

Engineering Civil Review (Reviewed By: Mark Higginson, (253)841-5559, MHigginson@PuyallupWA.gov)

- The City will adopt the 2019 Ecology Manual July 1st, 2022. Any projects not vested (Building Permits and Subdivision Applications) and not permitted by the close of business on June 30th, shall incorporate the provisions of the 2019 Ecology Manual. [Storm Report; Pg 1 of 347]
 - Understood. Stormwater design and report will be updated to meet the 2019 provisions.
- Provide a DRAFT version of the City's Stormwater Facilities Agreement for review. (Note: this is not a condition of permit issuance)[Storm Report; Pg 1 of 347]
 - Noted and will be provided in the future
- Executed and record the City's Stormwater Facilities Agreement prior to permit close out.[Storm Report; Pg 1 of 347]
 - Noted and will be provided in the future
- If the current stormwater design complies with the 2019 Ecology Manual, then an acknowledgment letter from the design engineer will suffice for permit issuance. [Storm Report; Pg 1 of 347]
 - Acknowledgement letter/memo to be provided.
- Revise statement to reflect the wetland basin which is tributary to the detention facility. See comments in Section 7.7. [Storm Report; Pg 9 of 347]
 - Statement revised to include wetland tributary land uses.
- Due to the grades associated with the project, provide a letter from a licensed geotechnical engineer assessing the potential for lateral flow of the infiltrated runoff and whether any lateral flow will impact the proposed conventional paving and/or existing structures. If there are concerns due to lateral flow of the infiltrated runoff, redesign accordingly. [Storm Report; Pg 14 of 347]
 - Geotech has reviewed our design and will provide a letter.
- In the pre-developed condition, there is one threshold discharge area (TDA) and subsequently one Point-of-Compliance(POC). As a result, the post-developed scenario must be addressed holistically as one POC. That is, either the entire proposed area of disturbance complies with the LID Performance Standard or List 2 applies to the whole. It is not appropriate to breakdown a given TDA into smaller portions in an effort to meet MR5 requirements. Since the LID Performance Standard cannot be met for the TDA, List 2 must be evaluated for DB-B, in addition to DB-A, and Permeable Pavement feasibility addressed since it is a higher BMP than the proposed Bioretention BMP under the Other Hard Surfaces category. (See Ecology, Vol. V, Pg 5-20 for infeasibility criteria for permeable pavement related to slope). [Storm Report; Pg 20 of 347]
 - The post-developed scenario recognizes the full-site as one POC. Refer to sheet 278 to see both drainage basins are linked to POC 1
 - We will provide List 2 evaluation specifying why bioretention was selected over permeable pavement.
 - The proposed road grade in DB-B where infiltration planters are proposed slopes consistently at 6% or greater to the curblines prior to the planter. Per Ecology BMP T5.15 for permeable pavement, infeasibility criteria indicates "Where the permeable pavement wearing course slope exceeds 6 percent after

reasonable efforts to design grade.” Site grading utilized 6% slopes to minimize cut into the hillside as much as feasible. Lowering road slope for permeable pavement would require retaining walls and greater cuts on the site. Furthermore, in DB-A infiltration isn’t feasible due to poor infiltration rates and groundwater presence.

- Enhanced Treatment required (commercial site tributary to freshwater supporting aquatic life). [Storm Report; Pg 20 of 347]
 - Statement revised to identify Enhanced treatment requirement over basic treatment.
 - Bioretention swales and infiltration planters will provide enhanced treatment
- See Section 4.1.2 comment regarding lateral flow. [Storm Report; Pg 21 of 347]
 - Letter to be provided by Geotech.
- See Section 7.5 regarding the feasibility of using Permeable Pavement before Bioretention. [Storm Report; Pg 21 of 347]
 - See response above for List 2 infeasibility criteria.
- In the Mitigated scenario, the Wetland Basin is tributary to the storm collection system. Per Ecology, if the Wetland Basin 100yr peak flow is greater than 50% of the project's post-development undetained flow (WWHM701), then the runoff MUST bypass the storm facility. If less than 50% and the runoff is not bypassed, then the storm facility must be sized to account for the additional offsite inflow/runon. [Storm Report; Pg 21 of 347]
 - We will provide the 100-year flow of Wetland Basin (Q=0.108412 cfs) per sheet 302 of storm report. Undetained flow is Q=4.82 cfs. No bypass to occur.
 - The wetland area is already included in DB-A land use totals of the model to account for this run-on from the wetland, thus the storm facility accounts for these volumes.
- Please label as subbasins. [Storm Report; Pg 23 of 347]
 - Updated as requested
- and replaced [Storm Report; Pg 23 of 347]
 - Updated as requested.
- 6.83 per Basin Exhibit, but need to include wetland basin too. [Storm Report; Pg 23 of 347]
 - Yes, 6.83 acres total in Sub Basin-A . 6.76-acres is modelled in the WWHM model because the additional 0.07-acres is in the bioswales which receive precipitation inputs when modelled. A note is provided on sheet on sheet 23 & 249 of storm report clarifying.
 - Wetland Basin is 1.05 acres of the total 6.83 acres in DB-A. Figure 2 of storm report indicates as such.
- 3.05 per Basin Exhibit. [Storm Report; Pg 23 of 347]
 - Yes, 3.05 acres total in DB-B . 2.92-acres is modelled in the WWHM model because the additional 0.13-acres is in the infiltration planters which receive precipitation inputs when modelled. A note is provided on sheet 23 & 248 of storm report clarifying.

