



August 31, 2021  
ELECTRONIC RESUBMITTAL

Joseph Berkey, P.E.  
Civil Engineer  
City of Puyallup  
333 South Meridian  
Puyallup, WA 98371

RE: Civil Plans Resubmittal  
Best Parking Lot Cleaning Site Improvements  
Permit Tracking No. E-20-0067  
Our Job No. 20630

Dear Joey:

We have revised the plans and technical documents for the above-referenced project in accordance with your comment letter dated March 16, 2020. Enclosed are the following documents for your review and approval:

1. Revised civil plans
2. Revised landscape plans
3. Reconnaissance Letter by Soundview Consultants
4. Revised Stormwater Site Plan (SSP)
5. Redlined plans with responses to comments

The following outline provides each of your comments in italics exactly as written, along with a narrative response describing how each comment was addressed:

## **GENERAL**

### **Sheet C3 of 8:**

1. *The temporary construction entrance extends into the right of way and is shown over top of the existing paved approach. Is the intent to remove the existing approach at the start of construction?*

**Response:** Yes, the intent is to remove the existing approach at the start of construction to accommodate the proposed entrance. The asphalt demolition will also have to occur to install the proposed pond outlet piping. Demolition Keynote 1 on Sheet C3 has been added for further clarification to satisfy this comment.

2. *Provide a temporary detention Facility that meets the requirements of CoP Engineering standard 501.3.*

**Response:** The permanent detention pond will be installed during the initial phases of construction and will satisfy this requirement. Calculations demonstrating conformance to City Standard 501.3 have been included in the Revised SSP. Please see Exhibit H (Stormwater Pollution Prevention Plan), Appendix H.

**Sheet C5 of 8:**

3. *The existing hydrant meter within the Right of Way adjacent to the west approach needs to be removed as the hydrant is required for use as fire protection. If a fill station is needed for equipment a permanent water connection on site shall be installed with a RPBA. If the permanent connection is to be installed the location shall be shown on plan and all appropriate City of Puyallup standard water detail and notes shall be added to the drawings.*

**Response:** Sheet C6 has been revised to satisfy this comment. Per callout 6, the hydrant meter shall be removed.

4. *The existing perimeter fencing is constructed within the Right of Way. The fence shall be relocated outside of the right of way.*

**Response:** Sheet C6, revised to include callouts 3 and 4, satisfies this comment. The existing fence and gates will be relocated outside of the right-of-way.

5. *Note one calls out to follow geotechnical for the paving to be per the Geotechnical Engineers recommendations. The Geotechnical evaluation that was provided does not provide paving recommendations. The required pavement section shall be included in the permit drawings.*

**Response:** Note one has been revised to satisfy this comment; an asphalt pavement section has been included on detail sheet 10 to conform to the Geotechnical Engineer's recommendations.

6. *The detention pond does not appear to be sized appropriately. Revise the storm pond accordingly.*

**Response:** Based on the redline markup of the plans, this comment appears to be the result of a calculation by the reviewer of the dimensions at the bottom of the pond. Please note that the bottom of the pond is at elevation 57.0. The available storage starts at 57.5 (live storage is 6' from 57.5 to 63.5). WWHM was used to size the pond using the 'Pond' tool. Only rectangular ponds can be modeled using this WWHM tool. The volume at riser head and orifice elevations are the critical elements conveyed from the model to the construction plans. These elements have been verified to satisfy the comment; please see Section 4.4 and Exhibit E of the revised SSP.

7. *The approach to the site shall be upgraded to match the width and radius requirements of the City of Puyallup Std Detail 01.02.16. The sidewalk and curb are not required as the project does not require frontage improvements.*

**Response:** To satisfy this comment, the approaches to the site have been revised to match the Standard's width and radius requirements - please see Sheet C6 of the revised plan set. At the west entry, the intent of the detail has been met, as depicted with the dashed radius and width requirements identified.

