BARGHAUSEN

April 2, 2024

Chris Beale, Senior Planner
City of Puyallup
Planning Division
333 S. Meridian
Puyallup, WA 98371

RE: Responses to Preliminary Major Plat Comments for Normandy Heights
2007 Shaw Road, Puyallup, WA 98372
City of Puyallup Permit No. PLPMP20220090
Our Job No. 12663

Dear Chris:

We have revised the plans and technical documents for the above-referenced project in accordance with your comment letter dated September 28, 2022. Enclosed are the following documents for your review and approval:

1. Revised Set of Preliminary Plans dated 04/02/2024
2. Revised Stormwater Site Plan dated 04/02/2024
3. Soundview Consultants, LLC Technical Memorandum dated February 21,2024
4. Earth Solutions NW, LLC Response to Comments dated March 4, 2024
5. Email record of right-of-way dedication received from city staff, dated November 10, 2021.

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

Planning Review *– Chris Beale; (253) 841-5418; cbeale@puyallupwa.gov*

- *Deer Creek 100 foot buffer line apprx location - additional buffer area may apply to wetlands [plat markup, sheet 2]*

  Response: This area is now classified as “Tract E” and will provide space for landscaping and the detention vault.

- *Retaining walls facing the exterior of plats must meet setback and landscaping the standards of PMC 20.58.005 (2)(A) [plat markup, sheet 3]*

  Response: The plans have been revised and PMC 20.58.005 (2) is now being met on each wall.

- *Provide public ROW dedication to align with existing public ROW (apprx. 30 ft dedication). Improvements may be required as per Traffic Engineering. Pedestrian improvements required regardless of ROW improvements required. [plat markup sheet 3]*

  Response: The indicated area is now proposed to be dedicated as ROW.

- *Retaining wall must be moved interior to property line, setback and maximum heights stipulated by PMC 20.58.005 (2) - 8 ft setback from P/L, 3.5 ft max height [plat markup sheet 3]*

  Response: Retaining wall has been moved interior to property line per PMC 20.58.005 requirements.

- *Install city standard barricade and signs stating street to be extended in the future [plat markup sheet 3]*

  Response: Acknowledged. Barricade and Signs will be called out on final engineering.

- *Tract B exceeds maximum length for private road (200 ft) [plat markup, sheet 3]*

  Response: The new Tract B has been designated as a public road.

- *15 ft landscape requirement on Crystal Ridge frontage. Show call out [plat markup, sheet 3]*

  Response: 15 ft landscape buffer has been added to the plans and called out throughout the plan set.

- *Has the applicant considered applying for a planned development (PMC 20.40)? The project could receive flexibility on lot sizes and dimensions. The project appears to contain steep slope areas that contain desirable native vegetation that should be retained under LID standards and larger wetland and stream buffers that will impact the total quantity of lots.*

  Response: The project has been revised as a Planned Residential Development (PDR) and the master site plan can be found on sheet 4 of the plans.

- *The section on critical area review in the May 3, 2022 geotechnical report is incomplete. Please provide revisions and analysis of slopes and critical areas. Please note that areas of sites that exceed 40% slope are critical areas that cannot be modified if those areas are consistent with PMC 21.06.1210 (3). Also see PMC 21.06.1230 (1) regarding prohibition of 40% slope modifications. GIS and topo lines appear to show 40% slopes on site.*

  Response: Please see Earth Solutions NW Response to Comments dated March 4, 2024, included in this resubmittal.

- *Please review Confluence (the city's third party critical area consultant) peer review report. Deer Creek is classified by code as a 100' buffer stream. Additional modifications to the wetland report may also require revisions to the wetland buffer area. These changes will impact the plat layout and may impact the feasibility of lots 7 and 8.*

Response: Please see Soundview Consultants, LLC's Technical Memorandum dated February 21, 2024, included in this resubmittal.

- *Tract B exceeds length allowed for private tract roadway. This will need to be a public street. Pedestrian access shall be stubbed to P/L. See Traffic Engineering notes for further detail [plat markup, sheet 2]*

  Response: Tract B has been revised as a public ally.