Upper Parking -FG		
Bypass:	No	
GroundWater:	No	
Pervious Land Use	acre	
C. Forest, Mod	0.89	
C. Lawn, Mod	0.16	
Pervious Total	1.05	
Impervious Land Use	acre	0.13-ACRES OF INFILTRATION PLANTER
ROADS MOD	1.87	
Impervious Total	1.87	PRECIPITATION IS APPLIED TO THE BIORETENTION NODE
Basin Total	2.00 - ACRES	
	2.92	
	3.05 - ACRES	
Element Flows To:		
Surface	Interflow	Groundwater
Surface	TION PLANTER	

- Verify-Does not appear that this area is tributary to the Wetland. [Storm Report; Pg 27 of 347]
 - Contributing area estimated based on available survey data uphill from the wetland. Area included to conservatively estimate the contributing basin. To remain as identified.
- Verify-Does not appear that this area is tributary to the Wetland. [Storm Report; Pg 28 of 347]
 - Contributing area estimated based on available survey data uphill from the wetland. Area included to conservatively estimate the contributing basin to remain as identified.
- The WWHM output indicates 0.15ac of lawn tributary to the wetland. Where does this occur? (regraded areas appear tributary to the parking)[Storm Report; Pg 28 of 347]
 - Assumes portion of area will require some tree or shrub clearing to remove existing fences and features. Accounts for this area as lawn due to removal trees.
- In the Mitigated scenario, the Wetland Basin is tributary to the storm collection system. Per Ecology, if the Wetland Basin 100yr peak flow is greater than 50% of the project's post-development undetained flow (WWHM701), then the runoff MUST bypass the storm facility. If less than 50% and the runoff is not bypassed, then the storm facility must be sized to account for the additional offsite inflow/runon. [Storm Report; Pg 28 of 347]
 - The area contributing to Wetland F is already included in the sizing of the detention chamber facility. Bypass is not considered or required.
 - We will provide the 100-year flow of Wetland Basin (Q=0.108412 cfs) per sheet 302 of storm report. Undetained flow is Q=4.82 cfs. No bypass to occur.
- Provide the 100yr peak flow comparison between the Wetland Basin and the post-development undetained flow (WWHM 701). [Storm Report; Pg 28 of 347]
 - We will provide the 100-year flow of Wetland Basin (Q=0.108412 cfs) per sheet 302 of storm report. Undetained flow is Q=4.82 cfs. No bypass to occur.
- Based on the contours, it does not appear that runoff from this area reaches the wetland in the post-developed condition. [Storm Report; Pg 28 of 347]
 - Note to be added to plans to have contractor grade this area towards wetland via berm or ditch.
- Please label as Figure 3 [Storm Report; Pg 29 of 347]
 - Label 3 to be added to Figure.
- Provide the 100yr peak flo comparison between the Wetland Basin and the post-development undetained flo (WWHM 701). [Storm Report; Pg 245 of 347]

- We will provide the 100-year flow of Wetland Basin ($Q=0.108412$ cfs) per sheet 302 of storm report. Undetained flow is $Q=4.82$ cfs. No bypass to occur.
- In the Mitigated scenario, the Wetland Basin is tributary to the storm collection system. Per Ecology, if the Wetland Basin 100yr peak flo is greater than 50% of the project's post-development undetained flo (WWHM701), then the runoff MUST bypass the storm facility. If less than 50% and the runoff is not bypassed, then the storm facility must be sized to account for the additional offsite inflow/runon. If not bypassed, include the groundwater component that was used for the wetland analysis in the modeling of the detention facility. [Storm Report; Pg 245 of 347]
 - Repeat comment. See previous responses.
- Clarify-why is the precipitation scale adjusted? This is a default setting in WWHM. [Storm Report; Pg 246 of 347]
 - Program error. Corrected and values unchanged. See new report
- Provide Gage Information [Storm Report; Pg 246 of 347]
 - Program error. Corrected and values unchanged. See ne report
- In the Mitigated scenario, the Wetland Basin is tributary to the storm collection system. Per Ecology, if the Wetland Basin 100yr peak flo is greater than 50% of the project's post-development undetained flo (WWHM701), then the runoff MUST bypass the storm facility. If less than 50% and the runoff is not bypassed, then the storm facility must be sized to account for the additional offsite inflow/runon. If not bypassed, include the groundwater component that was used for the wetland analysis in the modeling of the detention facility. [Storm Report; Pg 247 of 347]
 - See previous response.
- Confirm-shouldn't mulch layer be included in the WWHM model. [Storm Report; Pg 251 of 347]
 - Mulch layer included.
- Verify-Section 2/TS-01 indicates 18 inches of gravel. [Storm Report; Pg 255 of 347]
 - Updated to match.
- What about the entrance road grassy swale? See comments Sheet SD-03. [Storm Report; Pg 255 of 347]
 - Updated to bioretention swale with underdrain. Included in model now.
- Confirm-0.5 offset per 2/TS-01 [Storm Report; Pg 255 of 347]
 - Updated to provide 0.5' offset
- See Comment Pg 245 regarding Wetland bypass. [Storm Report; Pg 276 of 347]
 - We will provide the 100-year flow of Wetland Basin ($Q=0.108412$ cfs) per sheet 302 of storm report. Undetained flow is $Q=4.82$ cfs. No bypass to occur.
- 3/TS-01 indicates 4-in mulch layer. Shouldn't that be included in the analysis? [Storm Report; Pg 277 of 347]
 - Mulch layer included. See new report.
- Provide screenshot of Mitigated design inputs for the bioswale. Ensure the bottom slope of the facility is accounted for. [Storm Report; Pg 277 of 347]
 - Screenshot to be provided.
- Provide Gage Information [Storm Report; Pg 297 of 347]
 - Program error. Gage info provided. See new report.

