



City of Puyallup

Engineering Division

333 S. Meridian, Puyallup, WA 98371

(253) 864-4165

www.cityofpuyallup.org

Comment Notice

Permit Application # PRCCP20220770

The City has completed the review of the above-mentioned permit submittal. Below please find the permit submittal review comments from your review team. Should you have any questions regarding the review comments, please contact the plan reviewer associated with the comment listed below.

Engineering Civil Review (Reviewed By: Anthony Hulse, (253)841-5553, AHulse@PuyallupWA.gov)

- ◆ Add Cut/Fill and net volume quantities. [Civil Plans, C1.0]
- ◆ Include Stamped Survey per Ecology Manual Requirements in Section 1-3.1.1. [Civil Plans, C1.0]
- ◆ Provide vertical Datum, Benchmark, and Legal Description. [Civil Plans, C1.0]
- ◆ Update City General Notes to latest version found in COP Design Standards Section 2.4. The phone numbers in notes 1 and 6 have been updated. [Civil Plans, C1.0]
- ◆ Make mention in the CSWPP that a sediment trap is proposed. Additionally size the trap per the contributing areas [CSWPP, pg 3]
- ◆ A small-scale PIT test was not conducted for the proposed Stem building and associated parking lot. Test PITs were not dug near the location of the proposed stormwater facility. Approximately 400' away from Test PIT from the parking lot project and 500' or so for PIT -2. [Geotech report, pg 19]
- ◆ Update element 5 to state the 2019 Ecology manual's requirements for soils to be stabilized. [drainage report, pg 8]
- ◆ This drainage report is for th Stem building and associate parking lot. The parking lot expansion project is covered under a seperate civil application. [drainage report, pg 5]
- ◆ Re-evaluate this section as necessary after further infiltration testing is conducted. [drainage report, pg 8]
- ◆ Include Development engineering Approval block on every sheet per design standard 1.4. You can find the approval block and additional info here: <https://www.cityofpuyallup.org/DocumentCenter/View/6921/Section-10-Engineering-Services-Review-Process?bidId=>[Civil Plans, C1.0]
- ◆ Include Landscape Plans in sheet Index. [Civil Plans C1.0]
- ◆ Add P linetype to the legend. [civil plans, pg C3.1]
- ◆ Provide the side slopes and bio-retention width [civil plans, pg C5.3]
- ◆ Rain gardens are not permitted through the department of Ecology for projects meeting List #2. [civil plans, pg 10]
- ◆ Make a reference and provide a detail for the high visibility plastic or metal fence per BMP C103 as referred by the CSWPP. [E&S, pg C2.1]
- ◆ Provide a note to amend all disturbed soils per CS 01.02.08a [civil plans, pg C2.1]
- ◆ Include CS 01.02.08a [E&S plans, C2.4]
- ◆ Show the downstream stormwater runoff 1/4 mile downstream. [drainage plan, pg 17]
- ◆ Test comment
- ◆ Provide a discussion as to how temporary stormwater will be addressed. The civil plans show multiple swales leading to a temporary sediment pond to be pumped into baker tanks. How will the stormwater be disposed from the baker tanks? [CSWPP, pg 3]
- ◆ The civil plans show three bioretention systems, update the plans or drainage report accordingly [Drainage report, pg 11]
- ◆ Provide an additional basin map within the drainage report clearly showing the associated pollution generating surfaces leading to the treatment systems. Be sure to include a table or callout providing the area in



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acres or square feet. [Drainage Report, pg 66]