**Sheet C6 of 8:**

8. *The Geotechnical evaluation on 1/20/19 observed ground water at 56'. It also states that this should not represent the seasonal high groundwater. There is concern that groundwater may reduce the capacity of the pond. Continues seasonal groundwater monitoring is required to determine the high groundwater elevation.*

**Response:** Continuous seasonal groundwater monitoring was performed through the recent wet season to satisfy this comment. The results from Earth Solutions NW have been included with this

resubmittal in Section 6.0 of the SSP. The pond has been revised to include a pond liner, such that seasonal high groundwater will not impact the storage within the proposed pond. Please reference Sheet C8 for sections depicting the pond and liner.

9. *Minimum cover for privately owned CPEP is 3' per the City of Puyallup Engineering standards. Revised the pipe type to DI or revise the pipe elevations to meet the minimum 3' cover.*

**Response:** The pipe type has been updated to DI where cover is less than 3' to satisfy this comment. Please see the revised plans, Sheet C7.

**Sheet C8 of 8:**

10. *Add detail City of Puyallup Det. 01.01.20.*

**Response:** City Standard 01.01.20 has been added to sheet C10 of the revised plan set to satisfy this comment.

11. *The control structure shall conform to CoP Std Det. 02.01.07.*
- *City standard requires a removeable gasketed end plug in lieu of the shear gate.*
  - *A cleanout to grade shall be installed above the riser.*
  - *The riser shall be constructed of PVC.*

**Response:** City Standard 02.01.07 has been included (with notes/elevations added) on sheet C9 to satisfy this comment.

12. *The invert elevation on the elbow shall be 62.25' per the calculation in the SSP. Make the appropriate revisions.*

**Response:** The invert elevation callout has been revised to 62.25 to match the design and to satisfy this comment.

**L1 of 7:**

13. *Add Final landscape plan approval block to all L sheets per CoP Eng Std 1.4.*

**Response:** The Approval Block has been added to all L sheets to satisfy this comment.

14. *Add notes that all disturbed areas are required to have soil amendment per BMP T5.13.*

**Response:** Notes requiring soils amendment per BMP T5.13 have been added to the plans, see sheet L1 and L4. A soil amendment detail has also been added to sheet L4.

**SEWER**

- *No comments.*

**WATER**

**Sheet L4 of 7:**

15. *The irrigation point of connection points to a water service that was abandoned on 10/30/2017. The meter box has recently been removed. A new irrigation water service will have to be installed. Install a 3/4-inch service with a 5/8-inch meter or a 1-inch service per City Standard detail 03.03.01. Include*

*this standard detail on the plan set. The DCVA should be placed 3-feet behind the new water meter on private property, and the DCVA should be sized the same as the water service. The Check Valve Assembly Detail on Sheet L6 of 7 should be removed and replaced with City Standard detail 03.04.01 2" and smaller Double Check Valve Assembly installation. No trees are allowed within 10-feet of water service and DCVA.*

**Response:** The location for new 3/4-inch service with a 5/8-inch meter is shown on sheet L5. Details 03.03.01 and 03.04.01 have been added to sheet L6. No trees are placed within 10 ft of the DCVA and water service.

#### **FIRE**

- *No fire related comments at this time*

#### **TRAFFIC**

- *No Traffic related comments at this time*

#### **PLANNING**

16. *A small wetland may be present near the proposed storm pond area. Please submit a recon report from a qualified wetland biologist.*

**Response:** A recon report from Soundview Consultants has been included with the resubmittal package. No potentially regulated wetlands, streams, or other fish and wildlife habitat areas were identified on or within 300 feet of the subject property.

17. *An inadvertent discovery plan (IDP) will be required for the project. The contractor will need to fill the IDP out at the time of the pre-con. The Puyallup Tribe and WA DAHP has asked for cultural resource reports in this area recently.*

**Response:** An IDP will be filled out, as necessary at the time of the pre-con.

18. *Please ensure all utilities are protected from new landscaping by appropriately spacing from all utilities and root barriers at the back of walk.*

**Response:** Trees have been set back from utilities and driveways per the city requirements. Tree spacing is between 25 ft and 30 ft on center. Trees located near or under power lines are 25 ft or less mature height. No planting is blocking visibility of street signage per requirement below.

