting the sediment size. WSDOT requests sediment size justifications from AECOM:



- 01/14/2026 – Coordination meetings with AECOM (Meredith Cote, Yacoub Raheem) and WSDOT consultants (Alicia Toney, Sonia Berriz, Sam Michel-Boyce). WSDOT expresses verbal support for sediment sizing justification based on the percent of streambed material expected to be mobile. AECOM prepares justification for Queensborough 405, which had been released for RFC three months prior.

01/26/2026 – Coordination meeting with AECOM (Meredith Cote, Yacoub Raheem), WSDOT consultants (Alicia Toney, Sam Michel-Boyce, Gabe Ng, Sonia Berriz), and WDFW (Jesse Dykstra, Duncan Pfeifer, Stewart Reinbold). Streambed sediment sizing is discussed.

- 01/27/2026 – WSDOT summarizes their understanding of the 01/26 meeting, and requests identification of AECOM's next steps:

From: Berriz, Sonia (Consultant) <Sonia.Berriz@consultant.wsdot.wa.gov>
 Sent: Tuesday, January 27, 2026 6:44 AM
 To: Cote, Meredith <meredith.cote@aecom.com>; Raheem, Yacoub <yacoub.raheem@aecom.com>; Gaffney, Erin <erin.gaffney@skanska.com>
 Cc: Toney, Alicia (Consultant) <Alicia.Toney@consultant.wsdot.wa.gov>; Sam Michels-Boyce <smichelsboyce@hntb.com>; Ng, Gabe <gabe.ng@jacobs.com>; Sharrer, Kyle <Kyle.Sharrer@skanska.com>; Guerrero, Jon <jon.guerrero@aecom.com>; Lovering, Janka (Consultant) <Janka.Lovering@consultant.wsdot.wa.gov>
 Subject: WDFW Meeting 1/26 Takeaways

Hi all,

I would like to summarize my understanding of the discussion held yesterday with WDFW and request clarification on AECOM's and Skanska's proposed next steps.

North Fork Perry – Velocities
 WDFW was clear that the concerns regarding North Fork Perry and the removal of this crossing from the permit are directly tied to the streambed sediment mix and its influence on hydraulic performance. WDFW will not evaluate velocities in isolation from sediment sizing; the stream must be evaluated as an integrated system.

Streambed Sediment Design
 Key points conveyed by WDFW included:

- WDFW is trying to keep the fish passage design in the stream simulation realm
- The proposed mixes are weighted heavily toward larger material sizes and appear to be overly armored.
- WDFW suggested that if larger material is necessary for stability, it should be placed deeper in the section, with a smaller mix placed above.
- The updated North Fork Perry streambed mix presented on screen is unlikely to be approved through iterative justification. While additional justification could be attempted, WDFW indicated this would be time-consuming and uncertain. The most direct path to approval is to continue revising the streambed sizing.

Next Steps
 To move this issue toward resolution, WSDOT requests the following:

- Skanska to provide a clear timeline for when the streambed material design resolution is needed.
- Identification of whether AECOM intends to pursue further justification of the current mix, or to proceed with revising the gradation consistent with WDFW's guidance and the contract.

WSDOT remains available to support technical discussions between SMEs and the Engineer of Record to achieve a permittable and contract-compliant design. Please advise how WSDOT can assist and what specific support would be helpful.

Thank you and please let me know if this was not in line with what you heard yesterday. I thought it was a helpful conversation to move the project forward.

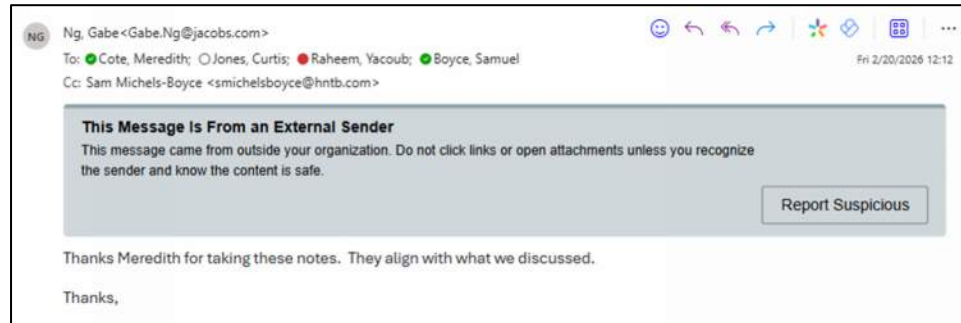
-Sonia

- 02/2026 – WSDOT provides approval for AECOM to revise designs for fish passages:

2/20/2026

- Juanita Creek
 - Briefly discussed utility crossing upstream at Juanita Creek. The utility line is several feet below the scour depth. WSDOT recommended not including this discussion of the utility crossing in the justification for sediment sizing.
 - AECOM to coordinate a follow-up meeting to continue conversation on Juanita
- Stream 25L
 - Gabe shared comments on the streambed justification. In general, feedback is to lessen the engineering justification, lean on the existing stream condition for design. Photos are strongest piece for this justification.
 - WSDOT will share the RCSR form with comments closed, with the understanding that comments related to the step-pool design will be points of further discussion.
- Queensborough
 - AECOM shared revised mix is 100% streambed sediment, 100% mobile
 - WSDOT agreed with this approach and stated the existing conditions match this closely
 - AECOM to share revised gradation with WSDOT to close comments related to sediment mix
 - Discussed adjusting depth of material below 3 ft. Difficult to justify anything below that without documentation of the material below the streambed, borings must be taking in the stream. Can adjust in the field if possible.
 - WSDOT is preparing responses to the QB527 RSCR form and will send to AECOM
- North Fork Perry Creek
 - AECOM shared revised mix is 90% streambed sediment, 10% 4" cobbles, 100% mobile.
 - WSDOT generally agreed with this approach
 - WSDOT shared photos of natural meander bars in the stream and could share photos

1



- 05/14/2026 – Streambed sediment sizing is revised and NDC 152 is submitted to Skanska and WSDOT. WSDOT requests extended review period on 05/15/26.

In summary, the Queensborough 405 timeline demonstrates that from the initial PHD submittal in April 2024 through the RFC submittal in September 2025, AECOM consistently communicated WSDOT Hydraulics Manual based engineering analyses to support the proposed streambed sediment sizing through multiple review cycles and WSDOT agreed with AECOM's assessments. Direction to revise the streambed material sizing was not communicated until meetings with WDFW in early 2026, after the RFC design had been completed for three months. This direction was provided independent of the documented engineering analyses for sediment stability and risk. AECOM has since complied by revising the sediment sizing with NDC 152, resulting in additional design rework beyond the previously accepted design.

Summary

Prior to submitting preliminary design for fish passages on the I-405 Brickyard Project, AECOM notified WSDOT that the requirement stated in Table 2.30-B of the Technical Requirements could not be met while maintaining streambed stability. AECOM requested guidance from WSDOT on how to progress the design and was directed to proceed with using material over the 20% existing gradation. From April 2024 to January 2025, AECOM progressed designs using the over coarsened material. WSDOT's explicit direction to use over-coarsened material is well-documented through meeting minutes, email correspondence, and acceptance of multiple Release for Construction (RFC) submittals for Par Creek, North Fork Perry Creek, and Queensborough 405, all of which included sediment gradations exceeding the 20% limit. In January 2025, the design team submitted Queensborough 527 and Juanita Creek Final Hydraulic Designs with designs similar to those released for RFC and was notified the streambed size was unacceptable. WSDOT informed the design team, through RCSR comments, that the increased gradation size would only be accepted if approved by WDFW.

In accordance with 2.30.7.3.1, "WSDOT will submit the PHD to the Tribe(s) and WDFW for Review and Comment. The Design Builder shall address the comments of the Tribe(s) and WDFW". At the time WSDOT stated the over coarsened streambed material was unacceptable and needed to be approved by WDFW, AECOM had submitted and closed all comments on the PHD for Par Creek, North Fork Perry Creek, Queensborough 405, Queensborough 527, and Juanita Creek Fish Passages. In violation of the contract, WSDOT did not provide the PHD to the Tribe or WDFW until AECOM had submitted FHD for Queensborough 527 and Juanita Creek Fish Passages and RFC'd the remaining designs. RFI 559 WSDOT response dated September 12, 2025 confirmed WSDOT did not adhere to the contract.

WDFW had not previously been involved in discussions regarding sediment size as required by the contract. However, as WDFW approves permits for the fish passages, WDFW notified AECOM the permits would not be issued unless the fish passage design was revised. AECOM collaborated with WSDOT / WDFW explaining WSDOT's previous direction to progress design using over coarsened material and that the streambed sediment would be unstable if the design met the 20% maximum requirement. The design team also explained that the fish passage designs provided were in accordance with the WSDOT provided Hydraulic Reports in Appendix H08 of the Technical Requirements. Even with this information, WSDOT / WDFW refused AECOM's design. WSDOT did not acknowledge their previous direction and required all designs to be reworked except for Par Creek and Stream 25.0L. The lack of clear, documented criteria for these exceptions, combined with WSDOT's failure to follow the contractually mandated review process, resulted in inconsistent and unpredictable project direction. This inconsistency led to unnecessary redesigns and delays, undermining the efficiency and fairness of the project delivery process.

