December 31, 2019

Edward Rose & Sons
C/O Mark Perkoski
Email: Mark_Perkoski@edwardrose.com

Subject: Oslo Bay Apartments Technically Incomplete; Request for Revisions; P-12-05-19-01

Dear Mr. Perkoski,

The City of Poulsbo has completed a preliminary technical review of the Oslo Bay Apartments, located north or SR 305 and the Bond Road intersection, which was determined Counter Complete on December 5, 2019.

The City wishes to acknowledge the work accomplished to date on this project, including three pre-application conferences (10/4/2016, 2/6/2018 and 6/18/2019), as well as numerous meetings and phone conferences/calls with your consultant teams. These have resulted in a downscaled project that avoids wetland impacts, provided attractive architectural building design, minimizes traffic conflicts on Bond Road, and offers a new connection to Viking Avenue.

Additionally, Edward Rose completed rescinding the master plan, development agreement, and has submitted a request for a rezone for some of the commercial area this year. Combined, this work signifies significant effort by Edward Rose to move forward in reaching a development proposal that meets your needs and the development requirements of the City.

This work resulted in a new Site Plan Review application for the Oslo Bay Apartments, submitted early December. The submitted application was reviewed by the City’s technical review team and consultants. At this time, the technical review results in a Technically Incomplete determination, and is on hold as of December 31, 2019. The attached memos outline the items required to technically complete the application, in addition to preliminary review comments that must be addressed upon resubmittal.

Please include a Revision Submittal Form and Response Matrix with your resubmittal package which addresses all comments, including those from Planning, Fire, Engineering, and the initial TIA peer review from Parametrix.

The City continues to look forward to working with you and your consultants on the remaining technical elements of your project. Feel free to contact me at (360) 394-9737 or mpowers@cityofpoulsbo.com with any questions or comments you may have.

Sincerely,

Marla Powers
Associate Planner

Attached: Revision Submittal Form and Matrix
Planning and Economic Development Revision Memo
Engineering Revision Memo
Engineering-TESC Checklist
Engineering-TESC Template
Parametrix Memo
Poulsbo Fire Revision Memo

cc: Berni Kenworthy
MEMO

To: Edward Rose & Sons Attn: Mark Perkoski
From: Marla Powers, Associate Planner
Subject: Oslo Bay Apartment Site Plan Review Planning File#: P-12-05-19-01
Technically Incomplete-Revisions Requested-On Hold
Date: December 31, 2019

The Planning & Economic Development Department has completed an initial review of the Site Plan materials submitted for the Oslo Bay Apartment proposal and provides the following request for revisions. Please note that this initial review anticipates a significant resubmittal package. Therefore, the subsequent review will likely identify additional required revisions. In addition, the city has requested peer review comments regarding critical areas and stormwater. The city is also expected to receive comments from WSDOT. These comments will be provided as a package and are anticipated the 3rd week of January. Comments generally follow the SEPA Checklist subject order and the page numbers are included for reference:

General Comments:
1) References to the right of way, as part of the site proposal, must be removed. Please revise Figure 1, Page 3 of the narrative to exclude the city right of way. This image suggests a different site area than that of the parcels themselves. This confuses the site area for both the Oslo Bay Apartment parcels and the off-site parcels. Revise all tables and references that include city right of way as part of the site. The city right of way is not to be included in tree retention, landscaping, or other requirements that must be met by the proposal.

2) The Site Plan Review application is for the Oslo Bay Apartments and the Boundary Line Adjustment modifies the property lines. This combination provides clarity as to which site is the Oslo Bay Apartments, and which parcels will be reviewed with future land use permits including the Senior Care Center and the parcels along proposed Road L. This review is specifically for the Oslo Bay Apartments. This means that there is no land use permit for any activity for the other sites and that these sites are not to be used for development purposes. Note: Tree Cutting and Clearing permits are required per PMC 15.35 for parcels that do not have land use permit approval.

SEPA Checklist:
3) Page 3 and page 9 relate to grading. The description states, “that the Oslo Bay Apartments project will provide sewer and water stubs to this area. In addition, grading will daylight into this area.” Please provide additional information. It is not clear what is being proposed for the senior center. As a separate parcel the senior center proposal is not under review with this land use permit and as such, any work on the site is not authorized with this Site Plan Review. Describe further the extent of the grading that will daylight into this separate site or how the applicant sees this working for the proposal.
4) Page 9 comment relates to stripping, stockpiling, and this soil to be used for landscape soil amendment. Please provide more details on the stockpiling, location, height, duration, etc. Confirm through the Landscape Architect or other professional that the stripping will be compatible for the soil amendment proposed.

5) Page 9 relates to the percent of the site that will be covered with impervious surfaces. The project site area is 55.66 acres, accurately excluding city right of way. Exclusion of the city right of way and exclusion of the Senior Center may alter the percentage and area provided in this response.

6) Page 9 item h states that a draft Temporary Erosion and Sedimentation Control Plan was submitted, Civil Sheets 11-17 are included that provide minimal provisions for TESC measures. A temporary TESC Plan has not been included in permit packet. Please provide this plan with revisions.

7) Page 11 item 2.c it is not clear if the response is complete. Perhaps measures from the TESC could be included.

8) Page 11 item 3 The city is waiting for the peer review from Grette Associates to provide detailed responses to the Critical Area Ordinance review of the application packet. This is anticipated to be the 3rd week of January.

9) Page 11 item 3.a.1. This describes the wetlands as a Category IV sloping wetland system and Civil Sheet #1 shows the wetlands as Category III. Revise accordingly.

10) Page 13 item c.1 This section discusses the stormwater detention wetponds and Contech Stormfilter with Metal Rx media. The City’s peer review for Stormwater will address the anticipated issues with this approach in the City of Poulsbo.

11) Page 14 item 2.c.3 This section discusses the hydroperiod analysis. The peer review for Critical Areas Ordinance will provide response to this requirement. It is noted that the hydroperiod analysis by Clear Creek Solutions cites Category III wetlands, which seems inconsistent with other reports stating the on-site wetlands are a Category IV. Ensure consistency between all documents.

12) Similar comments for item 2.d related to proposed measures to reduce or control surface, ground, and runoff water impacts. Comments will be provided by peer review consultants.

13) Page 14 related to water. The Oslo Bay Apartments and Off-Site Parcels are shown to be in the Critical Aquifer Recharge Area of Concern (CARA). This area includes private and public wells. The applicant has not provided any information related to location of wells or the wellhead protection area that is associated with each well. A report or statement from a qualified professional is to be included that addresses the CARA requirements. In addition, provide a map and narrative describing the wells, wellhead protection area, and how this proposal is or is not affecting the use of water to those wells. Propose mitigation or protection if the proposal will affect the use of the wells.

14) Page 15 item 4.a. The plant list can be expanded based on the Wetland Delineation Plan Report on page 2.

15) Page 15 item 4.b relates to the amount of vegetation that will be removed. The numbers provided seem inconsistent with the information provided on Page 3 of the SEPA Checklist under the description of the project. It is unclear what area is being described or what area will be protected from vegetation removal during project construction.
16) Page 15 item 4.d relates to the proposed landscaping, use of native plans, or other measures to preserve or enhance vegetation on site. The applicant states that “significant replanting of trees throughout the site” will be completed with the project. Please quantify this intent.

   a. Describe how existing vegetation, including significant trees, outside the project clearing limits and within critical areas/buffers will be retained. Provide BMP for protection and retention for trees and existing vegetation retention.

   b. The site must meet the PMC 18.180 for tree retention. This requires that 25% of significant trees (10” DBH (diameter at breast height)) be retained. A tree retention plan was not included as part of the application packet. The Significant Tree Inventory Report is provided and will be peer reviewed with the Tree Retention Plan when it is provided. Provide a Tree Retention Plan that is consistent with the Significant Tree Inventory Report, uses BMP for protection and retention, and excludes areas outside of the parcels that are under Site Plan Review.

   c. Provide the calculation for the required 20% landscaping. According to PMC 18.70.060.D.1.b critical areas may count toward no more than 40% of the 20% of the landscaping requirement. These areas are to only include the site area for this Site Plan Review proposal.

17) Page 17 related to buffer reduction. Identify the minimum buffer reduction necessary to address project needs in a way that does not affect the critical area. A broad request for the maximum buffer reduction does not meet this requirement and is unnecessary for much of the critical area buffer.