Criteria	Class I (Overhead Utility Street Trees)
Minimum planter strip width	3.5'* - 4' <i>*limited species may be planted in 3.5' strips</i>
On-center spacing standards	20 - 25 ft
Plant under overhead utility lines?	Yes
Planting distance from buildings	7.5'
Distance from utility poles	10'
Distance from fire hydrants	5'
Distance from driveway (measured from the outer edge of driveway paving)	7.5'
Distance from stop light signal poles	15'
Distance from underground water, sanitary sewer or storm sewer lines	7.5'
Distance from underground gas, power or other conduit	3'
Minimum distance from intersection (as measured from the face of curb line corner at intersection) (See photo below)	30 ft
Minimum distances from street signs (excluding parking signs)	30' from leading side, 10' from trailing side

19. *When designing the final landscape plan, please design to the following:*
- *PMC 20.58 outlines landscaping requirements. The city has a companion design manual – the Vegetation Management Standards (VMS) manual – found here: (cityofpuyallup.org □ Planning Services □ Current Planning (tab) - Vegetation Management Standards (PDF link) VMS: <https://www.cityofpuyallup.org/DocumentCenter/View/1133/Vegetation-Management-Standards-?bidId=> Appendices: <https://www.cityofpuyallup.org/DocumentCenter/View/6054/VMS-Appendices-Complete-Documents-?bidId=>*

**Response:** The landscape design now conforms to the standards referenced.

### **General Landscaping Standards**

20. *Top soil on private property shall be installed per the standards of the VMS, section 8.2A, 8" depth of compost amended soil to meet the standards.*

**Response:** Notes have been added requiring topsoil to be installed per standards defined in the VMS, section 8.2A. Topsoil is to be installed except as noted within the storm drainage facility.

21. *Please estimate the total topsoil required to meet the standard in cubic yards. The contractor will be required to submit delivery sheets and demonstrate compliance with topsoil required and spec'd on plans at the time of final inspection.*

**Response:** The topsoil volume estimate is now shown on sheet L2. This volume excludes some areas within the storm drainage facility as noted.

22. *All planting areas shall be mulched with a uniform four (4") inch layer of organic compost mulch material or wood chips over a properly cleaned, amended and graded subsurface.*

**Response:** Notes have been added requiring 4" minimum depth of organic composts mulch and wood chips on properly cleaned, amended and graded subsurface – except as noted within the storm drainage facility

23. *All shrubs required shall be no smaller than two (2) gallon in size at the time of planting.*

**Response:** All shrubs are specified as 2-gallon size.

24. *Storm water facilities shall be landscaped in accordance with SLD-02, contained in the VMS.*

**Response:** Storm water facility is landscaped per SLD-02 in the VMS so far as we know. Please let us know if we missed anything.

25. *Sight Distance standards. Adjacent to public rights-of-way and points of access, no fences or landscape material at maturity, shall exceed three (3) feet above the local finish grade within a clear sight triangle. Please provide analysis to ensure spacing is met at driveways. Please show the sight distance area on the plans.*

**Response:** The sight distance area is shown on the revised plan set, Sheet C10 with information placed on the landscape drawings (L2), as necessary to satisfy this comment.

26. *Root barriers, in accordance with city standards, are required for all street trees. A minimum of 8' of linear protection along the edge of the sidewalk adjacent to the street tree shall be provided, using a minimum 24" deep root barrier panels. See city standards #01.02.07 and #01.02.03 for further details.*

**Response:** Notes have been added requiring the 24" depth root barrier if trees are within 7 ft of the curb or edge of pavement. The two city details have been added to L4.

27. *Street tree soil requirements. See section 8.2 of the VMS. Copy and paste the applicable section for street tree topsoil and place on plans as requirement to meet the city standards.*

**Response:** These notes are included in the soil amendment detail on L4.

### **Parking Lot Landscaping**

28. *The project needs to provide landscaping islands to meet the minimum 2,248 square feet standard internal to the paved areas. Perimeter areas do not count toward this requirement. We can work with the owner on the location of the islands since the paved area is not a well-defined parking lot.*

**Response:** One large island is included within the parking lot. It has 2,274 SF landscaped area.

29. *No more than eight (8) parking spaces shall be placed consecutively without a landscaping island.*

**Response:** One large island is included within this industrial lot with the intent of satisfying the City's Island requirement, typically applied to business/commercial parking areas. It has 2,274 SF landscaped area.