- ◆ Where does the 0.71 acres of pervious come from? The stem building basin map provides 0.57 acres of landscape whereas the parking lot is proposing 0.14 acres. Clarify which areas lead to the detention system. [Drainage report, pg 43]
- ◆ How was the 9" perimeter stone sized? The acceptable fills material: Stormtech MC-7200 Chamber Systems detail on page C5.3 references the depth of stone is to be determined by the site Design Engineer 9 inch min. [Drainage Report, pg 39]
- ◆ Provide the existing pervious and imperious areas as part of this map. [Drainage report, pg 15]
- ◆ Provide the existing pervious and imperious areas as part of this map. [Drainage report, pg 16]
- ◆ Provide a calculation that converts the WWHM calculation volume to number of chambers necessary/ Linear footage of MC-7200 to be installed. [Drainage Report, pg 45]
- ◆ The WWHM model shows that minimum requirement #7 is not met per this analysis. [Drainage report, pg 58]
- ◆ Create a small note indicating that site upgrades will occur here. This is a bit challenging to distinguish [civil plans pg C1.0]
- ◆ Construct construction entrance before installing other TESC BMPs [Civil Plans, C1.0]
- ◆ Define what these are in the legend or provide a keynote. They appear to be inspection ports. [civil plans, pg C3.1]
- ◆ Provide pipe diameter, material, slope. [civil plans, pg C3.1]
- ◆ Provide the sump depth for SDCB 17. Per detail 1/C5.4 this should be a minimum of 24 inches. Additionally this detail references an elevated bypass manifold, is that being installed? Provide the IE information and flow direction. [civil plans, pg C3.1]
- ◆ Is SDCB 1 really a type 1 catch basin with a RIM to IE of 15 plus feet of depth? Type 1 catch basins are typical for depths less than 5 feet from the top of grate to pipe invert. Type 2 catch basins are used for depths greater than 5 feet. [civil plans, pg C3.1]
- ◆ The invert elevation for the upstream catch basin is at a lower elevation. Was this done on purpose? [civil plans, pg C3.1]
- ◆ This information in the storm structure table and on the plan view do not match for EX SDCB 1 pipe flowing east. What is the actual IE for the pipe flowing east? [civil plans, pg C3.1]
- ◆ Provide the pipe diameter, material, and slope for the proposed underdrain [civil plans, pg C3.1]
- ◆ Provide the area in square feet for the proposed bioretention cell. [civil plans, pg C3.1]
- ◆ Rain gardens are not allowed for projects meeting the thresholds of Minimum Requirements 1-9, additionally this doesnt appear to be proposed on the plans, remove this keynote [civil plans, pg C3.1]
- ◆ Where is keynote 2 located on this sheet? [civil plans, pg C3.1]
- ◆ How is stormwater from the parking lot being collected/conveyed to the bioretention? I don't see any collection CB's or curb cuts. [civil plans, pg C3.1]
- ◆ Provide pipe crossing information. [civil plans, pg C3.1]
- ◆ Add proposed curb linetype to the legend. [civil plans, pg C3.1]
- ◆ Is the swale to be removed once the permanent storm system has been installed? If it is to remain, provide flowline spot elevations. Additionally, the swale bypasses the detentions system and would need to be modeled as such for MR 7. [civil plans, pg C3.1]
- ◆ What are these symbols representing? a splash pad for the stormwater prior to discharging to the bioretention cell? Clarify/add to legend for all instances on this sheet [civil plans, pg C3.2]
- ◆ Include in detail 2/C3.5. [Civil Plans, C3.2]
- ◆ Where does footing drain connect to storm? [Civil Plans, C3.2]
- ◆ Reference Footing drain detail. [Civil Plans, C3.2]
- ◆ Provide stationing for the proposed callouts otherwise the information on sheet C3.4 isn't very informative. [civil plans, pg C3.2]