- Based on the Basin Map, Figure 2, it is unclear what changed in the post-developed condition that implies 0.15ac of lawn tributary to the wetland. Show on the Basin Map where this applies for Wetland F (see Basin Map Comments also) [Storm Report; Pg 299 of 347]
 - Basin area to include lawn component. This accounts for area that will be hydroseeded following clearing & grubbing to remove fences, utilities, and provide equipment access.
- Provide underdrain sizing calcs (length and perforations) for Alignment H considering tributary area to bioswale and Ecology requirement to drain the BSM within 48 hours. [Storm Report; Pg 337 of 347]
 - Calcs to be provided.
- Engr Clarify-CB1 thru CB3 will be under backwater influence during large storm events (top of riser at EL 481.51). Is there a concern for localized flooding due to the backwater condition? [Storm Report; Pg 337 of 347]
- Only applicable to CB 1 and 2. . CB 3 outfalls into the upper section of chambers
 - Riser lowered to minimize backwater conditions and localized ponding.
 - There is space within the bioretention cell for intermittent ponding without overflowing into parking/road surface.
 - Outfall IEs were raised and riser height lowered to limit occurrences.
 - Furthermore, the discharge flowrate ($Q_{100-out} = 2.74$ cfs) exceeds the maximum inflow flowrate ($Q_{100-out} = 1.34$ cfs) of both contributing areas to CB 1 & 2.

End storm report comments

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Start of civil plan comments

- Use correct approval block. (Typ. All Sheets)[Plans; Sht G-0.1] (AFR)
 - Revised as noted
- Use complete City Std Notes (missing original Note 15) [Plans; Sht G-03] (AFR)
 - Revised as noted
- Also shown on Sheet WA-02. [Plans; Sht G-03] (AFR)
 - Revised as noted
- Per Ecology, the 1-in drop is at the face of curb (abutting the hard surface). Revise accordingly. [Plans; ShtTS-01] (AFR)
 - Detail Revised
- Per Ecology, the 1-in drop is at the face of curb (abutting the hard surface). Revise accordingly. [Plans; ShtTS-01] (AFR)
 - Detail Revised
- Confirm-shouldn't mulch layer be included in the WWHM model. [Plans; Sht TS-01]
 - MULCH INCLUDED IN WWHM MODEL. SEE NEW STORM REPORT FOR DETAILS. (WZG)
- Callout 6-in (freeboard). [Plans; Sht TS-01] (AFR)
 - Detail revised
- Verify-46-in max places bottom of footing exactly at bottom of biocell. ($H=0.5+1.5+0.33+1+0.5 = 45.96$ inches) [Plans; Sht TS-01]
 - Verified 46" max.
- Provide underdrain sizing calcs (length and perforations) in the storm report for Alignment H considering tributary area to bioswale and Ecology requirement to drain the BSM within 48 hours. [Plans; Sht TS-01]
 - Calcs included in new storm report.
- Per prior comment, provide Construction Sequence per CS Section 501.6. Below is an example... [Plans; Sht DM-00]
 - Sequencing provided in new plans.
- Per Ecology, Sediment Traps are limited to 3ac tributary area. Clarify why the Sediment Pond BMP is not being used. [Plans; Sht DM-01]
 - Sediment Pond being utilized now.
- Per prior comment...is this not the roof drain and should be preserved? Clarify. [Plans; Sht DM-03]
 - Note added (RLP)
- Per prior comment...was the Fire Code Official consulted to ensure that there adequate hydrants to serve the building upon removal? [Plans; Sht DM-03]
 - Note added (RLP)
- Clearly identify the FDC, PIV, and DDCVA serving the building. [Plans; DM-03]
 - Note added (RLP)

