



MEMORANDUM

November 8, 2019

TO: MELISSA PLACE
FROM: COSTCO DESIGN TEAM
RE: Costco Responses to Lider and Whipple Comment Letters

This Memorandum collects responses from Costco’s wetland, stream, traffic, geotechnical and stormwater consultants who have reviewed and provided responses to the October 7, 2019 William Lider, PE, CESCL (“Lider”) and October 15, 2019 Michael D. Whipple (“Whipple”) comment letters.

I. Lider Letter

The binding site plan is only one component of the larger development that includes critical areas evaluation, wetland permitting, site plan approval, development agreement, and building permits. Many of the questions raised in the Lider letter are being addressed elsewhere in the City’s permitting process or by application of RCW 43.21C.240, which allows a permitting jurisdiction, planning under the state’s Growth Management Act (“GMA”), to rely on existing local, state and federal regulations to mitigate the environmental impacts of a proposed development.

Regarding stormwater, the applicant, Costco Wholesale Inc. (“Costco”), submitted a preliminary Stormwater Drainage Report (“Preliminary Drainage Report”) with its binding site plan application. The Preliminary Drainage Report will be refined and finalized in coordination with the critical areas evaluations and low impact development design decisions and will be included in the Final Stormwater Drainage Report (“Final Drainage Report”). As explained below, the project’s stormwater facilities are being designed to the 2014 Department of Ecology (“DOE”) Stormwater Management Manual for Western Washington (“SWMMWW”), which is the current standard for design of environmentally protective stormwater facilities. When completed, the project’s stormwater system will comply with all applicable local, state and federal regulations.

DOE developed the SWMMWW with a strong emphasis on protecting salmon. The SWMMWW places a high priority on maintaining peak flows and flow durations at pre-development levels. With the large buffer to be maintained on Mosher Creek, enhanced buffers on the unnamed, ephemeral Mosher Creek tributary, enhanced buffers for Wetland D, and the

significant effort to identify and replicate drainage off the numerous sub-basins on the site, it can be expected that wetland hydrology and stream flow will be protected when the final design is produced.

Wetland mitigation for the project's wetland impacts includes a combination of on-site wetland creation and enhancement to Wetland D, off-site improvements to the unnamed Mosher Creek tributary, and participation in an approved wetland mitigation bank. This suite of mitigation measures arose from discussions with the City of Lake Stevens, the US Army Corps of Engineers, and the Tulalip Tribe with the goal of protecting fish habitat in Mosher Creek and the tributary. Wetland D is the only on-site wetland with a surface water connection to Mosher Creek. All direct impacts to Wetland D will now be mitigated 1:1 with wetland creation in the area immediately adjacent to the existing wetland. Historic drainage patterns, both surface and groundwater, are being mapped with the goal of recreating hydrology to Wetland D using clean roof from the proposed Costco building. This water will be distributed to the wetland using level spreaders throughout the wetland buffer.

The environmental documents that have been prepared to date for the Costco project include the following:

1. 2012 Draft and Final 20th Street SE Corridor Subarea Plan Environmental Impact Statements;
2. Planned Action Ordinance 878 (September 24, 2012), which includes several mitigation measures described in Ordinance 878 Exhibit B;
3. Dowl Engineering Inc., Preliminary Drainage Report, September 18, 2019;
4. Preliminary Terracon Geotechnical Report, May 29, 2018;
5. HWA GeoSciences 24th Street SE Extension Report, January 15, 2016;
6. Sewall Wetland Consulting, Inc. Preliminary Mitigation Plan, September 10, 2019
7. Sewall Wetland Consulting, Inc. Revised Critical Areas Report, September 10, 2019;
8. Watershed Company 24th Street SE Extension Wetland Delineation (September 7, 2017);
9. Biological Evaluation, August 13, 2019;
10. Recommended Culvert Sizing Analysis - Lake Stevens Road at SR-9 (March 26, 2019);
11. Recommended Culvert Sizing Analysis – Mosher Creek and Tributary (August 14, 2019);

12. 404(b)(1) Alternatives Analysis; Transportation Solutions, Inc. Traffic Impact Analysis (October 28, 2018);
13. Transportation Solutions, Inc. Traffic Impact Analysis (October 28, 2018);
14. Caldera Archeology Cultural Resources Report (May 5, 2018); and
15. American Forest Management, Inc. Significant Tree Inventory (March 27, 2018).