During development of the revised designs, WSDOT / WDFW again agreed over coarsened sediment size was necessary at Juanita Creek and Stream 25.0L. WSDOT's inconsistent guidance directly resulted in substantial rework, schedule delays, and increased costs at Queensborough 405. AECOM was forced to redesign five of six fish passage sites, duplicating effort and expending resources that could not have been anticipated under the original contract terms. Incorporated in this Change shall be costs and delay attributed to the direction and rework caused by WSDOT's inconsistencies to the Queensborough 405 Fish Passage Hydraulic Design. AECOM progressed design in good faith at WSDOT's direction and should not be liable for rework and delay due to WSDOT's indecisive and contradictory behavior.

Given the documented history of WSDOT's direction, acceptance of over-coarsened design, and subsequent reversal without an OIC, AECOM is contractually and equitably entitled to an Owner Initiated Change and corresponding compensation for additional costs and schedule impacts. The lack of timely coordination with WDFW and the Tribe by WSDOT further exacerbated these issues, as required reviews and comments were not obtained until late in the design process, compounding delays and rework.

AECOM is warranted additional compensation due to the additional costs and delays incurred as a direct result of WSDOT's inconsistent and contradictory direction at Queensborough 405 Fish Passage.

c. The estimated dollar cost, if any, of the protested Work and a detailed breakdown showing how that estimate was determined.

AECOM's additional labor cost to implement the changes stemming from the disruption caused by WSDOT direction and redirection for the increased sediment size at Queensborough 405 is shown below. The estimates noted are preliminary and based only on the information available to AECOM at this time. As more information becomes available, and as the design is coordinated, additional impacts may be discovered which are unknown as of today.

I-405 Brickyard DB Project		
PCN / CN #: 148		
Name of PCN/CO: WDFW Sediment Size - QB 405		
Date Updated: 7/7/2026		
	Discipline	Hours
		Fee
	Section 2.1 General / Management	46
		\$18,062
	Section 2.5 Survey	
		\$0
	Section 2.6 Geotechnical	
		\$0
	Section 2.7 Pavement	
		\$0
	Section 2.8 Environmental	
		\$0
	Section 2.10 Utilities	
		\$0
	Section 2.11 Roadway	
		\$0
	Section 2.12 Project Documentation	
		\$0
	Section 2.13 Bridges and Structures	
		\$0
	Section 2.14 Stormwater	
		\$0
	Section 2.15 Roadside Restoration	
		\$0
	Section 2.16 Illumination	
		\$0
	Section 2.17 Traffic Signals	
		\$0
	Section 2.18 ITS	
		\$0
	Section 2.19 Signing	
		\$0
	Section 2.20 Pavement Marking	
		\$0
	Section 2.21 Traffic Operations	
		\$0
	Section 2.22 MOT	
		\$0
	Section 2.26 Toll Infrastructure	
		\$0
	Section 2.27 Transit	
		\$0
	Section 2.28 Design Quality Management	26
		\$6,864
	Section 2.30 Water Crossings	449
		\$106,280
	Section 2.31 Vertical Construction	
		\$0
	Totals	521
		\$131,206

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

AECOM is currently evaluating the full impact of these issues. At this time, AECOM estimates the approximate disruption caused by WSDOT misleading the design team and directing over coarsened stream bed material at the Queensborough 405 Fish Passage delayed the work from February 2025 through July 2026, 15 months. This was determined because WSDOT / WDFW first stated they would not



accept the increased gradation size in Queensborough 527 and Juanita Creek RCSR review, and design revisions due to this issue are still ongoing as of July 2026 at Juanita Creek, North Fork Perry Creek, Queensborough 405, and Queensborough 527 fish passages. AECOM is currently developing a delay analysis that will determine the actual delay. Upon completion, AECOM will revise this request to reflect actual delay, corresponding cost and a request for a time extension. This design will be worked through concurrently with other contractual design plan sets and will cause delay to the contractual submittals. Actual design delay is currently being evaluated and will be provided once full delay is assessed.