- Per Ecology, callout a staff gauge with a prominent mark 1-ft above the bottom of the trap/pond. [Plans; ShtDM-06]
 - Note added in detail.
- Does not appear on Sht SD-07. [Plans; Sht SD-00] (AFR)
 - Detail added to SD-07
- Does not appear on Sht SD-07. [Plans; Sht SD-00] (AFR)
 - Detail added to SD-07
- Per prior comment, confirm callout. [Plans; Sht SD-00]
 - Wheelstop detail reference for schematic layout purposes, wheelstop construction coordination with contractor
- Please add "slotted" to callout. [Plans; Sht SD-01] (AFR)
 - Revised as noted
- Confirm invert and/or pipe slope.[Plans; Sht SD-01] (AFR)
 - Confirmed invert and pipe slope
- Verify-Rim Elev w/ 2/TS-01 [Plans; Sht SD-01]
 - Rim elev verified
- Confirm invert and/or pipe slope.[Plans; Sht SD-01] (AFR)
 - Confirmed invert and pipe slope
- Please add "slotted" to callout. [Plans; Sht SD-01] (AFR)
 - Revised as noted
- Verify-Rim Elev w/ 2/TS-01 [Plans; Sht SD-01] (AFR)
 - Rim elev verified
- Confirm-Storm Note 2?[Plans; Sht SD-03] (AFR)
 - Confirmed and added
- Verify-EL 477.00 per Sht SD-09. [Plans; Sht SD-01]
 - Correct EL of lower stormchamber is EL: 476.50' . Detail from SD-09 is for reference. These civil documents dictate locations, IEs, and elevations of the system with the rest of the site.
- This callout should reference Std. Detail 02.01.06 Sheet SD-07. [Plans; Sht SD-01]
 - Revised callout to include Detail 02.01.06
- Engr Clarify-CB1 thru CB3 will be under backwater influence during large storm events (top of riser at EL 481.51). Is there a concern for localized flooding due to the backwater condition? [Plans; Sht SD-01]
- CB 1 & 2 may encounter some backwater in large storm events. CB 3 outfalls into the upper section of chambers. Outfall IEs were raised and riser height lowered to limit occurrences. The bioretention cells at CB inlets have some storage capacity. Furthermore, the discharge flowrate ($Q_{100-out} = 2.74$ cfs) exceeds the maximum inflow flowrate ($Q_{100-out} = 1.34$ cfs) of both contributing areas to CB 1 & 2.
- Clarify-Saddle MH? Existing In/Out inverts. [Plans; Sht SD-01]
 - Saddle MH to be installed. Existing inverts added.

No response rec'd.[Response Letter; Pg 7 of 14]

- Callout Cross-Section of bioswale. [Plans; Sht SD-01] (AFR)
 - Callout added
- Confirm callout.[Plans; Sht SD-01]
 - Callout revised
- Please add "slotted" to callout. [Plans; Sht SD-01] (AFR)
 - Revised as noted
- Clarify-less than 12-in ponding provided. [Plans; Sht SD-01] (AFR)
 - Base of cell at 485.14' and rim at 486.14' confirming 12-in ponding depth
- Please add "slotted" to callout. [Plans; Sht SD-01] (AFR)
 - Revised as noted
- Verify-Rim Elev w/ 2/TS-01 [Plans; Sht SD-01] (AFR)
 - Rim elev verified
- Confirm invert and/or pipe slope.[Plans; Sht SD-01] (AFR)
 - Confirmed pipe invert
- Confirm invert and/or pipe slope.[Plans; Sht SD-01] (AFR)
 - Confirmed pipe invert
- Verify-does there need to be erosion protection btwn the curb inlet and the bioswale? (6 Plcs) [Plans; Sht SD01]
 - There will be a concrete splash pad at the curb inlet per detail on SD-06 for erosion protection. Landscaping will reduce erosion risk once vegetation is established. (WZG)
- Confirm-Storm Note 2?[Plans; Sht SD-03] (AFR)
 - Confirmed and added
- Confirm-Storm Note 2?[Plans; Sht SD-03] (AFR)
 - Confirmed and added
- Verify-EL 480.25 per Sht SD-09. [Plans; Sht SD-01]
 - Correct EL of upper stormchamber is EL: 478.50' . Detail from SD-09 is for reference. These civil documents dictate locations, ies, and elevations of the system with the rest of the site.
- Verify-EL 477.00 per Sht SD-09. [Plans; Sht SD-01]
 - Correct EL of lower stormchamber is EL: 476.50' . Detail from SD-09 is for reference. These civil documents dictate locations, ies, and elevations of the system with the rest of the site.
- Revise Notes per comments on Sht SD-00. [Plans; Sht SD-01] (AFR)
 - Revised as noted
- See comment on Sht SD-00. [Plans; Sht SD-01] (AFR)
 - Revised as noted
- Please provide a x-section thru stair-gutter-sidewalk transition for clarity. (3 plcs)[Plans; Sht SD-02]