The stormwater system design for the site is ongoing. Low Impact Development (LID) stormwater facilities will be assessed and designed in accordance with the 2014 DOE SWMMWW. LID facilities to be evaluated for use at the site include:

- Bioretention Cells (Rain Gardens)
- Bioretention Swales
- Rainwater Catchment
- Dispersion

A Final Drainage Report meeting all city and state requirements will be provided by Costco prior to the issuance of a construction permit. The Final Drainage Report will also include a LID feasibility analysis. Regarding wetland hydroperiods, wetland hydrology is not proposed to be maintained by the project's stormwater features. Wetland hydrology will be provided by collection and dispersion of clean rainwater from the roof of the Costco building.

A. Responses to LIDER Comments 1-9

The binding site plan application was signed and dated. Because the drainage report submitted with the application was a preliminary report there is no requirement that it be stamped and signed. The Final Drainage Report will be signed and stamped with an engineer's seal.

As discussed above, LID measures are under review. Soil data and borings are described in the Preliminary Geotechnical Report. The geotechnical engineering evaluation included the advancement of 65 test borings to depths ranging from approximately 10 to 75 feet and 30 test pit explorations to depths ranging from approximately 6 to 13 ½ below existing site grades. Terracon Report, p. 1.

Because of glacial till soils, the site is not a good candidate for infiltration. Wetland hydrology to Wetland D will be maintained by dispersion of roof rainwater into the wetland. Natural drainage systems, including Mosher Creek and the unnamed Mosher Creek tributary, will be maintained.

The hydroperiods of Wetlands A, D, X, and XX will be maintained through dispersion of clean roof water at quantities that will be modeled to mimic existing flows. There should be minimal changes, if any, to the hydroperiods of these wetlands.

The stormwater system design will meet all city and state law requirements, including the cited Minimum Requirements #6, #7 and #8. The stormwater system will be designed with sufficient gravity flow to convey water to the south, which is the nature slope of the land.

The stormwater pond was preliminarily sized using a DOE-approved Western Washington Hydrology Model (“WVHM”). The stormwater system is not being used to maintain wetland hydrology. Rainwater that falls on the Costco building roof will be directed the wetlands to help maintain hydrology.

Current wetland conditions and mitigation are explained in the Sewall Critical Areas Report and Preliminary Wetland Mitigation Plan. The hydroperiods of downslope wetlands will be maintained. A shallow groundwater system for the northern portion of the site is under consideration. Deeper groundwater (i.e. below the building foundation) will continue to flow to the south.

Computer modelling will be used to model the existing hydrologic conditions for the 2, 5, 10, 25, 50 and 100 year storms. The stormwater system will be designed to match the modelled volumes as required by the applicable regulations.

The Terracon Geotechnical Report is preliminary. The final Geotechnical Report will be signed and stamped with an engineer’s seal. Borings and test pits have been performed. LID measures, such as rain gardens for water quality treatment, will be evaluated for feasibility and included in the Final Drainage Report.

The stormwater facilities for this project are being designed to comply with the 2014 Department of Ecology SWMMWW and the City of Lake Stevens Engineering Design and Development Standards (EDDS). The calculations for the conveyance system and BMPs will be included in the Full Drainage Report.

Predevelopment and post-development stormwater flows will be modeled using WVHM in order to determine the volume of clean stormwater from the developed site to be discharged to the remaining wetlands in order to maintain the existing hydroperiods. The calculations for this discharge and design of the stormwater conveyance system will be included in the Final Drainage Report.

The US Army Corps of Engineers supports the use of mitigation banks as an ecologically sound method of wetland impact information. Also, Costco is proposing on-site/in-basin wetland mitigation. Per the Wetland Mitigation Plan, Costco plans 1:1 wetland creation for Wetland D and six culvert removals/replacements along the unnamed tributary to Mosher Creek located south of Wetland D. At this time, Costco is not proposing the use of pervious concrete/pavers, primarily because the on-site soils have low infiltration permeability and because Costco’s past experience with these products are that they create safety and maintenance issues.