18) Page 23 item 11 light and glare. Please provide more details in the Lighting System Plan that was included as part of the application packet. The design of the lights and types of lighting are unknown. In addition, the plan seems to show 0 lighting on the City right of way and other areas that seems inconsistent with requirements.

19) Page 23 item 12.c please provide more details on the amenities provided for the residents. These are detailed further in the Landscape Plan, which would be helpful to reference. However, the Landscape Plan or other documents are needed to specify the area to be used for these amenities. Landscape Plan Sheets 100, 101, and 102 provide location, name, and generic pictures of these amenities. In previous discussions with the applicant, it was stated that larger amenities would be preferred over a number of small amenities. It seems the approach has not changed in this regard. Please provide the requested additional information and the city will determine if this criterion is met.

20) Page 25 item 14 transportation. The city peer review consultant Parametrix has provided initial comments that are included as part of the response packet. Please see attachment.

21) Page 25 item 14.a relates to public streets. The applicant can reference public access with site plan sheets. This would clarify and communicate more clearly what the applicant is describing.

The review of the SEPA Checklist does not indicate that a thorough integrated environmental review document has been provided, such that all environmental impacts are identified and mitigations for those impacts are provided in a meaningful way. The integrated environmental review was discussed many times with the applicant as a crucial component of the application packet. The result of the integrated environmental document would be that an Environmental Impact Statement would not be required because all environmental impacts had been identified and properly mitigated. At this point, it is not possible to make an environmental determination.
Critical Area Ordinance PMC 16.20:

Peer review by Grette Associates is anticipated in the 3rd week of January of 2020 and will provide comments related to critical areas. High level comments are provided by staff:

22) Any new development on a parcel or parcels containing a regulated wetland or its buffer, or within three hundred feet of a wetland or its buffer, shall provide the specialists reports, according to PMC 16.20.220. The Wetland Mitigation Plan identifies three wetlands: A, B, and C. Wetland C is not shown on any other document or plan set. Include all wetlands within three hundred feet of the site.

23) The site and off-site parcels are identified as being in an area with a critical recharging effect on aquifers used for portable water. No map or narrative seem to have been provided with the application packet to identify and discuss this particular critical area. Please see PMC 16.20.500 for requirements.

24) The unnamed stream shows that it goes north and possibly through the off-site parcels to the north in many of the environmental reports provided in the application packet. Identify the stream area location and any other critical areas that must be addressed on the off-site parcels. This is relevant for the road construction anticipated as Road L and also for any building or development limitations for the proposed parcels through the BLA.

Wetland Delineation Report:

25) Page 5 of the report states that the PMC has not been updated to reflect the new rating scores, however, the city has adopted the required update to the Critical Areas Ordinance in 2017 and the new rating scores are included in the PMC. This reflects the age of the report, originally written July 19, 2016. Although it has a revised date of August 21, 2019, it is unclear how much of the report has been brought up to date.

Habitat Management Plan:

26) Buffer reduction should reflect the minimum necessary for the proposal. This proposal seeks the maximum reduction possible. Describe why the full buffer reduction is necessary. Would buffer averaging better serve this proposal?

27) Some of the buffer area is outside of the parcel ownership. Identify how mitigation is to occur in this area.

28) Provide fence, signage details, and locations.

More review comments will be provided with the anticipated peer review comments via consultants in January. Once a full application resubmittal packet is received additional review comments will be provided.
December 31, 2019

To: Edward Rose Millennial Development
From: Michael Bateman, PE, Development Review Engineer
RE: Oslo Bay Apartments, Initial comments on submittal #1, December 5, 2019; P-05-15-19-01

The Engineering Department has completed an initial review of the Site Plan materials submitted for the project known as Oslo Bay Apartments and finds the submittal not technically complete. The following items are missing from the submittal:

1. No grading plan drawings were submitted as required per Engineering preapplication comment #13 and PMC 18.270.040.
   “13. Applicant will be required to submit a Grading Plan with Site Plan Application. This plan should discuss the areas to be graded and when. This plan should follow all recommendations of the geotechnical report to be prepared for this project.”
   PMC 18.270.040(D)(3)(j) - “Proposed topography at two-foot contour intervals for grades zero to ten percent and at five-foot contour intervals for grades more than ten percent.”

2. Grading plan consistent with Engineering preapplication comment #13 not submitted.
   “13. Applicant will be required to submit a Grading Plan with Site Plan Application. This plan should discuss the areas to be graded and when. This plan should follow all recommendations of the geotechnical report to be prepared for this project.”

3. TESC Plan not submitted. Sample TESC Plan template and TESC Plan review checklist attached.

4. NPDES Permit Appendix 7 worksheet not submitted per Engineering preapplication comment #16.

5. Site plan drawings do not comply with Engineering preapplication comment #67 nor PMC 18.270.040.
   “67. The preliminary site plans shall show topography, a conceptual utility plan for water, sanitary sewer, and storm sewer (including detention systems and treatment facilities, IE and RIM elevations for all Storm/Sewer structures), existing easements, structures, wells, and drainfields (including all structures, existing wells, sanitary sewer systems, septic tanks and drainfields within 100’ of project boundaries). Plans shall include cross sections for all street categories proposed. Street layout shall show parking lane preliminary concepts. Preliminary road profiles, showing existing grade and proposed finished grade shall be provided. Contours shall be provided extending 50’ beyond project boundaries and including the full width of adjacent ROW.”

PMC 18.270.040 – Submittal Requirements – “All applications shall be accompanied with complete site plans drawn to one inch to forty feet scale and produced in such a way as to clearly indicate compliance with all applicable requirements; provided, that for minor site plan review, the planning director may not require all of the following site plan review submittal requirements:”
The Engineering Department offers the following initial comments on the site plan submittal materials provided. Additional comments will be provided with peer review of Stormwater Drainage Report and Traffic Impact Analysis. More detailed technical review comments on materials submitted will be provided upon receipt of completed and/or revised submittal materials.

TIA submitted:

6. No discussion of intersection configuration design or safety at newly created western intersection with Viking Ave. Intersection proposed on site plan drawings is offset with major driveway serving Sonic and Arco. TIA indicates that the intersection will be constructed opposite the existing driveway. Safe pedestrian crossing at this intersection not discussed. Intersection control not analyzed nor discussed. This intersection may warrant additional control such as mini roundabout. Closely spaced offset is not consistent with AASHTO design guidelines.

7. No discussion or analysis of how project complies with City Concurrency ordinance. No discussion or analysis of how project complies with City Complete Streets ordinance. No discussion or analysis of how project is consistent with City Comprehensive plans.

8. Stacking/queuing distances and storage needs are not addressed in general, nor are they addressed for specific known deficiencies such as SR305/SR307, SR305/Viking and SR305 mainline. Stacking/queuing needs at the Viking/SR305 intersection for the proposed new road L intersection not addressed, nor is the existing stacking/queuing available in the distance from SR305 to that intersection.


10. No impact fee credit is available as suggested in TIA. Vetter Road Extension appears as Project N-3 in Table CFP-6. Reference Traffic Impact Fee Technical Document, March 2019, Page 6:

IV. Update of Impact Fee Calculation

A. Transportation Capital Improvement Project Costs.

The Comprehensive Plan’s Capital Facilities Plan Transportation section identifies a number of projects necessary to ensure the continuation of the City’s adopted level of service during the 2036 anticipated population growth. These projects were based on the 2016 Transportation Plan Update, with some projects removed that had been completed. The comprehensive plan identifies four types of facility improvements:

- Table CFP-5 “2036 Required Transportation Improvement Projects”
- Table CFP-6 “2036 Required New Roadway Segments”
- Table CFP-7 “2036 Required Intersection Improvement Projects”
Table CFP-8  “2036 Segments and Intersections for Transportation Demand Management”

All four tables identify transportation improvement projects that are growth-related improvements. However, the 2036 required new roadway segments identified in Table CFP-6, are necessary due to new residential development in the underdeveloped areas of the City, and therefore would be completed under the requirements of development regulations and frontage improvements, and not impact fees (with the exception of New Road X- Noll Road Extension). Therefore, Tables CFP-5, 7 and 8 and New Road X – Noll Road are the capital improvements qualified to use transportation impact fee as a funding source.