- Verify-Callout 9 is for gutter to run behind island (no gutter shown). (3 plcs)[Plans; Sht SD-02]
 - Call out to be revised. No gutter run through to occur.
- Verify-callout is for the gutter to run behind island? [Plans; Sht SD-02]
 - Call out to be revised. No gutter run through to occur.
- Revise Notes per comments on Sht SD-00. [Plans; Sht SD-02] (AFR)
 - Revised as noted
- See comment on Sht SD-00. [Plans; Sht SD-02] (AFR)
 - Revised as noted
- Verify callout.[Plans; Sht SD-03]
 - Updated accordingly.
- Verify-Rim Elev w/ 2/TS-01 [Plans; Sht SD-03] (AFR)
 - Elevation verified
- Confirm callout.[Plans; Sht SD-03]
 - Revised to call out GR-06 for alignment profile
- Verify-Rim Elev w/ 2/TS-01 [Plans; Sht SD-03] (AFR)
 - Elevation verified
- Confirm invert and/or pipe slope.[Plans; Sht SD-03] (AFR)
 - Pipe invert confirmed
- Confirm invert and/or pipe slope.[Plans; Sht SD-03] (AFR)
 - Pipe invert confirmed
- Confirm-Storm Note 2?[Plans; Sht SD-03] (AFR)
 - Note 2 added
- Verify-EL 480.25 per Sht SD-09. [Plans; Sht SD-03]
 - Correct EL of upper stormchamber is EL: 478.50' . Detail from SD-09 is for reference. These civil documents dictate locations, ies, and elevations of the system with the rest of the site.
- Verify callout.[Plans; Sht SD-03]
 - Verified and updated
- Callout Cross-Section of bioswale. [Plans; Sht SD-03] (AFR)
 - Callout added
- Callout Cross-Section of bioswale. [Plans; Sht SD-03] (AFR)
 - Callout added
- Please add "slotted" to callout. [Plans; Sht SD-03] (AFR)
 - Revised as noted
- Please add "slotted" to callout. [Plans; Sht SD-03] (AFR)
 - Revised as noted
- Confirm-Storm Note 2?[Plans; Sht SD-03] (AFR)
 - Note 2 added
- Clarify that this is a Traffic Curb per Roadway Construction Note 2. [Plans; Sht SD-03]

- Traffic curb. Added callout.
- Revise Notes per comments on Sht SD-00. [Plans; Sht SD-03] (AFR)
 - Revised as noted
- See comment on Sht SD-00. [Plans; Sht SD-03] (AFR)
 - Revised as noted
- Clarify-is this inlet at the bottom of swale? Is it overflow? See comment below. [Plans; Sht SD-03]
- Clarify this swale design. Is it purely conveyance? If so, how is the entrance road being treated? Is the intent to use Section 1/TS-01? Swale does not appear to be same width (11ft) as the drive aisle biocells and if it is designed solely as conveyance, then a majority of the road is not being treated. If it is intended to function as a biocell by filtering through soil mix (which would capture all of the road runoff for treatment), then shouldn't there be an underdrain to capture the treated effluent? Lastly, if the swale is intended as a treatment facility, what affect does the runoff from the wetland basin have on the swale (saturation of the BSM and Ecology requirement to drain within 24 hours). [Plans; Sht SD-03]
 - Swale design to be revised as bioretention swale for conveyance and WQ treatment. New TYP. Sec to be provided. Impact from the wetland basin should be minimum on the swale. An average of 50'+ LF of overland dispersion will help disperse runoff quantities. Also, undetained 100-year flowrate is only 0.108 CFS. Furthermore, the slope of the swale will convey runoff to underdrain. Calcs are included for draindown time of underdrain.
- In the Mitigated scenario, the Wetland Basin is tributary to the storm collection system. Per Ecology, if the Wetland Basin 100yr peak flo is greater than 50% of the project's post-development undetained flow (WWHM701), then the runoff MUST bypass the storm facility. If less than 50% and the runoff is not bypassed, then the storm facility must be sized to account for the additional offsite inflow/runon. If not bypassed, include the groundwater component that was used for the wetland analysis in the modeling of the detention facility.[Plans; Sht SD-03]
 - Wetland basin is a tributary and is already included in the detention facility design. See response in storm report comments above. (WZG)
- Clarify that this is a Traffic Curb per Roadway Construction Note 2. [Plans; Sht SD-04]
 - Traffic curb? Add callout?
- Verify-Callout 9 is for gutter to run behind island (no gutter shown).[Plans; Sht SD-04]
 - Call out to be revised. No gutter run through to occur.
- Revise Notes per comments on Sht SD-00. [Plans; Sht SD-04] (AFR)
 - Revised as noted
- See comment on Sht SD-00. [Plans; Sht SD-04] (AFR)
 - Revised as noted
- Verify-callout is for the gutter to run behind island? [Plans; Sht SD-04]