In addition, Costco is preserving stream and wetland health by respecting stream and wetland buffers, enhancing the buffer in the area of proposed culvert removal/replacement along the unnamed tributary, enhancing the Wetland D buffer area and removing a house, garbage, and failing septic system that are currently contributing to degraded water quality in Wetlands A and D.

The road in Tract E (proposed 24th Street SE) is on the City's transportation improvement plan and has been identified as an important east-west transportation link in the city's 20th Street SE Corridor Subarea Plan. *See Alternatives Analysis.*

The project will not adversely affect salmonids or other fish species. For mitigation purposes, all watercourses and Wetland D are being treated as though they are fish-bearing.

Costco prepared a Biological Evaluation that address potential impacts to endangered species under the federal Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act, and the 1996 Sustainable Fisheries Act. Costco also prepared two Recommended Culvert Sizing Analyses that addressed fish passage for the SR-9 Roundabout and Mosher Creek tributary.

Costco's investigation demonstrated that there are no endangered species documented on the project site and that the nearest documented presence of endangered salmonid species is approximately one mile away. Costco's proposed mitigation will maintain water quality and quantity per the DOE SWMMWW that was designed to be protective of salmonids. Costco's project design respects the buffer around Mosher Creek and will not have direct impacts to Mosher Creek. Costco is also proposing wetland creation and enhancement at Wetland D and buffer enhancement associated with the culvert removal/replacement along the unnamed tributary of Mosher Creek.

B. Conclusion

The binding site plan is supported by a substantial amount of environmental investigation including the City's 20th Street Corridor EIS, the additional SEPA analysis of project components that were not covered by the City's Planned Action Ordinance, and the studies cited above. The wetland and stream mitigation plan was developed in consultation with the Tulalip Tribe and US Army Corps. To address environmental concerns, the project is undergoing regulatory review from a number of agencies including the City of Lake Stevens (stormwater, SEPA and critical areas); the US Army Corps of Engineers (§ 404 Wetland Permitting); Washington Department of Ecology (§ 401 Water Quality Certification); and the Washington Department of Fish and Wildlife (Hydraulic Project Approval).

II. Whipple Comment Letter

The project is supported by a substantial amount of environmental investigation including the City's 20th Street Corridor EIS, the additional SEPA analysis of project components that were not covered by the City's Planned Action Ordinance, and the studies cited below. The wetland

and stream mitigation plan was developed in consultation with the Tulalip Tribe and US Army Corps of Engineers. To address environmental concerns, the project is undergoing regulatory review from a number of agencies including the City of Lake Stevens (stormwater, SEPA and critical areas); the US Army Corps (§ 404 Wetland Permitting); Washington Department of Ecology (§ 401 Water Quality Certification); and the Washington Department of Fish and Wildlife (Hydraulic Project Approval).

The environmental documentation that supports Costco's development applications includes the following:

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15. American Forest Management, Inc. Significant Tree Inventory (March 27, 2018).

A. Comment Letter Page 1

The site is characterized by a mix of pasture and second- or third-growth forest. There is evidence of previous mining, logging and road construction activities. In addition, there are invasive species, garbage and sewage from a failing septic system affecting Wetlands A and D. The City's critical areas regulations and the Department of Ecology's Stormwater Management Manual for Western Washington ("SWMMWW") incorporate best available science as required by Washington's Growth Management Act. Ch. 365-195 WAC. Additionally, the proposed off-site fish passage improvements, which are located just south of the project site on an unnamed, ephemeral tributary of Mosher Creek, were designed using the latest Washington Department of Fish and Wildlife protocols.

The city's SEPA review is consistent with applicable law. SEPA encourages the use of supporting documents (WAC 197-11-090, WAC 197-11-635) and under SEPA's GMA integration provisions, the city has the option of determining that the requirements for environmental analysis, protection, and mitigation measures in the city's GMA-compliant development regulations and comprehensive plan and other applicable local, state, or federal laws or rules, provide adequate analysis of and mitigation of potential environmental impacts (RCW 43.21C.240, WAC 197-11-158).

The city is also appropriately relying upon its 2012 20th Street Corridor Subarea Plan EIS and SEPA Planned Action Ordinance 878. A planned action is a development project whose impacts have been addressed by an environmental impact statement associated with a programmatic plan for a specific geographic area before the individual project was proposed. A planned action involves detailed SEPA review and preparation of an EIS in conjunction with sub-area plans, consistent with RCW 43.21C.031 and WAC 197-11-164 through WAC 197-11-172. Such up-front analysis of impacts and mitigation measures then facilitates environmental review of subsequent individual development projects.