11. TIA only provides existing accident history. No analysis of project’s expected impact to safety and existing accident history.
12. TIA does not analyze or discuss mitigation to ensure project does not further degrade existing level of service deficiencies as required for both City streets and State routes, nor does it discuss any mitigation to ensure safety on City streets nor State routes.
13. TIA does not analyze or discuss individual leg deficiencies vs overall intersection average LOS prior to showing overall average LOS results. Depending upon extent of individual leg deficiency, this may not be appropriate to fully assess impacts of this development.
14. WSDOT PFA referred to for SR305/Vetter intersection was associated with a previous application. New project application will require new analysis of design requirements by WSDOT under current regulations and current traffic conditions. Additional frontage improvements may be required. Additional restrictions may be required.
15. Mitigation table 14 referenced on Page 22 not provided.
16. Construction traffic volume not predicted or modeled.
17. Initial peer review comments from Parametrix attached. Comments from WSDOT will be provided upon completion of agency review by WSDOT.

Stormwater drainage report submitted:

18. Wetponds proposed – not allowed by City Construction Standards Section 5(B)(11).
19. Cartridge system is proposed for publicly owned stormwater facilities – not allowed by City Construction Standards Section 5(B)(5).
20. Stormwater report and plan does not appear to address treatment and detention of new impervious surfaces in SR305 right of way.
21. BGE materials submitted dated 2011. Please submit current materials. Aged materials may be submitted as supplement to current materials, but should not be submitted on their own.
22. Many pond structures appear to be unserviceable – not evident from drawings provided.
23. Pond berms do not appear to meet stormwater manual requirements.
24. Pond depths do not appear to meet manual requirements.
25. Drainage report does not have required text per preapplication comment #22 on stamping/cover page.
26. Additional comments will be provided upon completion of peer review by Parametrix.

General comment:

27. Sight distance analysis and certification not provided as required per Engineering preapplication comment #46

Drawings submitted:

28. No grading plan drawings submitted.
29. WSDOT PFA drawing submitted was associated with Rose Master Plan submittal, not this application. Additionally, no City concurrence on PFA submitted. New review of design proposal by WSDOT required. New project application will require new analysis of design requirements by WSDOT under current regulations and current traffic conditions. Additional frontage improvements may be required.
30. Retaining wall heights and proposed construction method not shown on any drawing. Proposed retaining wall construction method required to assess any potential conflicts with retaining wall stabilization materials (such as geogrid extending into right of way or neighboring properties). Retaining wall heights required to assess requirements.
31. Site plan drawings do not show existing structures, wells, septic tanks and drainfields within 100’ of project per Engineering preapplication comment #67.
32. No logical termini for pedestrian improvements proposed. No compliant connection to existing pedestrian network proposed. No compliant pedestrian connection to neighboring transit facility proposed.
33. Requested change to 10’ shared use path one side would require processing deviation to construction standards. This deviation has not been discussed with Engineering previously. This will require application to the City Engineer for a deviation, with sufficient documentation to show how the
request meets the deviation decision criteria in City Construction Standards Section 1(C).

34. No frontage improvements proposed.
35. Drawings do not show proposed roadway ownership. Vetter Road and New Road L shall be dedicated to the City. Remaining roads will remain under private ownership.
36. Drawings do not show abutting property approximate locations of structures and uses within 50’ of perimeter as required by PMC 18.270.040(D)(2).
37. Proposed water line easements to City not shown on any drawing as required by PMC 18.270.040(D)(3)(a).
38. Lighting plan submitted does not show lighting on new road L nor intersection proposed at Viking Ave. It appears no lighting will be installed on Vetter Road proposed to be constructed – this is a requirement. No analysis is provided of lighting requirements and lighting provided on roadways, intersections or pedestrian facilities.
39. Water lines are not shown as required per looping analysis findings provided by Gray and Osborne 11/19/19.
40. Sanitary Sewer not provided in New Road L. City construction standards require new roadways to include all utilities. Utility stubs shall be provided to adjoining properties for future development.
41. Community Center access shown as utilizing property that will not be associated with the community center. Grading on that property not shown or included in the submittal. Proposed method of allowing access (such as easement/maintenance agreement) not provided for review.
42. Narrative discusses grading on commercial property to be developed further as senior care center. All grading associated with this proposal shall be shown on the site plan and grading plan drawings and included in site grading calculations.
43. Survey information not provided. Vertical datum information not provided.
44. SR305 mainline alignment and intersection with Viking Ave not shown correctly – typical throughout drawing set. Please show right of way, mainline alignment, intersection alignment, pavement edges and intersection configuration correctly. Lane configuration and striping shall be shown on Viking Ave from SR305 intersection to beyond new road L intersection at a minimum.
45. General comment on drawings submitted – drawings do not comply with PMC 18.270.040 and Engineering Department requirement to be drawn at 40 scale. Drawings do not have consistent orientation between sets, and most
are missing match lines and an orientation map to show location of drawing relative to others.

46. Existing conditions drawings – no overall drawing. Individual sheets do not have match lines to adjoining drawings nor any other method of determining orientation to overall site such as orientation map. See provided landscape drawings for example. Individual sheets drawn at 30 scale vs 40 scale required. No basis of vertical datum shown.

47. TESC drawings – no overall drawing. Individual sheets do not have match lines to adjoining drawings nor any other method of determining orientation to overall site such as orientation map. See provided landscape drawings for example. Individual sheets drawn at 30 scale vs 40 scale required. No basis of vertical datum shown.

48. Site plan drawings – no overall drawing. Individual sheets do not have match lines to adjoining drawings nor any other method of determining orientation to overall site. Individual sheets drawn at 30 scale vs 40 scale required. No basis of vertical datum shown. Individual drawings orientation to North not consistent. No grades shown (existing or proposed) as required per PMC 18.270.040(D)(3)(j). No structures on adjacent properties shown as required per PMC 18.270.040(D)(2). Site plan drawings do not show topography as required by Engineering preapplication comment #67. Active or passive recreation or open space areas not shown as required by PMC 18.270.040(D)(d).

49. Overall storm drawing does not show basins. Only partial grades shown.

50. Individual storm drawings consist of road profiles and pond drawings only, drawn at 20 scale vs 40 scale required.

BLA Submitted

51. BLA cannot be reviewed as submitted until roadway alignment, intersection configuration and right of way requirements are confirmed for all created roadways and intersections.

52. Water lines not shown per City looping requirements analysis findings provided by Gray and Osborne 11/19/19.

53. Sanitary Sewer not shown in New Road L.

54. New Road L intersection with Viking Ave not compliant per previous comments.

55. WSDOT PFA for new Vetter intersection with SR305 not reviewed/approved by WSDOT nor concurred with by City – WSDOT and/or City requirements
for roadway and/or nonmotorized improvements may alter right of way dedication required.

56. SR305 mainline intersection with Viking Ave not shown correctly per previous comment #43.

57. BLA appears to show Vetter Right of Way vacation via fair market value purchase. City has not approved this, nor concurred with this proposed action at this time.
TESC Plan Review Checklist

A complete TESC plan must include a narrative section and plan sheets. WSDOT uses TESC plans and Spill Prevention, Control, and Countermeasures (SPCC) plans to meet the stormwater pollution prevention planning (SWPPP) requirements of the NPDES Construction Stormwater General Permit (CSWGP) issued by the Department of Ecology (Ecology). This checklist is intended to help TESC plan designers ensure TESC plans are complete and meet the CSWGP planning requirements.

A TESC plan must be prepared in accordance with WSDOT’s *Temporary Erosion and Sediment Control (TESC) Manual M3109*. Some items required to be in a TESC plan may not be known during the design phase and must be added to the TESC plan or site log book after the pre-construction meeting, following CSWGP transfer, or as needed during construction. These items may include:

- The Certified Erosion Sediment Control Lead (CESCL).
- Locations of the permitted outfall locations and discharge sample locations.
- Staging area location(s).