- Call out to be revised. No gutter run through to occur.
- Verify-Callout 9 is for gutter to run behind island (no gutter shown).[Plans; Sht SD-04]
 - Call out to be revised. No gutter run through to occur.
- Revise Notes per comments on Sht SD-00. [Plans; Sht SD-05]
 - Revised as noted
- See comment on Sht SD-00. [Plans; Sht SD-05]
 - Revised as noted
- Does this note apply? If the referenced detail (P-540) applies, please provide. [Plans; Sht SD-06]
- This is exceeded at multiple locations based on the GR sheets at the Infiltration Planters. See comments on GR sheets. [Plans; Sht SD-06]
 - Splash pad inlet locations elevations to be revised to provide 6" max. Drop.
- Add City Std Details: 02.01.02 // 02.01.04 // 02.01.08 // 06.01.01 // 06.01.02 // 06.01.03[Plans; Sht SD-07]
 - Details added to SD-07 and SD-08
- Verify-EL 478.50 per Sht SD-01. [Plans; Sht SD-09]
 - Correct EL of upper stormchamber is EL: 478.50' . Detail from SD-09 is for reference. These civil documents dictate locations, ies, and elevations of the system with the rest of the site.
- Verify-EL 476.50 per Sht SD-01. [Plans; Sht SD-09]
 - Correct EL of upper stormchamber is EL: 476.50' . Detail from SD-09 is for reference. These civil documents dictate locations, ies, and elevations of the system with the rest of the site.
- Confirm-Only four inflo locations indicated (5 per Sht SD-01. [Plans; Sht SD-09]
 - Vendor cutsheet for reference only. Contractor will submit new cut sheet for review and approval based off approved civil documents.
- Confirm-Inflo location per Sht SD-01. [Plans; Sht SD-09]
- Verify Callout. [Plans; Sht SD-01] (AFR)
 - Callout adjusted to correct sheet
- Verify flo direction. [Plans; Sht GR-01] (AFR)
 - Flow direction callout revised
- Verify flo direction. [Plans; Sht GR-01] (AFR)
 - Flow direction callout revised
- Verify flo direction. [Plans; Sht GR-01] (AFR)
 - Flow direction callout revised
- Verify flo direction. [Plans; Sht GR-01] (AFR)
 - Flow direction callout revised
- Identify contours [Plans; Sht GR-01] (AFR)
 - Contours identified

- Verify-is this flowline per Pt 315 note, or splash pad? This elevation indicates a 1.2ft drop from the corner (Pt 314). Based on Detail 1/SD-06 (right), max drop from depressed gutter to top of splash pad is 6in. Resulting in a top of pad at El 512.5. [Plans; Sht GR-02]
 - Updated accordingly.
- See comment on Sht SD-02.[Plans; Sht GR-02]
 - Updated accordingly.
- Using Detail 3/TS-01:Top of splash pad = $509.89+0.5+1.5+0.33+0.33 = 512.55$ which is higher than Pt 315.[Plans; Sht GR-02]
 - Updated accordingly.
- Verify per Pt 315 comment. [Plans; Sht GR-02]
 - Updated accordingly.
- Verify per Pt 315 comment. [Plans; Sht GR-02]
 - Updated accordingly.
- Verify per Pt 315 comment. [Plans; Sht GR-02]
 - Updated accordingly.
- Verify-top of planter El 505.98 and top of splash pad El 506.31 [Plans; Sht GR-02]
 - Updated accordingly.
- Verify-top of planter El 505.98 and top of splash pad El 506.31 [Plans; Sht GR-02]
 - Updated accordingly.
- See comment on Sht SD-02.[Plans; Sht GR-02]
 - Updated accordingly.
- See comment on Sht SD-02.[Plans; Sht GR-02]
 - Updated accordingly.
- Verify-top of planter El 499.19 and top of splash pad El 499.52 [Plans; Sht GR-02]
 - Updated accordingly.
- Verify-top of planter El 499.19 and top of splash pad El 499.52 [Plans; Sht GR-02]
 - Updated accordingly.
- Verify-top of planter El 513.41 and top of splash pad El 513.74 [Plans; Sht GR-02]
 - Updated accordingly
- Verify-top of planter El 505.66 and top of splash pad El 505.99 [Plans; Sht GR-02]
 - Updated accordingly
- Verify-3.5ft elevation difference in less than 12-inches? Does not work with Detail 1/SD-06.[plans; sht gr-02]
 - Updated accordingly
- Verify-top of planter El 500.68 and top of splash pad El 501.01 [Plans; Sht GR-02]
 - UPDATED ACCORDINGLY
- Verify-flo direction arrow.[Plans; Sht GR-03]
 - Flow direction revised
- Verify-flo direction arrow.[Plans; Sht GR-03]