- ◆ SDCB 7 is missing the pipe connection from the south. [civil plans, pg C3.2]
- ◆ For SDCB 4, the depth from the rim to pipe IE is greater than 5 feet, thus this should be a type II catch basin. [civil plans, pg C3.2]
- ◆ Provide pipe slope. Additionally, why is a swale and solid pipe being proposed to convey stormwater? [civil plans, pg C3.2]
- ◆ Rain gardens are not appropriate for this project. A professional must calculate the necessary size of the bioretention systems. Remove this keynote and any associated rain garden references/details. [civil plans, pg C3.2]
- ◆ This pipe system is flowing east. Revise accordingly the west flow direction. [civil plans, pg C3.2]
- ◆ Match proposed topo to existing topo [Civil Plans, C3.3]
- ◆ How is stormwater being mitigated for these replaced surfaces? [civil plans, pg C3.3]
- ◆ Markups added in CV 6.23.22
- ◆ 1
- ◆ 1
- ◆ How is stormwater being collected via surfaces east of SDCB 2? The paving appears to be graded to the north. An additional CB may be warranted in the NE corner of this area to collect all associated stormwater runoff from the proposed hard surfaces. [civil plans, pg C3.5]
- ◆ The hatches shown on sheet C3.2 does not match this View A. Revise accordingly. [civil plans, pg C3.5]
- ◆ What is this dashed line representing? A grade break? Is this collecting stormwater? [civil plans, pg C5.3]
- ◆ The 2.92% slope arrow is pointing in the wrong direction. [civil plans, pg C3.5]
- ◆ add spot elevations at the corners of this section. [Civil Plans, C3.5]
- ◆ This pipe is flowing uphill according to the IE's. [civil plans, pg C3.5]
- ◆ Provide a legend on this sheet. [civil plans pg C3.5]
- ◆ Create a note that the running slope of any walkway must be 5% or less otherwise this is considered a ramp and must meet ADA accessibility guidelines. [civil plans, pg C3.5]
- ◆ Call out all storm conveyance features. [Civil Plans, C3.5]
- ◆ Label pipe material, diameter and slope. [Civil Plans, C3.5]
- ◆ Label diameter, material, slope [Civil Plans, C3.6]
- ◆ Remove random arrow from this sheet. [civil plans, pg C3.6]
- ◆ Label diameter, material, slope. [Civil Plans, C3.6]
- ◆ Add match line. [Civil Plans, C3.6]
- ◆ Indicate what these line are representing. [civil plans, pg C3.6]
- ◆ What are these?
- ◆ Add legend to this sheet. [civil plans, pg C3.6]
- ◆ Revise to reference CS 06.01.02 [civil plans, pg C5.2]
- ◆ Match Rim elevation given in sheet C3.1.[Civil Plans, C5.2]
- ◆ Revise to be CS 06.01.03 [civil plans, pg C5.2]
- ◆ Provide the elevations proposed for Orifices 1,2 and 3. [civil plans, pg C5.2]
- ◆ The site plan and bioretention detail do not match. Are two underdrains proposed? [civil plans, pg C5.3]
- ◆ Amend this detail to show the rock-line swale as shown on sheet C3.2 or amend the plans and detail to provide a 2 inch section of woodchip mulch or aggregate to mimic the 2019 Ecology manual detail. [civil plans pg C5.3]
- ◆ Provide an overflow structure for the bioretention cell. Be sure to provide the IE's. [civil plans, pg C5.3]
- ◆ Typo in elevation. [civil plans, pg C5.3]
- ◆ Why is an underdrain proposed? The Ecology manual states underdrain systems should only be installed when the bioretention is: 1. Located near sensitive infrastructure (e.g., unsealed basements) and potential for flooding is likely. 2. Used for filtering storm flows from gas stations or other pollutant hotspots (requires



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impermeable liner). 3. Located above native soils with infiltration rates that are not adequate to meet maximum pool and system dewater rates, or are below a minimum rate allowed by the local government. 4. In an area that does not provide the minimum depth to a hydraulic restriction layer, e.g., high seasonal ground water. [Civil plans, pg C5.3]