- *Large areas of steeply graded and wooded portions of the site are proposed to be fully cleared and graded. PMC 19.12.020 requires principles of Low Impact Development be incorporated into the development: Low Impact Development Principles. General principles of low impact development to be reflected inany subdivision layout include:(a) Emphasizing natural resource conservation;(b) Minimizing impervious surfaces, loss of existing vegetation,and storm water runoff;(c) Incorporating any natural drainage features.Mass grading of the large, native wooded topographical featureof the site may not be consistent with this standard. Please consider a design that incorporates the retention of more of the natural grade and native trees on site; areas meeting the 40%slope critical area definition may need to be set aside by virtue ofcritical area designation. [plat markup, sheet 3]*

  Response: Critical areas have been identified and are proposed to remain undisturbed in the developed condition. Critical area tracts will be flagged in the field and protected throughout development.

- *In response to the Barghausen 20th Ave Ct SE access analysis request letter, Planning staff offers the following:*

  - *Code (PMC 19.12.060 (1)(b) states blocks on arterials should be no less than 1,000 ft 'whenever practical'. Due to the topography and grades and critical areas to the north, the next possible location for a future block length would exceed 1,000 ft. It appears more practical to provide a block length in this location, where a street intersection exists to the west.*

  - *The water easement area to be provided must be 40 ft wide, per engineering standards, and is proposed to be graded flat, thus facilitating a potential road and street intersection at this location*

  - *Lot* 11 far exceeds the minimum lot area (over 14,000 square feet proposed) and would be eliminated or rendered encumbered or less developable if a new ROW was provided to the north. Adjustments to grading and locations of walls and application of street side yard setbacks still appears to provide a comparable building area as other lots.

  - *Not all street and ROW improvements are meant to mitigate negative vehicular traffic impacts. The city's block standards are put in place to create a desired urban form and development pattern, as well as interconnected street grid, when possible.*

  Response: Acknowledged. The project has been redesigned to include the right of way dedication at the NW of the project to intersect with 20th Ave Ct SE.

Fire Review *– Ray Cockerham; (253) 841-5585; rayc@puyallupwa.gov*

- *Codes*
  - *http://www.cityofpuyallup.org/325/Permit-Support-Services*
  - *IFC 2018 Edition and the referenced standards shall be utilized.*

  Response: IFC 2018 is being utilized and applied in design.

- *Access*
  - *Per IFC 2018 Edition Appendix "D" a fire access road turnaround shall be required*

  Response: Fire Access Turnarounds are provided for both Tract B and Tract C per IFC 2018

  - *Per IFC 2018 Edition Appendix "D" a fire access road greater than 26' but less than 32' requires Fire Lane-No Parking signs on one side. Less than 26' requires signage on both sides of the street*

  Response: Acknowledged, will be addressed at final civil.

  - *The fire access road shall be asphalt or concrete*

  Response: All access roads will be asphalt.

  - *Maximum road grade shall be 10%*

  Response: Road grades do not exceed 10% on Road A, Tract B, and Tract C.

- *Fire*
  - *Install Storz fitting on hydrant*

  Response: Acknowledged. Will address at final civil.

  - *Verify fire flow a City of Puyallup Water Availability/ Fire Flow report shall be required. This can be achieved by applying for a Hydraulic Modeling/ Water Availability/ Fire Flow letter, at a fee of $400.00. Application can be made at the City Hall 2nd floor permit counter. Fire Flow letter shall be required at the time of building permit application.*

  Response: Acknowledged, a fire flow report will be applied for.

  - *City of Puyallup Municipal Code requires a minimum 1,000 GPM of fire flow. If this amount is less than the requirement, a fire sprinkler system shall be required in the new structures built in the short*

  Response: Acknowledged.

- *If the new structure has a fire area greater than 3600 sq. ft. than a fire flow of 1750 GPM shall be required.*

Response: Acknowledged.

- *Per City of Puyallup Municipal Code 16.08.070 (14), Installation of fire hydrants. Any portion of new single-family dwellings shall be within 600' from a public hydrant that is located on a fire apparatus access*

Response: Fire hydrant locations are spaced to meet this requirement.

- *Hydrant spacing of 450-500 within the right-away.*

Response: Two hydrants along Road A meet the 450' spacing requirements within the ROW.

- *Maximum road grade shell be 10%*

Response: This road grade is not exceeded on Road A, Tract B, and Tract C

- *Driveways or Tracts greater than 150' will require a Fire Truck turn-around.*

Response: Tract B and C both include a Fire Truck turn-around per IFC 2018.