This letter is without prejudice to, and with a full reservation of, AECOM's rights, remedies, causes of action, and defenses under the Subcontract, at law, in equity, or otherwise. Nothing in this letter shall be interpreted as a modification or waiver, or an estoppel of AECOM's right to assert the same.

I appreciate your prompt attention to this matter. If you have any questions, please do not hesitate to contact me directly.

Yours sincerely,

AECOM Technical Services, Inc.

A handwritten signature in black ink, appearing to read 'Jon Guerrero', is positioned above the contact information.

Jon Guerrero, PE
M: 206.579.0292
E: jon.guerrero@aecom.com

cc: Evan Grant (AECOM)
Richard Patterson (AECOM)

Enclosure:

2024 WSDOT_AECOM Email Correspondence

RFI #00559 – Juanita Creek WDFW PHD Review

Just, Madison

Subject: FW: RE: I-405 Brickyard - Segment 2 Final Sammamish River Bridge WSDOT comment concurrence

From: Strom, Alex (Consultant) <Alex.Strom@consultant.wsdot.wa.gov>

Sent: Friday, November 1, 2024 12:55 PM

To: Gentzler, Seth <seth.gentzler@aecom.com>

Cc: Berriz, Sonia (Consultant) <Sonia.Berriz@consultant.wsdot.wa.gov>; Gaffney, Erin <erin.gaffney@skanska.com>; Kyle.Sharrer@skanska.com; Abraham, Ryan <ryan.abraham@aecom.com>; Guerrero, Jon <Jon.Guerrero@aecom.com>; Cote, Meredith <Meredith.Cote@aecom.com>

Subject: RE: RE: I-405 Brickyard - Segment 2 Final Sammamish River Bridge WSDOT comment concurrence

This Message Is From an External Sender

This message came from outside your organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Report Suspicious

Seth,

Regarding #2 below.

I discussed with Gabe, and came to the conclusion that as long as we document our calculations show we need upsized material, and that we document that we followed WSDOT directives from the sediment tree, we should be able to state that in our response.... What we can add to these responses is that we have documented that we are in systems that due to things out of our control (i.e upstream barriers) that we are currently in a sediment-starved system, and if we were to place material that we have shown will transport out of the crossing, we will be left with a crossing that immediately gets placed back on the injunction list. In an effort to keep this crossing passable, and not having the sediment coming to us from upstream, upsizing our material per WSDOT guidelines is the approach to these crossings...

Make sense? If not, let's talk soon.

Alex Strom, PE
I-405/SR 167 Corridor Program GEC Fish Passage Lead
406.794.6144 | stroma@consultant.wsdot.wa.gov

From: Gentzler, Seth <seth.gentzler@aecom.com>

Sent: Tuesday, October 29, 2024 5:19 PM

To: Strom, Alex (Consultant) <Alex.Strom@consultant.wsdot.wa.gov>

Cc: Berriz, Sonia (Consultant) <Sonia.Berriz@consultant.wsdot.wa.gov>; Gaffney, Erin <erin.gaffney@skanska.com>; Kyle.Sharrer@skanska.com; Abraham, Ryan <ryan.abraham@aecom.com>; Guerrero, Jon <Jon.Guerrero@aecom.com>; Cote, Meredith <Meredith.Cote@aecom.com>

Subject: [EXTERNAL] RE: I-405 Brickyard - Segment 2 Final Sammamish River Bridge WSDOT comment concurrence

WARNING: This email originated from outside of WSDOT. Please use caution with links and attachments.

Alex.

Hope all is well. A few items for you:

1. Circling back on scour/lateral migration concurrence email below and confirming whether you or Sonia were able to forward to Gabe.
2. Hoping to get an update on any discussions with Gabe or tribes regarding direction for us on the streambed sediment gradation.
3. Hoping to get concurrence on our responses to your comments on Package 8. Meredith sent a reminder email late last week.

Let us know your thoughts.