This is precisely what is occurring in this case. The city's planned action SEPA analysis covered most aspects of the proposed development. Certain project-specific elements that were not included in the Planned Action, for example the 24th Street SE/SR-9 Roundabout, are being addressed through additional SEPA process. This is not piecemealing, it is appropriate implementation of SEPA's planned action provisions. SEPA Handbook (2018 Update), pp. 46-49.

As detailed in the § 404(b)(1) Alternatives Analysis that was prepared as part of the project's wetland permitting, Costco conducted a thorough search of the Lake Stevens service area to locate a site with sufficient size and other characteristics, such as proximity to major arterials and appropriate zoning, that could accommodate Costco's proposed development. Costco also explored various on-site orientations of the building and parking field to minimize impacts to wetland areas.

The current site plan avoids all impacts to Wetland M and its buffer, which are associated with the main stem of Mosher Creek. While the proposed development does have some unavoidable impacts to Wetland D, Costco is proposing 1:1 on-site wetland creation and buffer enhancement for Wetland D (see Sewall Wetland Mitigation Plan) and removal/replacement of six culverts along the unnamed Mosher Creek tributary that

currently block fish passage. The Wetland Mitigation Plan proposes enhancing the buffer along the unnamed Mosher Creek tributary in the areas of the proposed culvert removals/replacements and removing a home and failing septic system that is currently degrading water quality in Wetlands A and D.

B. Comment Letter Page 2.

The project will comply with all applicable local, state and federal regulations including Lake Stevens' critical area regulations. The critical area mitigation hierarchy was considered as part of the project site planning and the design minimizes impacts to the most significant wetlands (Wetland M (no impact) and Wetland D (on-site mitigated impact)). The Biological Evaluation describes where federally listed fish species have been sighted: none are found on-site. Other species may be found in Mosher Creek on-site, but neither Mosher Creek or its riparian buffer will be impacted. Moreover, for mitigation purposes, all watercourses and Wetland D are being treated as though they are fish-bearing.

As explained in the Alternatives Analysis, Costco's existing Everett and Woodinville locations are not adequate to serve the growing demand in the Lake Stevens service area and require Costco member to travel approximately 20 to 34 miles roundtrip to shop at these locations.

The wetland ratings in the Sewall Revised Critical Areas Report are consistent with the prior delineation performed by the Watershed Company's, and there has not been any downgrading of wetlands between the two delineations.

The wetland labeling in the May 18, 2018 Watershed Company report uses the same wetland labels used in an older Altman Oliver report. Sewall Wetland Consulting re-delineated all of the wetlands, and in the process, re-labeled them to reflect the sequence in which they were flagged. Although the wetland identification labeling differs between the Sewall and Watershed reports, the wetland ratings and associated buffer sizes are the same. In other words, the Sewall report confirmed and retained the wetland ratings contained in the Watershed report and no wetland has been downgraded.

C. Comment Letter Page 3.

Costco's wetland consultant, Ed Sewall has spent several days on site. During that time, Mr. Sewall looked for signs of listed wildlife species and found none. He has also reviewed the Washington Department of Fish and Wildlife Priority Habitat Database, which did not indicate the presence of any threatened or endangered species on, or proximate to, the project site. A SEPA checklist does not require an exhaustive wildlife inventory, and none of the animals purportedly observed by Mr. Zueger are species of concern.

As stated previously, best available science is a concept that is incorporated into local development regulations (particularly critical areas regulations) and comprehensive plans. The city utilized best available science when it adopted its GMA-compliant development regulations. Similarly, best available science is incorporated into the Department of

Ecology’s stormwater and wetland regulations and into the Department of Fish and Wildlife’s fish passage design recommendations. Costco continues to consult with subject matter experts from the Tulalip Tribe, Department of Ecology, City of Lake Stevens, Department of Fish and Wildlife and US Army Corps. Thus, best available science is guiding the mitigation for the proposed development.