- Flow direction revised
- Provide spot elevations at ends of swale and every 100-ft between. [Plans; Sht GR-05]
 - What table do I add these new points to?
- Verify-elevation (BFC) is higher than grades to the west. [Plans; Sht GR-05]
 - FG doesn't match callouts, how to proceed
- Verify-elevation (BFC) is higher than grades to the west. [Plans; Sht GR-05]
 - FG doesn't match callouts, how to proceed
- Assuming the gutter is not intended to run behind island (See comments on SD sheets), confirm that a slightly lower elevation is desired here (ponding). [Plans; Sht GR-04]
 - UPDATED ACCORDINGLY
- Verify-is gutter intended to run behind island (See comments on SD sheets). Confirm gutter flow. [Plans; ShtGR-04]
 - UPDATED ACCORDINGLY
- Verify-if gutter does not run past, ponding at this location. [Plans; Sht GR-04]
 - UPDATED ACCORDINGLY
- Verify-0% gutter slope at this location. [Plans; Sht GR-04]
 - UPDATED ACCORDINGLY
 - Verify-0% gutter slope at this location. [Plans; Sht GR-04] UPDATED ACCORDINGLY
- Provide spot elevations at ends of swale and every 100-ft between. [Plans; Sht GR-05]
 - Included in new plans.
- Please provide a x-section thru stair-gutter-sidewalk transition for clarity. [Plans; Sht GR-15]
 - Included in new plans.
- From Sheet GR-02 comment: Verify-is this flowline per Pt 315 note, or splash pad? This elevation indicates a 1.2ft drop from the corner (Pt 314). Based on Detail 1/SD-06, max drop from depressed gutter to top of splash pad is 6in. resulting in a top of pad at El 512.5. [Plans; Sht GR-17]
 - Updated accordingly.
- See Pt 315 Comment. [Plans; Sht GR-17]
 - Updated accordingly.
- See Pt 315 Comment. [Plans; Sht GR-17]
 - Updated accordingly.
- See Pt 315 Comment. [Plans; Sht GR-17]
 - Updated accordingly.
- Verify-top of planter El 513.41 and top of splash pad El 513.74 [Plans; Sht GR-17]
 - Updated accordingly.
- Verify-top of planter El 505.66 and top of splash pad El 505.99 [Plans; Sht GR-02]
 - Updated accordingly.

- Verify-3.5ft elevation difference in less than 12-inches? Does not work with Detail 1/SD-06.[Plans; Sht GR-17]
 - Updated accordingly.
- Verify-top of planter El 500.68 and top of splash pad El 501.01 [Plans; Sht GR-02]
 - Updated accordingly.
- Verify-top of planter El 505.98 and top of splash pad El 506.31 [Plans; Sht GR-17]
 - Updated accordingly.
- Verify-top of planter El 505.98 and top of splash pad El 506.31 [Plans; Sht GR-17]
 - Updated accordingly.
- Verify-top of planter El 499.19 and top of splash pad El 499.52 [Plans; Sht GR-17]
 - Updated accordingly.
- Verify-see comment Sheet GR-05. [Plans; Sht GR-18]
 - Updated accordingly.
- Verify-see comment Sheet GR-05. [Plans; Sht GR-18]
 - Updated accordingly.
- Verify. [Plans; Sht GR-19]
 - Updated accordingly.
- See comment Sht GR-04. [Plans; Sht GR-19]
 - Updated accordingly.
- Verify-0% gutter slope at this location. [Plans; Sht GR-19]
 - Updated accordingly.
- Verify-0% gutter slope at this location. [Plans; Sht GR-19]
 - Updated accordingly.
- Indicate thrust Blk'g.[Plans; Sht WA-01]
 - Updated accordingly.
- Updated material call out in plan and profile
 - Updated accordingly.
- Use City Standard DI CI 52 pipe[Plans; Sht WA-01]
 - Updated material call out in plan and profile
- Indicate thrust Blk'g.[Plans; Sht WA-01]

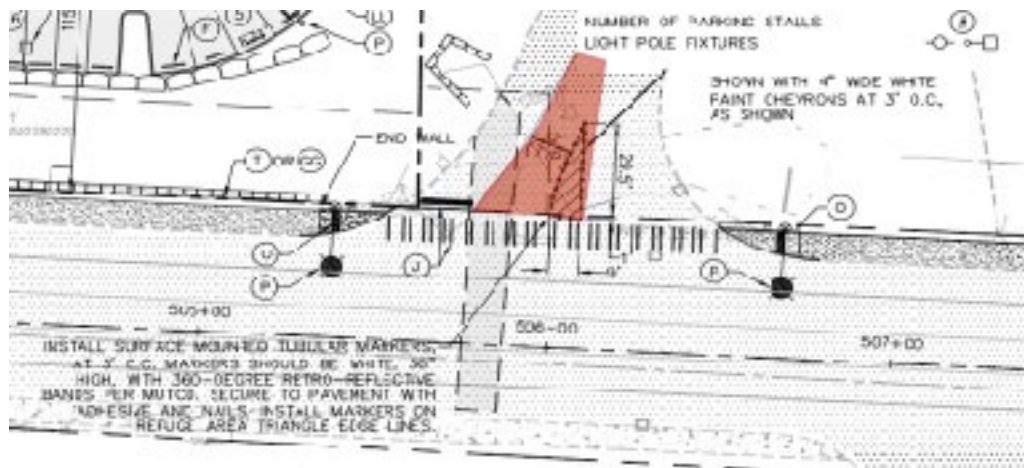
Added block and callout for installation of thrust block
- Clarify-abandon existing main? [Plans; Sht WA-01 & DM-01]

Added callouts to demo plans RP

- Remove Approval Block from Landscape Plans. Typ. all landscape sheets.[Plans; Sht LS-00]
 - Removed

Engineering Traffic Review (Reviewed By: Bryan Roberts, (253)841-5542, broberts@PuyallupWA.gov)

- Per previous comments: The existing eastern most driveway on 39th Avenue SE will be required to limit turning movements to right-in, right-out only. Signage, a raised channelization device (raised porkchop island), and striping will likely be required to assure left turns into and out of the site cannot circumvent the restriction. Existing driveway location along 39th Ave SE does not meet current driveway separation standards (300ft for Major Arterial Roadways). This separation requirement applies to driveways located on both sides of the street. The required access restriction (right-in/right-out) will help mitigate deficient driveway spacing standards. Currently, this intersection does not restrict left turns.
 - This improvement was addressed with the development of Group Health Candlesticks and striping will be revised to allow right in right out only.