Engineering Review *– Mark Higginson; (253) 841-5559; mhigginson@puyallupwa.gov*

- *The proposed project discharges to an adjacent wetland; the applicant shall provide a hydrologic analysis prior to landuse approval which ensures the wetland's hydrologic conditions, hydrophytic vegetation, and substrate characteristics are maintained. See Ecology Manual Volume I, Minimum Requirement*

  Response: Per Soundview Consultants report titled "Wetland and Fish and Wildlife Habitat Assessment Report," the wetland category and habitat score of onsite and offsite wetlands do not trigger hydroperiod analysis.

- *Clarify how the wetland hydrology is being maintained. Provide hydroperiod analysis for the adjacent wetland in accordance with the DOE Manual, MR8 and Appendix I-D.*

  Response: Per Soundview Consultants report titled "Wetland and Fish and Wildlife Habitat Assessment Report," the wetland category and habitat score of onsite and offsite wetlands do not trigger hydroperiod analysis.

- *If an easement is allowed by the City in lieu of ROW dedication, City Standards require a minimum 40-ft wide public easement. An Alternative Methods Request must be submitted and approved to allow any easement reduction. If an AMR is submitted, engineering staff cannot support the reduction request since the existing property is undeveloped and the proposed lot layout can be adjusted to accommodate the standard. [Plans; Sht 2 of 3]*

  Response: This area is being dedicated to ROW, rending this comment obsolete.

- *Callout existing Shaw Rd ROW widths. [Plans; Sht 2 of 3]*

  Response: Existing Shaw Road ROW widths are now being called out. See C2 of new plan set.

- *At time of civil application, provide signage and Type III barricade per CS 101.6 and 101.12. Plans; Sht 2 of 3]*

  Response: Acknowledged. This will be addressed during final engineering.

- *1-ft No Access Easement along Lot 1, 18, and 20 [Plans; Sht 2 of 3]*

  Response: 1-ft No Access Easement is now shown on sheet C2 of the plan set.

- *Provide Distance and Bearing. [Plans; Sht 2 of 3]*

  Response: Distance and Bearing of each line and curve are called out.

- *35-ft curb radius per Table 2 (residential to collector). [Plans; Sht 2 of 3]*

  Response: Per Table 100-2 in the City of Puyallup 2019 Roadway Design, curb radius should be 25'. Per note (6), the lower classification curb radii shall be used, as it's a collector and a residential street intersection. Plans have been revised to show a 25' curb radius.

  Per comments in the Preliminary Storm Report, additional clarification/justification is needed regarding the feasibility of permeable pavements. [Plans; Sht 2 of 3]

  Response: *Please see Earth Solutions NW Response to Comments dated March 4, 2024, included in this resubmittal.*

- *Extension line should be back of curb. [Plans; Sht 2 of 3]*

  Response: Road section has been revised.

- *Verify-Section 36? [Plans; Sht 2 of 3]*

  Response: Plans have been revised to correctly show Section 36.

- *Provide public easement for wall maintenance. [Plans; Sht 3 of 3]*

  Response: A 10' Easement for wall maintenance has been added and can be seen on sheet C2 of the plans.

- *There needs to be some accommodation to collect runoff from the regraded portion of Shaw Road to prevent erosion and undermining the existing roadway. [Plans; Sht 3 of 3]*

  Response: There is now a 4:1 graded ditch adjacent to the proposed gravel shoulder on Shaw Road E see Sheet C3 for detail.

- *At time of civil, wall height must be coordinated with City CIP project with top of wall a minimum of 1-ft above proposed Shaw Road finished grade. Pedestrian handrail/guardrail required. [Plans; Sht 3 of 3]*

  Response: Acknowledged. This will be addressed during final engineering.

- *At time of civil, maintenance road shall be mitigated for flow control and water quality. [Plans; Sht 3 of 3]*

  Response: Acknowledged. This will be addressed during final engineering.

- *At time of civil, a turning exhibit shall be provided using the City's vactor truck dimensions. [Plans; Sht 3 of 3]*

  Response: Acknowledged. This will be addressed during final engineering.

- *At time of civil, provide turnaround for City's maintenance vehicle(s). [Plans; Sht 3 of 3]*

  Response: Acknowledged. This will be addressed during final engineering.

- *At time of civil, control structure and water quality structure must be accessible to the City's vactor truck (8-ft front reach; 20-ft side reach). [Plans; Sht 3 of 3]*

  Response: Acknowledged. This will be addressed during final engineering.

- *At time of civil, maintenance access road shall comply with CS 205.2. As shown, it appears that the maximum slope is exceeded.[Plans; Sht 3 of 3]*

  Response: Acknowledged. This will be addressed during final engineering.