Thanks,

-Seth

Seth Gentzler, PE

Vice President

West Coast Hydrology & Hydraulics Practice Lead

M: [415-722-5129](tel:415-722-5129)

D: [510-874-3018](tel:510-874-3018)

300 Lakeside Drive, Suite 400

Oakland, CA 94612, USA

www.aecom.com

From: Gentzler, Seth

Sent: Friday, October 25, 2024 2:54 PM

To: Strom, Alex (Consultant) <Alex.Strom@consultant.wsdot.wa.gov>

Cc: Berriz, Sonia (Consultant) <Sonia.Berriz@consultant.wsdot.wa.gov>; Gaffney, Erin <erin.gaffney@skanska.com>;
Kyle.Sharrer@skanska.com; Abraham, Ryan <ryan.abraham@aecom.com>; Guerrero, Jon <Jon.Guerrero@aecom.com>;
Cote, Meredith <Meredith.Cote@aecom.com>

Subject: I-405 Brickyard - Segment 2 Final Sammamish River Bridge WSDOT comment concurrence

Alex/Gabe. (hoping Alex or Sonia can forward to Gabe – I didn't have his email)

Hoping to resolve this final comment (see comment and response in the table below) on the Segment 2 Final Sammamish River Bridge pier scour calculations. We've followed the WSDOT guidance, contract TRs and the determination in the attached 2023 opinion paper on lateral migration, to complete "further analysis during final design as part of the Hydraulic Design Report for this water crossing."

Our analysis uses a multi-disciplinary evaluation (per WSDOT requirements) recommended by the Federal Highway Administration (Stream Stability at Highway Structures, HEC No. 20), and is included in the attached working draft HDR. The attached incorporates the additional geotechnical data requested in the comment below, and uses that information in the multi-disciplinary evaluation.

Please take a look and let us know your thoughts. Also, please note that nearly all of the proposed piers are outside of the 500-year flood extents, and the few that are not, barely overlap with the edge of the flood extents.

Thanks,

-Seth

Seth Gentzler, PE

Vice President

West Coast Hydrology & Hydraulics Practice Lead

M: [415-722-5129](tel:415-722-5129)

COMMENT (WSDOT, City, Checker)				
No. ▾	Report or Sheet No. ▾	Comment By ▾	TR/Spec Section ▾	Comment
3	Appendix A	L. Assink		There needs to be some geotechnical data showing that the risk is low; I information here to change the original determination of not low



Skanska USA Civil
1995 Agua Mansa Road
Riverside, California 92509

Project: 90009590 - I-405 - Brickyard to SR527
Bothell, Washington 98011

BY-CRE-03393_009727_RFI_00559_16.03.01_Juanita Creek WDFW PHD Review

TO:	Nancy Alpuche (Washington State Department of Transportation) Rachel Gehrlein (Washington State Department of Transportation) Ron Haukom (Washington State Department of Transportation) Sokha Men (Washington State Department of Transportation) Emma Hutchinson (Washington State Department of Transportation)	FROM:	Meredith Cote (AECOM (Seattle))
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DATE INITIATED:	08/28/2025	STATUS:	Closed on 09/17/25
LOCATION:		DUE DATE:	09/12/2025
COST CODE:		REFERENCE:	
COST IMPACT:		SCHEDULE IMPACT:	
DRAWING NUMBER:		SPEC SECTION:	2.30 - Water Crossings
PRIORITY:			
LINKED DRAWINGS:			
RECEIVED FROM:			

COPIES TO:
Nancy Alpuche (Washington State Department of Transpor), Sonia Berriz (Washington State Department of Transpor), Document Control - Skanska (Skanska USA Civil West), Meredith Cote (AECOM (Seattle)), Erin Gaffney (Skanska USA Civil West), Rachel Gehrlein (Washington State Department of Transpor), Ron Haukom (Washington State Department of Transpor), Emma Hutchinson (Washington State Department of Transpor), Janka Lovering (Washington State Department of Transpor), Sokha Men (Washington State Department of Transpor), Michelle Petterson (Skanska USA Civil West), Jacob Schmidt (Atlas Technical Consultants, LLC), Kyle Sharrer (Skanska USA Civil West)

RFI Response Date	Estimated Hours
RFI Priority	RFI Type

Question from Meredith Cote (AECOM (Seattle)) at 08:49 PM on 08/28/2025

Per technical requirement section 2.30.7.3.1 - Preliminary Hydraulic Design Report, ‘After WSDOT’s comments are addressed by the Design-Builder, WSDOT will submit the PHD to the Tribe(s) and WDFW for Review and Comment.’ For Juanita Creek PHD, comments were returned to AECOM on 7/29/2024 and comments were resolved (as returned from WSDOT on 1/7/2025) and incorporated into a Draft Final Hydraulic Design (FHD) report sent to WSDOT on 1/24/2025.

Please confirm and provide documentation that the Juanita PHD was sent to WDFW for review and comment as required in the Contract. If confirmed, please identify if WDFW had no comments or was unresponsive.

Additionally, please confirm the PHD's for the other Project fish passages were sent to WDFW in accordance with 2.30.7.3.1.