D. Comment Letter Page 4.

SEPA encourages the adoption of existing environmental documents (WAC 197-11-090, WAC 197-11-635) and, as evidenced by the 15 studies referenced above, the environmental conditions on the project site have been characterized in detail. This site is not scientifically unique and there is no scientific uncertainty about the location of critical areas or their functions.

Regarding the need to construct 24th Street SE, the Alternatives Analysis provides the following discussion:

The addition of 24th Street SE is a logical east-west connector within the City’s transportation system. The City lacks major east-west connectors, putting traffic pressure on the few existing connectors in the southern half of the City; 20th Street SE, 12th Street SE, 8th Street SE, and Market Place; none of which, except 20th Street SE, fully extend from SR-9 to SR-204 (see below maps).

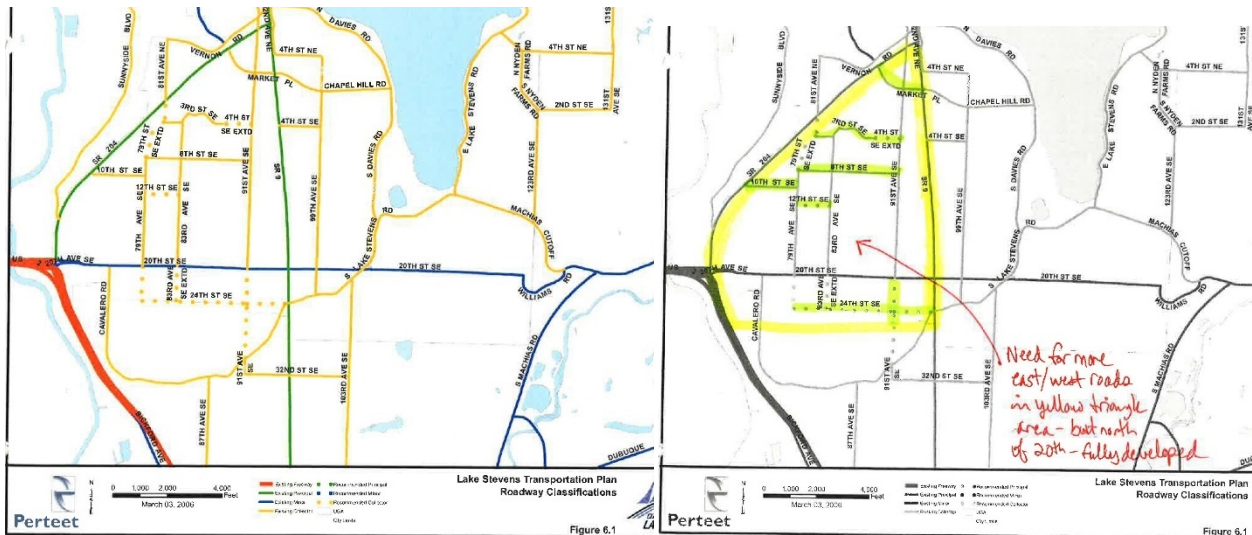


Figure 18: Need for East-West Connector Roads

Proposed 24th Street SE is a much-needed parallel alternative to 20th Street SE, helping to reduce traffic congestion on 20th St SE, some of which has been generated by recent housing development in the area and pass-by trips from outside the City limits. The possible location for 24th Street SE is constrained to the south by current City limits and the Puget Sound Energy power transmission line, wetlands and a Mosher Creek tributary, and to the north by the City of Everett waterline corridor (just south of 20th Street SE). The properties north of 20th Street SE are fully developed, precluding the location of a new east-west road spine.

Construction of 24th Street SE would also provide better access to Cavalero Mid-High School and Cavalero Park in the future, a major goal of the City's, via a road extension west of the proposed 91st Street SE. The proposed location for South Lake Stevens Road is a natural connection lining up with the existing South Lake Stevens Road directly east across SR-9. The reconfiguration of South Lake Stevens Road will resolve the existing situation of unsafe access to the highway.

Intersection alternatives for 24th Street SE and SR-9 are currently being developed. The extent of wetland impacts associated with this intersection will be weighted as part of the alternatives' selection as conceptually designed impacts to the Waters of the State are minimized or avoided outright.

To reduce impacts to the environment, primarily wetlands and stormwater, 24th Street SE is being constructed with retaining walls, and a narrower roadway section (by the elimination of a planter strip and sidewalk on one side) to reduce the cut and fill footprint on the adjacent wetlands.