Project Title: ____________________________________________________________

________________________________________________________________________

Checklist Complete By: ____________________________________________________

Date: __________ Project Engineer: __________________________________________

### TESC Narrative: Project Description and Existing Site Conditions

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<tr>
<th>Checklist Items</th>
<th>Yes</th>
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<td>Will the NPDES Construction Stormwater General Permit be transferred to the contractor?</td>
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<td>Is the <em>project information</em> complete and accurate for TESC planning purposes (acres of soil disturbance, information about site contamination and impaired waterbodies)?</td>
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<td>Is a <em>general construction schedule</em> outlined for TESC planning purposes (help understand seasonal risks)?</td>
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<td>Checklist Items</td>
<td>Yes</td>
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<td>Have risks associated with <strong>soil type</strong> been identified (vulnerability to erosion, saturation, infiltration, suspension and sedimentation etc.)?</td>
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<td>Have <strong>climate</strong> based risks been identified (duration, frequency, intensity of historic storm events, seasonal risks, wind, freeze-thaw cycles etc.)?</td>
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<td>Have <strong>topography</strong> based risks been identified (existing or designed slope length, gradient, contours etc.)?</td>
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<td>Have <strong>vegetation</strong> preservation opportunities been described and vegetation removal based risks been identified? Consider how the removal of vegetation will effect erosion; if vegetated areas can be saved; if permanent vegetation can be planted early; if clearing be phased to limit risk etc.</td>
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<td>Have <strong>drainage</strong> based risks been identified (e.g., sources of offsite water run-on from adjacent areas, altered drainage systems, existing drainage issues etc.)?</td>
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<td>Have <strong>other potential risks</strong> associated with existing site conditions or high risk work been identified (e.g., high groundwater, seeps or seasonal springs, sensitive or critical areas, utilities work, residential or commercial challenges, geotechnical issues, shaft drilling, rock blasting etc.)?</td>
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<td>Have <strong>potential problem areas</strong> been identified (e.g., cut/fill slopes, clay soils, work that generates process wastewater like shaft drilling etc.)?</td>
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Have **contingency plans** been identified (e.g. how the project plans to manage things like: high pH stormwater, HazMat plans, really turbid water and wastewaters etc.)?

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Have **engineering calculations** for ponds, treatment systems or other designed structures such as channels and outlets been included?

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**TESC Narrative: Elements Risk Analysis and BMP Identification**

It is recommended that S9.D of the CSWGP be referred to during this part of the review process.

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<th>Yes</th>
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<tr>
<td>- Are risks clearly outlined?</td>
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<td>- Are possible BMPs identified?</td>
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<th>Element 2: Establish Construction Access</th>
<th>Yes</th>
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<th>Comments</th>
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<td>- Are risks described clearly?</td>
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<th>Element 3: Control Flow Rates</th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
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<tbody>
<tr>
<td>- Are risks described clearly?</td>
<td></td>
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<tr>
<td>- Are possible BMPs identified?</td>
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<tr>
<td>- Are engineering calculations for ponds included?</td>
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<table>
<thead>
<tr>
<th>Element 4: Install Sediment Controls</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>- Are risks described clearly?</td>
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<td>- Are possible BMPs identified?</td>
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<table>
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<th>Element 5: Stabilize Soils</th>
<th>Yes</th>
<th>No</th>
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<td>- Are risks described clearly?</td>
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<td>- Are possible BMPs identified?</td>
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<th>Element 6: Protect Slopes</th>
<th>Yes</th>
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<th>Yes</th>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Element</td>
<td>Are risks described clearly?</td>
<td>Are possible BMPs identified?</td>
<td>Are possible BMPs identified or relevant contract language referenced?</td>
</tr>
<tr>
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<td>-----------------------------</td>
<td>-----------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>Element 8: Stabilize Channels and Outlets</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>Are risks described clearly?</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Element 9: Control Pollutants</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are risks described clearly?</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Element 10: Control Dewatering</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are risks described clearly?</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Element 11: Maintain BMPs</td>
<td>☐</td>
<td>☐</td>
<td></td>
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<tr>
<td></td>
<td>Are risks described clearly?</td>
<td>☐</td>
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</tr>
<tr>
<td>Element 12: Manage the Project</td>
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<td>☐</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are risks described clearly?</td>
<td>☐</td>
<td></td>
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<td>Element 13: Protect Low-Impact Development (LID) Facilities</td>
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<td></td>
<td>Are risks described clearly?</td>
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<td></td>
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<tr>
<td></td>
<td>Are possible BMPs identified?</td>
<td>☐</td>
<td></td>
</tr>
</tbody>
</table>

**Project Specific Contract Language Used to Manage TESC Risk**

| Are Special Provision(s) needed to manage TESC related risks? | ☐   | ☐                      |
Additional comments on TESC narrative section:

<table>
<thead>
<tr>
<th>Checklist Items</th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Is the direction north identified?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are property lines, ROW, existing structures, roadways and impervious surfaces identified?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are all potential receiving surface water bodies, including wetlands and sensitive/critical areas shown?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are cut/fill slopes identified, including the top and bottom slope catch lines?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are clearing limits and sensitive/critical areas accurately delineated with high visibility fencing?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are first order of work BMPs such as silt fence and ponds shown?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Are catch basin inlets shown?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are anticipated stabilized construction access points shown?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>Are topographical features and the directional flow of water shown?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are locations of off-site support activities directly related to the project shown (to be included by the contractor after the permit has been transferred)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the temporary outfalls as identified in the Notice of Intent shown?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the discharge sample locations shown (these will likely be added to the TESC plan sheets once construction begins)?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional comments on TESC plan sheets:
TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

SR ***$$$$***
Stage ***$$$$***
(Name)
(SR ***$$$$*** to SR ***$$$$***)
MP ***$$$$*** to MP ***$$$$***

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
Northwest Region
Seattle, Washington

(Name), P.E.
Project Engineer
Or
Prepared by: (Name)
(Company)

Lorena Eng, P.E.
Region Administrator

(Month) (Year)
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FIGURES

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1.0 Project overview

The Temporary Erosion and Sediment Control (TESC) Plan describes the measures to be used during construction to protect Waters of the State from degradation due to sediment transport or water pollution. These measures may include the use of temporary Best Management Practices (BMPs). Field conditions during construction may require additional temporary BMPs or a change in placement of the temporary BMPs. The Contractor Erosion and Sediment Control (ESC) Lead and WSDOT Project Office Inspectors shall modify this plan if necessary to meet field conditions.

1.1 SITE DESCRIPTION

(Include a Vicinity Map that shows the right-of-way limits, existing roadways, proposed roadways, drainage basins, flow direction, location of nearby or adjacent construction activities, and sensitive areas (wetlands, streams, receiving water bodies, etc).

1.2 SCOPE OF WORK

This project involves the construction of ***$$$$*** from ***$$$$*** to ***$$$$*** and ***$$$$*** (Describe the overall project activities and where they will occur). The work activities will include ***$$$$*** (e.g., clearing and grubbing, grading, roadway excavation and embankment, constructing storm sewers, paving with asphalt concrete, constructing temporary BMPs, constructing permanent stormwater detention and infiltration ponds, widening one bridge, adding two turn lanes, constructing curb and gutter, landscape planters, sidewalks, construction of a bus pullout, fencing, pavement markings, illumination, signalization, traffic control, etc.) Call out the construction plan sheets and details (e.g. See Appendix ***$$$$*** for construction plan sheets and details.)

The development of this Light TESC Plan has been fully coordinated with Ms/Mr. ***$$$$*** of ***$$$$*** Construction Office. (Applicable to WSDOT Constructed Projects Only.)

1.3 AREAS IMPACTED

Total area of new impervious surface added ***$$$$*** SF or acres
Total area of disturbed soil ***$$$$***

1.4 EXISTING CONDITIONS

This section presents the existing conditions on and surrounding the project site. Included are descriptions soils, drainage, off-site water, outfalls, sensitive areas, existing water quality, WRIA, adjacent construction and affected utilities.

1.4.1 Soils or Surface Conditions

The major soil type identified along the project as identified in the Soil Survey of ***$$$$*** County is ***$$$$***. Other soil types identified along the project, and
ranked by relative predominance are ***$$$$***, and ***$$$$***. (Soil Information is available thru the NWR Hydraulic Group and a starting point is 206.440.4904)

1.4.2 Drainage

Streams and Stream Crossings (List stream names, locations, drainage pathways, and receiving water bodies.)