Attachments:
[BY-CRE-03393_009727_RFI_00559_16.03.01_Juanita Creek WDFW PHD Review.pdf](#)



Official Response: Nancy Alpuche (Washington State Department of Transportation) responded on Friday, September 12th, 2025 at 1:18PM PDT

As indicated in your question – the FHD as submitted by AECOM is the document that resolves WSDOT’s comments on the PHD. The FHD for all fish passages submitted to date have been shared with the tribe and WDFW as required by contract. The preliminary comments were never closed with WSDOT acceptance. The RCSR form was submitted with the FHD with codes of “R” Resolve comment in the next submittal phase. The FHD contained similar comments to the PHD that to date are not closed.

Juanita Creek was sent to WDFW on February 26, 2025. WDFW has not responded with comments.

Per the approved Hydraulic Project Approval for Juanita Creek, Appendix P04, an HPA modification is required prior to construction.

To date WSDOT has not been asked or provided with the information to submit a permit modification in accordance with RFP Section 2.8.5.2.2, *Permit Compliance, Modifications, and Additional Approvals*, “The Design-Builder shall work with WSDOT to identify changes to the methods and means previously described as part of the original environmental documents and permit applications. WSDOT will bring final detailed proposals provided by the Design-Builder to the Federal, State and Local regulatory agencies for document updates, permit applications and modifications, and ESA consultation or Section 106 consultation updates or re-initiations, as required.”

Please note the following:

- RFP Section 1-04.1(2), *General Obligations of the Design-Builder*, “The Design-Builder, in addition to performing all other requirements of the Contract Documents, shall...Construct the Project and maintain it during construction in accordance with the requirements of the Contract Documents, each applicable Contract Schedule, all applicable Legal Requirements, all Governmental Approvals...”
- RFP Section 1-04.4(5), *Matters Not Eligible for Change Orders*, “Changes of any nature to the Environmental Commitments List (Appendix C) that are imposed by, or agreed to by a Governmental Body having jurisdiction, that are the result of the Design-Builder’s design choices within the Design-Builder’s control.”

Attachments:

All Replies:

Response from Kim Christian (Skanska USA Civil West) at 04:02 PM on 09/12/2025

Assigned BY-REC-02677

Attachments:


Response from Nancy Alpuche (Washington State Department of Transpor) at 01:18 PM on 09/12/2025

As indicated in your question – the FHD as submitted by AECOM is the document that resolves WSDOT's comments on the PHD. The FHD for all fish passages submitted to date have been shared with the tribe and WDFW as required by contract. The preliminary comments were never closed with WSDOT acceptance. The RCSR form was submitted with the FHD with codes of "R" Resolve comment in the next submittal phase. The FHD contained similar comments to the PHD that to date are not closed.

Juanita Creek was sent to WDFW on February 26, 2025. WDFW has not responded with comments.

Per the approved Hydraulic Project Approval for Juanita Creek, Appendix P04, an HPA modification is required prior to construction.

To date WSDOT has not been asked or provided with the information to submit a permit modification in accordance with RFP Section 2.8.5.2.2, *Permit Compliance, Modifications, and Additional Approvals*, "The Design-Builder shall work with WSDOT to identify changes to the methods and means previously described as part of the original environmental documents and permit applications. WSDOT will bring final detailed proposals provided by the Design-Builder to the Federal, State and Local regulatory agencies for document updates, permit applications and modifications, and ESA consultation or Section 106 consultation updates or re-initiations, as required."

Please note the following:

- RFP Section 1-04.1(2), *General Obligations of the Design-Builder*, "The Design-Builder, in addition to performing all other requirements of the Contract Documents, shall...Construct the Project and maintain it during construction in accordance with the requirements of the Contract Documents, each applicable Contract Schedule, all applicable Legal Requirements, all Governmental Approvals..."
- RFP Section 1-04.4(5), *Matters Not Eligible for Change Orders*, "Changes of any nature to the Environmental Commitments List (Appendix C) that are imposed by, or agreed to by a Governmental Body having jurisdiction, that are the result of the Design-Builder's design choices within the Design-Builder's control."

Attachments:

Response from Jacob Schmidt (Atlas Technical Consultants, LLC) at 02:05 PM on 08/29/2025

Ready for WSDOT review.

Attachments:

Response from Erin Gaffney (Skanska USA Civil West) at 11:36 AM on 08/29/2025

Okay to submit to WSDOT

Attachments:

BY

DATE

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