30. *All perimeter landscape islands (defined as islands which project into parking lots from an area connected to a perimeter landscape yard) shall be a minimum of 12' wide with a minimum area of 200 sq ft of area.*

**Response:** One large island is included within this industrial lot with the intent of satisfying the City's requirement. It is more than 12' wide and has 2,274 SF landscaped area.

31. *All internal landscape islands (landscape islands entirely surrounded by paving) shall be a minimum of 15' in width with a minimum area of 500 sq ft.*

**Response:** The internal island measured 15 ft wide at the narrowest end, and is greater than 500 sf area

32. *'Head-to-head' parking stalls and internal landscape islands shall be separated by a 'connector landscaping strip' a minimum of 6' in width.*

**Response:** One large island is included within this industrial lot with the intent of satisfying the City's Island requirement, typically applied to business/commercial parking areas. It is more than the minimum 6' width.

33. *All internal landscape islands and connector strips shall include a single row of structural soil cells (EX. Silva cells, or equivalent) along the perimeter of all internal parking lot landscape islands where parking spaces are proposed (under the pavement directly abutting the outer edge of the landscape island, except in drive lanes)*

**Response:** A single row of structural soil cells have been added around the internal parking lot island except at drive lanes.

34. *All 'head-to-head' parking stalls internal to a parking lot shall have internal island 'end caps' to separate the parking stalls from abutting drive aisles. These 'end cap' islands shall follow the requirements for internal islands (size, dimensions, required landscaping, etc.).*

**Response:** One large island is included within this industrial lot with the intent of satisfying this City standard. The internal island has been proposed to satisfy the size and dimension standards, as outlined in previous responses.

### **PW STORM**

35. *There is a storm pipe connection (90 or TEE) missing from the plans that will impact the discharge point from the proposed project. The exact location of the connection is not specifically known, but its existence is assumed based on observed flows between catch basins. This connection will need to be eliminated with the installation of a CB that will be the new discharge point for this proposed project. The redlines will give clearer specifics of what will need to be done. The type of CB and lid configuration (round solid or grated rectangle) will need to be determined.*

**Response:** Sheet C7 has been updated per the redlined comment and to satisfy this written comment. The revised plan includes a new Type 1 catch basin with solid lid – 'CB#6'.

36. *No spillway or outlet details exist of page 4 as stated.*

**Response:** Sheet C7 has been updated per the redlined comment and to satisfy this written comment. The revised plans include the required details on Sheet C9.

### **Stormwater Site Plan**

37. *The geotechnical report states that infiltration is not recommended without any quantifiable testing to confirm this. While soils with higher fines content generally have lower infiltration rates there are BMPs that are able to function properly. I.e permeable pavement. Feasibility/infeasibility testing for infiltration facilities shall be in accordance with the site analysis requirements of the Ecology Manual, Volume I, Chapter 3, specifically:*

- *Groundwater evaluation, continuous monitoring well (MR1-9) during the wet weather months (December 21 through April 1). The geotechnical report states that the groundwater evaluation does not represent the seasonal high groundwater elevation.*
- *Hydraulic conductivity testing:  
The development meets the threshold to require implementation of Minimum Requirement #7 (flow control) therefore Small Scale Pilot Infiltration Tests (PIT) during the wet weather months (December 21 through April 1) is required per city standard to determine on site soil infiltration rates.*

**Response:** The geotechnical engineer's report, included in the revised SSP, Section 6.0, has been updated to satisfy this comment. The geotechnical report includes wet season monitoring sufficient to satisfy this comment; infiltration is not feasible or proposed due to the high groundwater elevation and soil type.



Joseph Berkey, P.E.  
Civil Engineer  
City of Puyallup

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August 31, 2021

We believe that the above responses, together with the enclosed revised plans and technical documents, address all of the comments in your letter dated March 16, 2020. Please review and approve the enclosed at your earliest convenience. If you have questions or need additional information, please contact me at this office. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Hubbell", with a stylized flourish at the end.

Jason Hubbell, P.E.  
Senior Project Engineer

JH/ca  
20630c.004.docx  
enc: As Noted  
cc: Rich Hamilton, BPLC Properties LLC