1.4.3 Off-Site Water

There ***$$$$*** the potential for off-site water to enter the project limits. (State whether there is or is not the potential for off-site water. If applicable, Include a discussion about the sources and waterways of off-site water that may enter the project site and describe measures to be taken, if any, to keep off-site water from mixing with on-site runoff. The site should be visited on a rainy day to verify conditions.)

The Design Office ***$$$$*** aware of any illicit connections to the state drainage system within the project limits. (State whether there is or is not an illicit connection which discharges within the project limit.)

1.4.4 Outfalls

The WSDOT Outfall Inventory lists outfalls along state routes and is ranked (High, Medium, or Low) by retrofit priority. At this time, High-ranking outfalls are strongly encouraged for retrofit and Medium-ranking outfalls should be considered. The WSDOT Outfall Inventory indicates ***$$$$*** outfalls within this project area. (Include a table listing MP, condition, and ranking of each outfall within the project area. If outfall ranked medium to high, state if it will be retrofitted, or why not.)

(If you need assistance to determine the retrofit priority ranking of the outfalls within your project, please contact the Water Quality Group or consult the posting entitled “Accessing the Outfall Inventory” in the Water Quality Public Folder in Exchange.)

Also, describe any suspected illicit connections or discharges within the project limits, or state: The Design office is not aware of any illicit connections or discharges to the state drainage system within the project limits.

1.4.5 Sensitive Areas

(Summarize wetland report, areas of critical habitat, sensitive areas specified in basin plans, etc. If applicable references figure).

1.4.6 Existing Water Quality

(This section should include the WAC 173-201A Surface Water Classification for all nearby water bodies, and information on impaired water bodies from Ecology’s 303d assessment listing. Include the appropriate WAC 173-201A water quality standards as Appendix E. The Ecology listing can be accessed at the following Internet site: http://www.ecy.wa.gov/programs/wq/303d/1998/1998_by_wrias.html )
Example text is as follows:
Mill Creek is classified by the Washington State Department of Ecology (Ecology) as Class A (excellent) (WAC 173-201A). All discharges will need to meet Class A water quality standards with no mixing zone allowed. Under the 303d Assessment list prepared by Ecology, Mill Creek has had levels of fecal coliform, temperature, and dissolved oxygen outside the standards.

(Please contact the Water Quality Group for assistance in determining the water quality classification of the water bodies affected by the project as well as potential monitoring requirements. Pre-construction monitoring for turbidity, pH, temperature, and dissolved oxygen may be required in sensitive areas and for Ecology’s 303d listed water bodies.)

### 1.4.7 Affected Utilities

(This section should include any utilities within the right of way of the proposed construction activities, which may be impacted by this construction project.)

## 1.5 PERMITS AND ASSOCIATED REPORTS

### 1.5.1 Permits

(Insert below the actual permits required for this project. Text describing why some permits may or may not be required should be added if necessary (e.g., a NPDES permit is not required because $$$, or a shoreline management permit is required because $$$).

Permits and issuing agencies required for this project are:

<table>
<thead>
<tr>
<th>Permit</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 404 Clean Water Act</td>
<td>Army Corps of Engineers</td>
</tr>
<tr>
<td>NPDES Permit</td>
<td>NW Regional Department of Ecology</td>
</tr>
<tr>
<td>Clearing Permit</td>
<td>$$$ County &amp; City of $$$</td>
</tr>
<tr>
<td>Hydraulic Project Approval</td>
<td>Washington State Department of Fisheries/Wildlife</td>
</tr>
</tbody>
</table>

Other Applicable Permits

### 1.5.2 Associated Reports

(Below is an example list of reports. Revise to match actual reports and studies related to this project.)

Other reports and studies conducted and prepared in conjunction with this project includes:

<table>
<thead>
<tr>
<th>Report</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Report</td>
<td>$$$</td>
</tr>
<tr>
<td>Biological Assessment</td>
<td>$$$</td>
</tr>
</tbody>
</table>
Wetland Analysis  

***$$$$***

***$$$$*** Plan  

Spill Prevention, Control, and Countermeasures Plan  
To be prepared by Contractor

Collection, Containment, and Disposal Plan  
To be prepared by Contractor
2.0 TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

2.1 PURPOSE OF PLAN

The Temporary Erosion and Sediment Control (TESC) Plan describes the temporary BMPs selected for stormwater detention and water quality treatment during construction of this project. A BMP is a physical, structural, and/or managerial practice that prevents or reduces the pollution of water. The goal of the TESC Plan is to prevent turbid discharges and sediments from leaving the site and to meet Water Quality Standards as defined in WAC 173-201A. Should field conditions during construction require additional temporary BMPs or if a change in placement of temporary BMPs is needed, this plan shall be modified by the Contractor ESC Lead and WSDOT Project Office Inspectors, and approved by the Engineer. The objectives of this TESC Plan are to:

- Implement BMPs to minimize erosion and sedimentation from rainfall at construction sites, and to identify, reduce, eliminate, or prevent the pollution of stormwater.
- Prevent violations of surface water quality, ground water quality, or sediment management standards.
- Prevent, during the construction phase, adverse water quality impacts including impacts on beneficial uses of the receiving water by controlling peak rates and volumes of stormwater runoff at WSDOT’s outfalls and downstream of the outfalls.

During active work, the Contractor shall keep the TESC Plan and BMP inspection reports on site. When construction activity is complete, the WSDOT Project Office shall retain the TESC Plan, inspection reports, and all other reports required by the contract.

It is required that the TESC Plan be prepared by a project Designer that has attended the WSDOT Construction Site Erosion and Sediment Control Certification Course (CSESC Certification Course). Re-certification is required every 3 years.

Designer’s Name: ____________________________
CSESC Certification Course Expiration Date: ____________________________

2.2 CONSTRUCTION POLLUTION PREVENTION TEAM (APPLIES TO WSDOT CONSTRUCTED PROJECT ONLY)

The pollution prevention team is responsible for implementing, enforcing, maintaining, and revising the SPCC and TESC Plans. The Construction Pollution Prevention Team form, presented in Table 2-1, should be completed by WSDOT at the pre-construction meeting. The Contractor is responsible for installing and maintaining all temporary BMPs through the duration of the contract and removing the BMPs when they are no longer needed per the requirements in this plan.

Whenever a self-inspection reveals that the description of pollutant sources or the BMPs specified in the TESC Plan are inadequate, due to the actual or potential discharge of a significant amount of any pollutant, the Contractor and WSDOT shall modify the TESC Plan as appropriate, with the Engineer’s approval.
<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Title</th>
<th>Name</th>
<th>Number</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSDOT</td>
<td>Area Administrator</td>
<td></td>
<td></td>
<td>Transportation program delivery in the <em><strong>$$$</strong></em> Area.</td>
</tr>
<tr>
<td>WSDOT</td>
<td>Engineering Manager</td>
<td></td>
<td></td>
<td>Assists the Area Administrator.</td>
</tr>
<tr>
<td>WSDOT</td>
<td>Construction Project Engineer</td>
<td></td>
<td></td>
<td>Contract administration; NPDES point of contact.</td>
</tr>
<tr>
<td>WSDOT</td>
<td>Chief Inspector</td>
<td></td>
<td></td>
<td>Oversees administration of the contract including maintenance, revision, and implementation of the TESC Plan. Ensures that TESC monitoring takes place, certifies compliance with the TESC Plan and NPDES permit, and keeps all records.</td>
</tr>
<tr>
<td>WSDOT</td>
<td>Environmental Permit Compliance Liaison</td>
<td></td>
<td></td>
<td>Assists the Project Office to ensure compliance with all environmental permits and provides project assistance as needed.</td>
</tr>
<tr>
<td>WSDOT</td>
<td>Water Quality Engineer</td>
<td></td>
<td></td>
<td>Assists the Project Office to ensure compliance with the NPDES Municipal permit; provides project assistance as needed; evaluates the performance of BMPs; and provides direction for field water quality monitoring as requested.</td>
</tr>
<tr>
<td>Contractor</td>
<td>Project Engineer</td>
<td></td>
<td></td>
<td>Contract administration.</td>
</tr>
<tr>
<td>Contractor</td>
<td>Chief Inspector</td>
<td></td>
<td></td>
<td>Oversees administration of the contract.</td>
</tr>
<tr>
<td>Contractor</td>
<td>Erosion and Sediment Control (ESC) Lead*</td>
<td></td>
<td></td>
<td>Ensures that BMPs are in place and functioning as designed; responds to TESC directives from WSDOT; inspects BMPs weekly and following storms; identifies necessary changes to BMPs; and discusses changes of the TESC plan with WSDOT Chief Inspector.</td>
</tr>
<tr>
<td>Contractor</td>
<td>Spill Prevention, Control and Countermeasures (SPCC) Lead*</td>
<td></td>
<td></td>
<td>Develops and implements the SPCC Plan. In the event of a hazardous material spill, the SPCC Lead is the designated person to respond and alert the appropriate authorities.</td>
</tr>
<tr>
<td>Ecology</td>
<td>Water Quality Inspector</td>
<td></td>
<td></td>
<td>Investigates project practices and discharges to determine whether or not compliance with water quality standards and the TESC Plan is achieved. Contacts WSDOT Project Engineer and Environmental staff regarding compliance.</td>
</tr>
<tr>
<td>Applicable County, City or Municipality</td>
<td>Site Development Specialist</td>
<td></td>
<td></td>
<td>Investigates project practices and discharges to determine whether or not compliance with water quality standards, TESC Plan and permits are achieved. Contacts WSDOT Project Engineer and Environmental staff regarding compliance.</td>
</tr>
</tbody>
</table>