- ◆ What is the proposed slope of the underdrain? The Ecology manual suggests a minimum 0.5% slope unless specified by an Engineer. [civil plans, pg C5.3]
- ◆ Typo [civil plans, pg C5.3]
- ◆ Remove the proposed raingarden detail. [civil plans, pg C5.3]
- ◆ Show/reference the isolator row location on the plan view. [Civil Plans, C4.4]
- ◆ Indicate on the detail that the underdrain will be 6 inches [civil plans, pg C5.5]
- ◆ Provide the WWHM printout to go along with this calculation. [CSWPPP, pg 9]
- ◆ Remove the proposed landscape islands from the Tesc and demo plan [civil plans, pg C2.1]
- ◆ Adjacent inlets still subject to sedimentation from potential track runoff. Protect all inlets in vicinity of work [TESC, C2.1]
- ◆ Removed the proposed curb from this sheet. [civil plans, pg C2.1]
- ◆ Add note to protect all downstream inlets within vicinity not shown on plans. [TESC, C2.1]
- ◆ Provide IE for the baker tank discharge. Provide pipe material, length and slope. [civil plans, pg C2.1]
- ◆ Provide a detail for the proposed baker tank, be sure to include the dimensions. [civil plans, pg C2.1]
- ◆ Include the required volume for storage and proposed volume via each baker tank. [civil plans, pg C2.1]
- ◆ Provide application reference to the Electrical plans, as they were not submitted along with the associated documents. [civil plans, pg C2.1]
- ◆ Existing bollards not shown on this sheet. Update the plans to reflect this keynote. [civil plans, pg C2.1]
- ◆ Provide a detail for the proposed pump and calculation to ensure the pump is sized adequately to address stormwater. [civil plans, pg C2.1]
- ◆ Create a note that the demo and installation of power is not reviewed/approved by the City of Puyallup. [civil plans, C2.1]
- ◆ Proposed power? Remove from this sheet as it is not applicable to the Tesc and Demo plan. [civil plans, pg C2.1]
- ◆ Revise text overlap. [civil plans, pg C2.1]
- ◆ Proposed communications line or to be demolished? The City of Puyallup is not reviewing approving this utility per this civil application. [civil plans, pg C2.2]
- ◆ Remove keynotes that are not applicable to this sheet. [civil plans, pg C2.2]
- ◆ Revise the rain gardens and provide another treatment BMP. [civil plans, pg C2.2]
- ◆ Remove proposed utilities layers from TESC and Demo plan. [TESC, C2.2]
- ◆ add check dams to this swale segment. [TESC, C2.2]
- ◆ Add existing manhole to legend(s). Create a note to preserve this manhole or replace it.
- ◆ Create a note that irrigation lines are being removed. [civil plans, pg C2.3]
- ◆ Make a note to protect the existing sewer and gas utilities when removing the irrigation lines. [civil plans, pg C2.3]
- ◆ Remove keynotes not applicable to this sheet. [civil plans, pg C2.3]
- ◆ Include CS 01.02.08A Soil Amendment and Depth [civil plans, pg C2.4]
- ◆ Replace with COP Standard detail 02.03.02 for siltation fence. [TESC, C2.4]
- ◆ Resolve overlap. [TESC Plans C2.4]
- ◆ Provide specific callouts for details/pages. [civil plans, pg C6.1]
- ◆ Create a note that the city is not reviewing the proposal of the gas line nor is approving the location with approval of this plan set. [civil plans, pg C6.1]
- ◆ Remove PSE Gas Facility excavation requirements. This will be reviewed/approved by PSE, rather than the



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City of Puyallup. [civil plans, pg C6.1]

- ◆ Add proposed thrust blocks to legend per COP STD DTL 03.02.01-1 [civil plans, pg C6.1]
- ◆ Text overlap. [civil plans, pg C6.1]
- ◆ During the next submission ensure this seal is signed and dated otherwise the submittal will be rejected [civil plans, pg C6.1].
- ◆ Provide pipe crossing information. [civil plans, pg C6.2]
- ◆ Provide a 0.1 foot drop through the manholes from inlet invert to outlet invert. per design standard 401.11. [civil plans, pg C6.2]
- ◆ label the sewer manhole numbers on the profile view. [civil plans, pg C6.2]
- ◆ Call out the hydrant to be installed per CS 03.05.01 [civil plans, pg C6.3]
- ◆ label the sewer manhole number on the profile view. [civil plans, pg C6.2]
- ◆ Add these symbols to the legend on sheet C6.1. Further is the water main already existing in this location to the north or will it be extended south then east? [civil plans, C6.4]
- ◆ Revise text overlap. [civil plans, pg C6.4]
- ◆ Provide pipe crossing information. [civil plans, pg C6.4]
- ◆ How is this to be built in the field when the profile view shows a vertical bend? [civil plans, pg C6.4]
- ◆ The domestic water service tee and gate valve is 4 inches whereas the water service line is called out as 3 inches. [civil plans, pg C6.5]
- ◆ What are all these dark gray lines representing? [civil plans, pg C6.5]
- ◆ Provide pipe diameters and length of pipes. [civil plans, pg C6.5]
- ◆ Show pipe crossing info. [civil plans, pg C6.5]
- ◆ Provide pipe crossing information. [civil plans, pg C6.4]