Planning Review (Reviewed By: Rachael N. Brown, (253)770-3363, RNBrown@PuyallupWA.gov)

- NO COMMENTS AVAILABLE
- Sheet IL-00 does not appear to match the design of the rest of the sheets. Revise Illumination plan to match the final submitted design.
 - Site plan background updated

Protective fence should be set back 10' from wetland edge where possible, [Civil Plan, DM-03]

- Include where feasible. No wetland buffer for wetland f. Some construction activities will be closer than 10' of wetland edge. Fencing placed where necessary to prevent impact.
- Landscape plan sheets need to include utility overlays. Utilities shall not conflict with required landscaping areas. See Vegetation Management Standards manual pg. 25 for utility spacing requirements from street trees (also required for landscape trees).

- Utility overlays added. Tree located adjusted per VMS utility spacing requirements or removed were space not adequate
- SEPA Condition #2 Environmental Health: The rationale provided by Parametrix in their March 3, 2022 memo, for forgoing the testing requirements outlined in the SEPA MDNS issued January 18, 2022 Mitigation Requirement #2 is acceptable. Contamination at the facility known to Ecology is not located where the parking lot is proposed. In addition, groundwater in the area of known site contamination appears to be flowing away from the proposed parking lot location. However, Toxics Cleanup Program (TCP) comments provided on the SEPA checklist are still applicable to the project. If soil or groundwater contamination is encountered during parking lot construction, Ecology must be notified by contacting the ERTS (Environmental Report Tracking System) coordinator at 360.407.6300.
 - Noted and will follow established procedures during construction.
- Blank areas around wetland need a landscape plan, especially the western side where the existing gravel area is being removed, [Civil Plan, LS-03]
 - Restoration plantings added where gravel is being removed. No plantings added on other side of wetland where there is existing vegetation
- Per updated wetland rating forms dated Oct. 6, 2021, wetland F is a depressional wetland, not a slope wetland, please revise and include updated wetland rating forms in storm report, [Storm Report, Pg. 5].
 - Wetland F has been updated as a depressional wetland within the updated storm report. This is also reflected in the previously submitted Critical Areas report.
- Please clarify how water line is being removed from under wetland [Civil Plan, DM-03]
 - Waterline to remain in place. No demolition to occur.
- **Public Works Water Review \ (Reviewed By: Brian Johnson, (253)841-5442, rianJ@PuyallupWA.gov)**
- Civil & Landscape Plans Sheet 49: This tee is feeding a 2-inch irrigation service. Consider reducing size to atleast an 8"x4" tee.
 - Updated accordingly.
- Civil & Landscape Plans Sheet 49: The new private water main shall be 8-inch Ductile Iron CI 52 pipe.
 - Updated accordingly.
- Civil & Landscape Plans Sheet 49: The existing water main that will be exposed and removed could be asbestos cement (A.C.) pipe. Use caution and dispose of per State Regulations.
 - Warning note added to wa-01 and wa-02 warning contractor

Fire Review (Reviewed By: David Drake, (253)864-4171, DDrake@PuyallupWA.gov)

- Show F.D.C, P.I.V, and Fire Hydrant Locations, As per both P Permits below Fire Hydrants may be required.
 - None proposed
- A 26' wide fire lane is required in front of Fire Hydrants.
 - Confirmed fire lane is 26' wide
- Existing P.I.V. is East of the building in the tree line. This needs to be addressed on the plans for code compliance.
 - The existing water system is proposed to be maintained and protected with no improvements anticipated. The only exception is the west water main which will be improved and buried to meet minimum cover requirements See Sheet WA-01
- Provide a Fire Lane / No Parking signage site plan.
 - New figure created and sent to David/Ray for approval
- Provide Auto-turn or equivalent program for Fire Apparatus maneuverability.
New figure created to be sent to David for approval
 - New figure created and sent to David/Ray for approval
- Notes below are the original notes not addressed. Per previous pre-application meeting P-14-0082: Bob Fore
- Show existing fire hydrant locations and a decision will be made if any need to be added.
 - Shown
- Fire access to hydrants and building circulation required to include fire lane stripping
 - Hydrants are existing
- A 26' fire lane is required in front of fire hydrants
 - Confirmed per response above
- Per previous pre-application meeting P-20-0040: David Drake
- Fire hydrants will be required. Please submit a plan showing hydrant locations.
 - New figure created and sent to David/Ray for approval
- 26' Minimum fire lane widths.
 - New figure created and sent to David/Ray for approval
- Provide Auto-turn showing turning radiuses.
 - New figure created and sent to David/Ray for approval