* The Contractor designates the ESC and SPCC Leads. These Leads must be certified through WSDOT’s Construction Site Erosion and Sediment Control Course.
The Contractor shall designate and make known the firm’s ESC Lead and Spill Prevention, Control, and Countermeasures (SPCC) Lead to the Project Engineer during the pre-construction meeting. Both the ESC and the SPCC Leads will have the training to administer active and effective construction site erosion and spill control program. If qualified, one person may be designated as both the ESC Lead and SPCC Lead. Certification as the ESC Lead is achieved by attending a WSDOT-approved course in *Construction Site Erosion and Sediment Control*. Re-certification is required every 3 years. (The method of payment for the ESC and SPCC Leads must be established within the TESC Plan and discussed with the WSDOT Project Office. Three payment options are available: force account, by the day, or by the hour (see GSP for ESC Lead).)

### 2.3 Erosion and Sediment Control Minimum Requirements

(Edit the following to include the BMPs proposed on your specific project.)

Minimum requirements of the WSDOT Highway Runoff Manual for erosion and sediment control will be implemented during the design and construction of this project. These requirements include the following:

(Add Section 2.3 to the TESC Notes drawing sheet.)

#### 2.3.1 Stabilization and Sediment Trapping

All exposed and unworked soils shall be stabilized according to the following criteria:

- **From October 1 to April 30**, no exposed and unworked soils shall remain unstabilized (exposed) for more than two days. Non-erodible, clean, granular base materials shall be applied to stabilize all trafficked areas.
- **From May 1 to September 30**, no exposed and unworked soils on slopes shall remain unstabilized (exposed) for more than seven days.

Stormwater runoff shall pass through <_____> prior to leaving the site.

(Specify the BMP to be used such as a sediment pond or suitable sediment trap that include geotextile-encased check dams, filter fences, and/or gravel filters.)

#### 2.3.2 Delineate Clearing and Easement Limits

All existing vegetation (trees, bushes, shrubs, grasses) shall be preserved when not required for the construction of the project. The Contractor is required to survey, stake, and flag the clearing limits shown in the Plans and/or areas not to be disturbed including easements, setbacks, sensitive and critical areas and associated buffers, and buffers for drainage courses before any clearing or grubbing can begin. The Engineer shall be notified 24 hours in advance of the clearing limits being staked. Laths shall be surveyed in and placed at angle points and in 50 feet intervals on tangents and curves. Laths shall have “Clearing Limits” written on them and survey flagging applied. Clearing limits should be checked periodically, stakes should be replaced immediately if disturbed.
2.3.3 PROTECTION OF ADJACENT PROPERTIES

Properties adjacent to the project site shall be fully protected from sediment deposition. Suitable sediment traps shall be installed on the project site to prevent sediment runoff. The sediment control BMPs are described in section 2.4.2 and located on the TESC plan sheets in Appendix <__>.

2.3.4 TIMING OF SEDIMENT TRAPPING MEASURES

Sediment ponds and traps, perimeter dikes, sediment barriers, and other BMPs intended to trap sediment on site shall be constructed as a first step prior to any land disturbing activities. These BMPs shall be functional before land disturbing activities take place. Earthen structures such as dams, dikes, and diversions shall be seeded and mulched, or otherwise stabilized, according to the timing and dates indicated in Minimum Requirement 1. The schedule for construction of BMPs designed to trap sediments is presented in Section 2.4.2.

2.3.5 CUT AND FILL SLOPES

Cut and fill slopes shall be constructed in a manner that will minimize erosion. Cut and fill slopes shall have erosion control BMPs installed for slope protection as needed. During construction, exposed slopes shall have seed, fertilizer, and mulch applied. When seeding and mulching are not possible, plastic covering or other suitable cover shall be applied. Finished slopes shall have permanent seeding applied between March 1 and May 15 or August 15 and October 1. Outside these specified application periods, temporary cover shall be applied.

2.3.6 CONTROLLING OFF-SITE EROSION

Properties and waterways downstream from the project shall be protected from erosion due to increase in volume, velocity and peak flow rate of stormwater runoff from the project site. (If applicable, state the measures that will be taken to control off-site volume, velocity, and peak flow rates of stormwater or reference <1995> Highway Runoff Manual Section 2.4.)

2.3.7 STABILIZATION OF CONVEYANCE CHANNELS AND OUTLETS

The Puget Sound condition requires that all temporary on-site conveyance channels shall be designed, constructed and stabilized to prevent erosion from the expected velocity of flow from a 2-year 24-hour frequency storm for developed conditions. Stabilization adequate to prevent erosion at outlets, adjacent stream banks, slopes, and downstream reaches shall be provided at all conveyance systems.

Conveyance channels will be stabilized with <_____> (specify the BMPs to be used such as geotextile-encased check dams and rock check dams) to minimize both the transport of sediment and erosion of the channel. Conveyance system outlets will be stabilized with <_____> (specify the method; i.e., quarry spalls) to prevent erosion at the discharge point.
2.3.8 STORM DRAIN INLET PROTECTION

All storm drain inlets used to discharge runoff from the construction site shall be protected so that stormwater runoff shall not enter the conveyance system without first being filtered or otherwise treated to remove sediment.

The <_____>* (State the number of drains.) storm drain inlets on the project site will be protected using <_____> (specify the BMPs.) Silt-laden runoff shall be prevented from entering culvert ends by installing <______> (specify the BMPs, i.e., geotextile-encased check dams and gravel filter berms) in the ditches or swales flowing to the culvert.

2.3.9 UNDERGROUND UTILITY CONSTRUCTION

No more than 500 feet of storm drain or utility trench shall be opened at one time. Where consistent with safety and space considerations, excavated material shall be placed on the uphill side of the trench. All de-watering devices shall discharge into a sediment trap or sediment pond.

(If any of these items apply, describe the measures to be taken; i.e., approximately 500 feet of trenching will be opened <______>. no trenching is proposed for this project, etc.)

2.3.10 CONSTRUCTION ACCESS ROUTES

Wherever construction vehicle access routes intersect paved roads, provisions must be made to minimize the transport of sediment and mud onto the paved roads. If sediment is transported onto a road surface, the road shall be cleaned thoroughly at the end of each day. Sediment shall be removed from roads by shoveling or sweeping and be transported to a controlled sediment disposal area. Street washing will be allowed only after sediment is removed in this manner.

(State how sediment transport off-site will be reduced; i.e., during construction activities roads will be cleaned as specified above. In addition, stabilized construction entrance(s) and tire wash areas will be constructed as described in Standard Specification Section 8-01.3(6)and shown on the TESC plan sheets in the Appendix.)

2.3.11 REMOVAL OF TEMPORARY BMPS

All temporary erosion and sediment control BMPs shall be removed within 30 days after final site stabilization is achieved or when the Engineer determines that the temporary BMP is no longer needed. The Contractor shall remove the item, then clean, restore and permanently stabilize all disturbed areas to the Engineer’s satisfaction. Trapped sediment shall be removed or stabilized on site.
2.3.12 DEWATERING CONSTRUCTION SITES

Dewatering devices shall discharge into a sediment trap or sediment pond. The rate of dewatering discharge shall not exceed the design capacity of the sediment trap or pond. If required in the project’s special provisions a dewatering plan shall be submitted for approval before implementation.