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

- ◆ Access shall meet AASHTO standards for ESD (280ft @ 25mph). AASHTO is the industry standard for roadway/intersection geometric design & best practices. Remove on-street parking spaces as needed to meet sight distance standards. [civil C3.1]
- ◆ Frontage should be designed with pedestrian path/sidewalk. The Pierce College Master Plan speaks to improving pedestrian environment and pathways within the campus & enhance pedestrian connections to Bradley Lake Park. To meet these goals, it seems logical to account for sidewalks & ADA ramps adjacent to the proposed parking lots. [civil C3.1]
- ◆ Provide an AutoTurn analysis for the largest anticipated design vehicle [civil C3.1]
- ◆ Recommend signage/stripping at driveway to identify one-way operation of College Way. [civil C3.1]

Fire Review (Reviewed By: Ray Cockerham, (253)841-5585, RayC@PuyallupWA.gov)

- ◆ Please show fire access within 150 feet of all points. IFC Appendix D (C3.0)
- ◆ Please provide details for signage and demarcation of fire lanes as needed.

Planning Review (Reviewed By: Chris Beale, (253)841-5418, CBeale@PuyallupWA.gov)

- ◆ The arborist report is not specific to the site development plan; the report notes: "Development plans have not been provided to provide an opinion on tree protection specific to each tree". Please have the project arborist re-assess the trees near the new development area and provide a supplement memo and tree protection recommendations.
- ◆ Please provide a archeological site survey, consistent with DAHP and Puyallup Tribe review and consultation.
- ◆



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All parking lot landscape islands required to be 15 feet wide (interior curb). All three interior landscape islands must have Silva cells (or eqv.) along interior under parking stalls only. [Planning comment, sheet C3.1]

- ◆ Provide two walking paths with curbing to provide ped access through the landscape strips [Planning comment, sheet C3.1]
- ◆ Planning cannot locate a proposed landscape plan for this permit. Please review the type IV standards in the city's Vegetation Management Standards (VMS) manual [Planning comment, sheet C3.1]
- ◆ All stormwater facilities shall be landscaped consistent with the SLD-01 landscape standard in the VMS design manual [Planning comment, sheet C3.2]

Public Works Water Review (Reviewed By: Brian Johnson, (253)841-5442, BrianJ@PuyallupWA.gov)

- ◆ Utility and Landscape Plans Sheet C6.4: Add - Removed existing blow-off assembly.
- ◆ Utility and Landscape Plans Sheet C6.4: Do not plant trees within 10-feet of water main.
- ◆ Utility and Landscape Plans Sheet C6.5: Add 2-inch RPBA 3-feet behind meter. Add City Standard detail 03.04.02 to this plan set.
- ◆ Utility and Landscape Plans Sheet C6.5: This could be a double strap saddle with 2-inch gate valve instead.
- ◆ Utility and Landscape Plans Sheet C6.5: Is an irrigation service needed for this area? If so, protect with DCVA and add City Standard detail 03.04.01 to this plan set.
- ◆ Utility and Landscape Plans Sheet C6.5: Do not plant trees within 10-feet of water main.
- ◆ Utility and Landscape Plans Sheet C6.5: Maximum hydrant run allowed is 20-feet.
- ◆ Utility and Landscape Plans Sheet C6.5: Consider adding an 8-inch gate valve to the northeast side of the proposed tee. This would help with control of this private water system.
- ◆ Utility and Landscape Plans Sheet C6.5: Do not plant trees within 10-feet of water main.

To resubmit, you must address all comments and complete the [resubmittal form](#). When you are ready to resubmit, you can do so using the customer portal, by **uploading a "new version" of the submittal requirement**. In addition, you will need to pay your resubmittal fee at the time of resubmittal. Your resubmittal will not be processed until the fee has been paid. Please note, partial resubmittals will be deemed incomplete and returned.

If you need assistance with resubmitting your corrections, please contact the Permit Center.

Sincerely,

City of Puyallup Permit Center

(253) 864-4165 option 1

permitcenter@puyallupwa.gov