E. Comment Letter Page 5

American Forest Management, Inc. performed a tree survey on the project site. For significant trees removed on the project site, Costco will mitigate the removal through a combination of on-site replanting, off-site replanting, and contribution to the city's tree mitigation fund. Consistent with the requirements of LSMC 14.76.120, Costco will mitigate the removed significant trees at a 3:1 ratio. Costco's preliminary landscape plan shows that approximately 1,714 replacement trees will be provided on site, 540 replacement trees will be provided in the SR-9 right-of-way and 3,188 replacement trees will be mitigated through some combination of off-site replanting and tree fund contribution.

The construction of 24th Street SE is on the City's GMA-required Traffic Improvement Plan, and the 2012 20th Street Corridor Subarea Plan EIS contemplated east-west road connections in the area. Because the exact alignment of 24th Street SE was not known earlier, the city conducted additional SEPA review once the precise alignment of proposed 24th Street SE became known. This is not piecemealing, it is conducting appropriate additional environmental review per WAC 197-11-600(3)(b)(i-ii).

F. Comment Letter Page 6.

The Alternatives Analysis details the consideration of both alternative sites and project configurations on the project site. Ultimately, the selected site and project configuration were the least impactful alternative that met project need and constructability criteria. A comprehensive study of site conditions has been done and reported in the above-listed studies, including the Terracon Geotech Report, the Sewall Revised Critical Areas Report, the Recommended Culvert Sizing Analyses, and the Biological Evaluation. Consistent with RCW 43.21C.240, impacts are being evaluated by several regulatory agencies under SEPA and other critical area and wetland regulations.

G. Comment Letter Pages 7-9.

The SEPA Checklist is one of many environmental documents that analyze site conditions, project impacts, and proposed mitigation. Per WAC 197-11-960, the Checklist asks applicants “to describe some basic information about your proposal.” Applicants are instructed to “[a]nswer the questions briefly, with the most precise information known, or give the best description you can.” Applicants are directed to answer each question accurately and to the best of their knowledge, in most cases, based on the applicant’s own observations or project plans, without the need to hire experts. The Checklist instructions note that the responsible official may ask for additional information to determine whether the proposal may have a significant adverse impact.

Here, the Checklist provides preliminary information about the proposal, which was supplemented by the 15 studies listed above. For mitigation purposes, all watercourses and are being treated as though they are fish-bearing and are being mitigated according. Similarly, impacts to Wetland D are being mitigated on-site to ensure that its hydrology and water quality treatment functions are maintained.

Site environmental conditions and proposed mitigation will be reviewed by several agencies including the City of Lake Stevens, Department of Ecology, Department of Fish and Wildlife, and US Army Corps. Details on wetland ratings and function are included in the Sewall Revised Critical Area Report and Sewall Wetland Mitigation Plan. Fish and fish habitat are discussed in the Biological Evaluation and Recommended Culvert Sizing Analyses.

H. Comment Letter Page 10.

The Transportation Solutions Inc. Traffic Impact Study (“TIA”) was prepared in accordance with City of Lake Stevens TIA guidelines. The TIA focused on local facilities directly impacted by the Costco project. An Intersection Control Evaluation (ICE) was prepared for the intersection of 24th Street SE/SR-9 per WSDOT requirements. WSDOT requested that the ICE focus on SR-9 north and south of the site. US-2 was not identified for analysis as it is had already been studied by WSDOT. The US-2/SR-204/20th Street SE Interchange Justification Report was completed in September 2018 and provides recommendations for improvements to address statewide and regional mobility. Commercial development of the S. Lake Stevens 20th Street Corridor Subarea was included in that analysis.

The TIA identified future LOS E/F operations at the US-2/SR-9 interchange. An addendum to the TIA identified potential mitigation to the westbound off-ramp terminal and SR-9/Bunk Foss Road intersection. The City of Lake Stevens is coordinating the improvements with WSDOT.

The TIA documented impacts to City of Lake Stevens and WSDOT facilities along with proposed mitigation including a new roundabout on SR-9 at 24th Street SE/S. Lake Stevens Road and the extension of 91st Ave SE south to 24th Street SE.