(State whether dewatering will be conducted as part of this project, and if so what measures are being taken to control sediment transport off-site. If this project is located within King County right-of-way, include the following text:)

Specific King County Requirements. In the areas shown in the Plans as requiring special dewatering plans, the Contractor shall prepare a dewatering plan that include details and construction sequences that address the handling and disposal of turbid water in these sensitive areas. The Contractor shall submit the dewatering plan to the King County Department of Development and Environmental Services (DDES) with a copy to the Engineer at least one week prior to commencement of any construction activity, including erosion control. No work shall commence in these sensitive areas or their buffers without approval of the dewatering plan by DDES.

In the event that the contractor shall encounter areas that require dewatering regardless of whether these areas have been indicated on the approved plans or not, no work, except the erosion control measures as needed to remedy unforeseen water quality problems, shall commence or continue until a dewatering plan approved by King County DDES, is obtained. The Contractor shall be responsible for preparing, submitting, and obtaining approval for dewatering plans in such situations.

No groundwater withdrawals are to be allowed, unless the Contractor obtains the appropriate permits).

2.3.13 MAINTENANCE

All temporary and permanent erosion control BMPs shall be maintained and repaired as needed to assure continued performance of their intended function per Standard Specification 8-01.3(11).

2.4 TEMPORARY EROSION AND SEDIMENT CONTROL BMPS

This section presents the temporary BMPs that were selected to control erosion and sediment during construction of this project. The BMPs selected include Source Control BMPs, Sediment Control BMPs, Structural Erosion Control BMPs, and Experimental and Other BMPs.

The BMPs were selected based on the potential for erosion at the site and the potential for impacts to surrounding sensitive areas (i.e., wetlands and water bodies). The erosion potential for this project was determined to be (low, moderate, high). Describe what factors led to the selection of the erosion potential. (Slope, slope length, amount of disturbed soil, proximity to receiving water bodies, outfalls, etc.) The designer should discuss how the project will be “staged” to the extent possible to disturb as little of the site for the shortest amount of time during construction.
The type and location of TESC BMPs used during construction may vary from those presented below. This plan may be modified by the Contractor in the field as necessary to control erosion and the migration of sediments at the project site. The proposed locations of the selected TESC BMPs are presented on the TESC Plan Sheets presented in (specify where in this document the plans are located (i.e., Appendix <______>* Plan Sheets <______>* and <______>*).

2.4.1 SOURCE CONTROL BMPS

Source control BMPs selected for this project include ________________________________
__________________________________

(List cover practices to be used, such as seeding, mulching, matting, PAM, plastic cover, etc. Describe selected BMPs and specify type of seed, mulch, or matting to be used, i.e., straw mulch, wood fiber mulch, bonded wood fiber matting, etc. Describe where each BMP will be constructed and reference the specific TESC Plan Sheet showing the proposed location.)

Minimize natural vegetation removal. Vegetation restoration is discussed in the Vegetation Management Plan Section 3.3. Street sweeping proper storage and handle of potential pollutions will be covered in the Spill Prevention, Control and Countermeasures Plan.

2.4.2 SEDIMENT CONTROL BMPS

The BMPs selected for the control of sediment include...

(List the BMPs selected for controlling sediment, such as filter fence, geotextile-encased check dams, brush barrier, gravel filter berm, storm drain inlet protection, straw wattle, compost sock or berm, sediment trap, and sediment ponds or basins.)

2.4.3 STRUCTURAL EROSION CONTROL BMPS

Structural Erosion Control BMPs selected include ________________________________.

(List BMPs such as stabilized construction entrance, tire wash, construction road stabilization, dust control, pipe slope drains, level spreader, interceptor dike and swale, etc.)

2.4.4 EXPERIMENTAL AND OTHER BMPS

(If applicable include this section describing any proposed experimental i.e. Chitosan Pressurize Portable Sand filter or other BMPs. Otherwise say “No experimental BMPs are proposed for this work.”)

3.0 CONSTRUCTION INSTALLATION, INSPECTION AND MAINTENANCE SCHEDULE

This project will be constructed in accordance with the Standard Specifications contained within Section 8-01, and the special provisions included in Appendix ____.
The project will be inspected and maintained in accordance with Section 8-01.3(1)B.

### 3.1 WATER QUALITY MONITORING

The Contractor ESC Lead, Environmental Construction Liaison, or Water Quality Engineer may determine that water quality monitoring is warranted. If needed, the <WSDOT> or <Contractor> or <Developer> shall measure turbidity, pH and temperature at all of the identified site discharge points after each 24-hour rainfall events of 0.5 inches or greater. If turbidity at any of the site discharge points exceeds the water quality standards (WAC 173-201A), then the Contractor shall make appropriate adjustments to the TESC plan. Turbidity will be measured with a HACH 2100P portable turbidity meter or equivalent and reported in Nephelometric Turbidity Units (NTUs). (If it is known that monitoring will be required, revise this text to describe required monitoring.) See IL 4049.00 for further guidance (if project will be constructed by WSDOT).

If warranted during the site work, the responsible party shall follow Section 8-01.3(1)B in the Standard Specifications, supplemented by the following:

1. The ESC Lead shall visually monitor off-site water discharge for sedimentation and turbidity. If turbid discharges are observed the turbidity shall be determined by use of a turbidity meter. Turbidity shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU. If turbidity exceeds these requirements, a formal Water Quality Monitoring Plan should be implemented. Notify the WSDOT chief inspector (if applicable) if any turbid discharges are observed and when measurements are taken with a turbidity meter.

2. Visually monitor for turbid water or off-site sedimentation. Check for potential BMP improvements if sediment is accumulating off-site, or if the discharge appears turbid. The ESC Lead shall be responsible for confirming that no turbid water or sediment leaves the site.

The responsible party shall update the TESC plan sheets (apply to WSDOT constructed projects only) to reflect changing field conditions.

### 3.2 PERMANENT STABILIZATION (APPLICABLE TO WSDOT CONSTRUCTED PROJECTS ONLY)

The permanent stabilization BMPs for this project consist of: 1) reestablishing vegetation; 2) outlet protection and 3) planting trees and shrubs. Disturbed areas will be planted with a seed/mulch mixture to prevent soil erosion. All new storm sewer outlets will be lined with quarry spalls to prevent scouring. In addition wetland vegetation, detention area and riparian buffer plantings will be provided to stabilize and prevent erosion. Seeding and planting shall be done according to the dates in the Special Provisions or the Standard Specification unless otherwise approved by the Engineer.

### 3.3 VEGETATION MANAGEMENT PLAN (APPLICABLE TO WSDOT CONSTRUCTED PROJECTS ONLY)

(Revise the following text to describe the actual vegetation plan)
Permanent erosion and sediment control on this project will consist of seeding, fertilizing, and mulching. Disturbed areas will be re-seeded with permanent cover as soon as possible. If exposed areas will remain undisturbed for more than seven days in the summer months, or more than two days in the winter months, temporary cover practices will be provided. Where possible, existing areas with vegetation will remain undisturbed unless no alternative exists. Undisturbed areas provide a positive buffer for stormwater flows between the improvements associated with the project and sensitive areas near these improvements.
4.0 Spill Prevention Control and Countermeasures (SPCC) Requirements

The Contractor shall develop a Spill Prevention, Control and Countermeasures (SPCC) Plan per the amendment to the Standard Specifications §1-07.15(1) and according to the format and content in the “Tools and Template” document, available on the internet at http://www.wsdot.wa.gov/eesc/environmental/programs/hazwqec/haz_docpubs.htm.

This plan is for control of pollutants on construction sites that have the potential to harm human health or the environment, (RCW 70.105, Hazard Waste Cleanup-Model Toxics Control Act). The plan shall address sources of pollutants, critical receptors, spill prevention and containment, spill response, and reporting requirements. This plan is expected to address comprehensive control of pollutants that include, but are not limited to, management of fuels, oils, solvents, and chemicals used in operations and maintenance, solid waste decomposition products determined by Department of Ecology to present a hazard, and maintenance and management of contaminated soils and water encountered or generated on the construction site.

The Contractor shall make available at the construction site an individual designated as the SPCC Lead that is knowledgeable in hazardous waste recognition, and spill control and response. The SPCC Lead is the person responsible for developing and implementing the SPCC Plan. In the event of a hazardous material spill, the SPCC Lead is the designated person to respond and alert the appropriate authorities. At a minimum this individual will have training or experience in the following:

1. Knowledge of basic hazard and risk assessment techniques
2. Knowledge of the proper selection and use of personal protective equipment
3. An understanding of basic hazardous materials terms.
4. Ability to perform basic control, containment, and/or confinement operations within the capabilities of the resources and personnel protective equipment available.
5. Knowledge of how to implement decontamination procedures.
6. An understanding of relevant standard operating procedures and termination procedures contained in the SPCC.

The Contractor shall take measures to prevent solid wastes from becoming a source of pollutants to stormwater or decomposition products from entering waters of the state. The Contractor should use best available practices to contain, segregate, store, and dispose of solid wastes consistent with state and local statutes and ordinances controlling solid waste disposal. BMPs C-1.10 through C-1.20 in the Highway Runoff Manual (HRM) should be considered for incorporation into the SPCC where applicable. BMPs used on this project are not limited to those mentioned above.

APPENDICES
Note: Add the following appendices that are applicable. Always include Appendices A and C (attached)

APPENDIX A: TESC MONITORING AND MAINTENANCE CHECKSHEETS

APPENDIX B: TESC PLAN SHEETS AND DETAILS

APPENDIX C: TESC BMP CONSTRUCTION CHANGE TRACKING FORM

APPENDIX D: SPECIAL PROVISIONS

Permit Requirements, Erosion and Sediment Control, and Drainage Requirements special provisions.

APPENDIX E: WAC 173-201A

Photographs may be included to help describe the site.
APPENDIX A: TESC MONITORING AND MAINTENANCE CHECKSHEETS

Fill out the appropriate portions of this form as work progresses. Make additional copies of this form as needed. Keep all completed copies of this form with the on-site TESC Plan. Reflect all TESC changes on the TESC plan sheets.

Project Name: _________________________________________

Prior to Earth Work

BMPs are in place prior to construction (signature)________________________________

Date: _____________

During Earth Work

<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>BMP &amp; Location</th>
<th>Repairs/Modifications Needed</th>
<th>Comments/Sampling Results</th>
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APPENDIX C: TESC BMP CONSTRUCTION CHANGE TRACKING FORM

Fill out the appropriate portions of this form as work progresses. Make additional copies of this form as needed. Keep all completed copies of this form with the on-site TESC Plan. Reflect all TESC BMP changes on the TESC plan sheets.

Project Name: _________________________________________

<table>
<thead>
<tr>
<th>Change Number</th>
<th>Change Date</th>
<th>Name of Person Making BMP Change</th>
<th>CSESC Certification Expiration Date</th>
<th>Description of TESC Plan Sheet Change With Drawing Number</th>
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December 27, 2019

Michael Bateman,
City of Poulsbo
200 NE Moe Street
Poulsbo, WA 98370

Re: Oslo Bay Apartments - Traffic Impact Analysis Review

Dear Michael:

We have reviewed the Oslo Bay Apartments Traffic Impact Analysis submitted by TSI in November 2019. Based on our review, we have the following comments.

Site Plan & Project Description

1. Page 2 states “The right-in/right-out Project access on SR 305 is identified in the City of Poulsbo 2016 Capital Facilities Plan as a planned intersection improvement project. The Project is included in the Poulsbo transportation impact fee rate calculation, per the March 2019 Poulsbo Transportation Impact Fees Technical Document.” Even though the Vetter Extension is a project identified in the City’s Capital Facilities Plan, since this extension is being proposed as part of a private development, and provides new access to a State highway, the developer needs to document how the TIA complies the WSDOT’s Development Services Manual.

2. TIA needs to discuss how the proposed roadways within the development meet the City’s standards for classification of commercial collector and residential collector.

3. It is unclear from Figure 2: Preliminary Site Plan, or from text on page 2, the distance the proposed project access on Viking Avenue is from the intersection of SR 305/Viking Avenue. Please update the site plan to more clearly illustrate access to the proposed project on Viking Avenue and distance of proposed access points to the SR 305/Viking Avenue intersection.

Traffic Operations

4. Other recent counts in the area show the PM peak hour occurring as early as 3:00pm. PM traffic count data should be collected between 3:00-6:00 to confirm correct PM peak hour. Additionally, all original traffic count data should be included in the report appendices.

6. In addition to reporting overall intersection LOS, the TIA should also report level of service by leg for each intersection. SR 305 is a very congested corridor, and this will give the reader a more thorough understanding of operating conditions along the corridor.

7. The TIA should document average and 95th percentile queues by movement for all study intersections, for existing, future-without and future-with project conditions. Turn-lane storage should be documented as well, so turn-lanes with queue spillback can be identified. Due to the congested nature of the SR 305 corridor, queueing should be analyzed using SimTraffic, not Synchro, so the full impact of queuing and blocking can be adequately documented.

8. Detailed calculations of segment ADT estimates should be included in the appendices.

Transit & Non-Motorized

9. The TIA does not document the location of all bus stops within 1 mile of the proposed project.

10. The TIA does not assess pedestrian concerns from the proposed development to parks, commercial districts or transportation stops within 1 mile of the proposed project, including the Kitsap Transit Park-and-Ride on Viking Avenue, Central Market, the North Kitsap Medical Center, etc.

11. There is no discussion of proposed frontage improvements along SR 305. Road shoulder as pedestrian facilities do not meet City standards.

Crash Analysis

12. The crash analysis section should include discussion on any CAL/CAC or IAL locations in the study area.

13. The TIA identifies several intersections and street segments that experience high percentages of injury crashes. However, there is no discussion of how the proposed project traffic may or may not contribute to increased crash potential or severity.

Future Conditions

14. On page 14, the TIA states the “total future growth was calculated as the sum of pipeline project growth and the background growth.” The report states “trip growth external to the City of Poulsbo was calculated using a 2 percent annual growth rate” but this growth rate does not appear to be what was used to calculate future volumes shown in Appendix A. What background growth was assumed for intersections within the City limits and what is the source?

15. The total weekday AM peak hour trips do not equal the total shown in Table 10.

16. Table 11 and Table 12 show the proposed project is expected to impact several intersections, increasing delay at intersection already operating below LOS standards. However, there is no discussion of mitigation to offset these impacts, as required.
17. There is no discussion of whether the project meets the City’s concurrency requirements, as required by PMC 14.04.

18. Page 20 states “The following sections will present queuing mitigation strategies to improve Project access during peak hours” however there is no more discussion about queuing. Queuing should be assessed at all study intersections (see comment #7).

19. Please provide calculations for sight distance justifications.

20. Page 22 states “The current TIA identifies several improvements to maintain level of service standards in the SR 305 corridor. These improvements are described above in Table 14 and mitigate congestion created by the combined impact of permitted unbuilt development, 2% annual background growth, and Oslo Bay Apartments to meet City and WSDOT LOS standards.” There is no discussion of improvements to maintain LOS or a Table 14 in the document.

21. The Construction Impact section needs to include project generated construction traffic, per the City’s TIA requirements.
December 19, 2019

City of Poulsbo
200 NE Moe Street
Poulsbo, WA 98370

In review of the new submittal for the Oslo Bay project, the fire department still has the same concerns about access to the development site and traffic mitigation. After a review of the submitted traffic report, it appears that there is missing data that would allow us to make an informed comparison/decision. Example: Table 14 is missing. (Page 22).

In addition to the missing data, there appears to be some significant impact to traffic in this traffic corridor as a result of the development, for example, the report notes that the development will add 3.49 minutes of delay in the Viking ave./SR305 intersection backing up traffic on the north side of Viking an estimated 725 feet (bottom of page 20) with no mitigation plan proposed.

The alternate proposed response route mentioned in the report via 10th ave. /Little Valley/Bernt road/SR307 would result in a three minute delay under ideal conditions and would still require the fire/aid apparatus to use SR305 from SR307 to access the development.

Bruce Peterson
Deputy Chief
Poulsbo Fire Department
bpetersen@poulsbofire.org