- *Watermain shall be setback a minimum of 10-ft from wall foundation. Maintain 10-ft (min) separation to sewer main.[Plans; Sht 3 of 3]*

  Response: Per PMC 20.58.005, the wall setback goes into the site 8’ from property line. This setback is being met.

- *Please be aware that Ecology, Vol. V, Section 4.5.3 restricts the use of flow dispersal trenches to less than 0.5cfs 100yr peak flow rates . [Plans; Sht 3 of 3]*

  Response: Acknowledged, an outfall system meeting the requirements of the Department of Ecology Stormwater Manual will be designed at final engineering.

- *Lots shall drain towards the ROW where feasible. The applicant shall provide drainage conveyance(s) to capture surface water for any lot that drains onto an adjacent lot. Captured surface water shall be discharged at a location and in such a manner as to prevent erosion. [Plans; Sht 3 of 3]*

  Response: Acknowledged, this will be fully addressed at final engineering.

- *Walls to be HOA responsibility [Plans; Sht 3 of 3]*

  Response: Acknowledged.

- *Walls over 4ft require separate building permit. [Plans; Sht 3 of 3]*

  Response: Acknowledged. Building permits will be applied for during final engineering.

- *At time of civil, concentrated runoff collected at the bottom of the wall (as well as wall footing drains) shall be properly dispersed. (typ) [Plans; Sht 3 of 3]*

  Response: Acknowledged. This will be addressed during final engineering.

- *Any necessary grading on parcels outside of the subdivision limits will require a Temporary Construction Easement from the underlying property owner. A copy of the TCE shall be provided to the City upon request. [Plans; Sht 3of 3]*

  Response: There is no proposed grading outside of subdivision limits with the exception of the Shaw Road ROW.

- *WQ facilities located downstream of detention shall be sized based on the full 2-yr release rate per Ecology. [Plans; Sht 3 of 3]*

  Response: Acknowledged, the water quality facility will be sized using the 2 year release rate.

- *Watermain to be located on the south side of centerline per CS.[Plans; Sht 3 of 3]*

  Response: Acknowledged, watermain location has been revised.

- *Sewer main to be located on the north side of centerline per CS.[Plans; Sht 3 of 3]*

  Response: Acknowledged, sewerline location has been revised.

- *Based on the contours, it appears that surface water is being concentrated along the back of sidewalk. Provide drainage swale (or other conveyance) to capture runoff prior to crossing subdivision line and discharge at an approved location; or redesign to maintain sheet flow in the post-developed condition. [Plans; Sht 3 of 3]*

  Response: This area has been revised to capture as much stormwater runoff as practical.

- *Verify-Section 36? [Plans; Sht 3 of 3]*

  Response: Acknowledged. Plans have been revised to correctly reflect section 36 corner.

- *Verify-8.2 acres per GIS and the project limits must include the converted areas of Shaw Road. [Storm Report; Pg 5 of 211*

  Response: Including the Shaw Road improvements, the total project area is 7.83 AC (Parcel Area = 7.35 AC, Shaw Road Improvements = 0.48 AC).

- *Verify-Min. Requirements 1-9? [Storm Report; Pg 12 of 211]*

  Response: Acknowledged. Minimum Requirements 1-12 are needed, see Figure 2.4.1 – Flow chart for determining requirements for new development in the SSP.

- *This section should include similar commentary to that contained in Section 5.1 regarding the site containing two subbasins and a single TDA. [Storm Report; Pg 13 of 211]*

  Response: Minimum Requirement #4 description has been revised.

- *Further clarification is needed here. It appears that the geotechnical engineer only investigated the existing native soils. The existing site is being substantially regraded and filled, up to 32ft deep. Is it not possible to construct permeable pavement(s) on the imported fill considering the Ecology Manual allows a minimum feasiblility infiltration rate of 0.3 in/hr? However, there may be other BMP infeasibility criteria outlined in the Ecology Manual that would prevent the use of permeable pavement. For example, downstream impacts associated with lateral flow, or potential erosion hazards, and/ or slope stability concerns due to infiltrated stormwater, but the current application materials do not appear sufficient to support a definitive project-wide infeasibility determination for the use of permeable pavement on the imported fill. [Storm Report; Pg 14 of 211]*

  Response: Please see Earth Solutions NW Response to Comments dated March 4, 2024, included in this resubmittal.

- *The discharge location is the upper reach of Deer Creek, a stream known to have aquatic life, so Enhanced Treatment required. [Storm Report; Pg 15 of 211]*

  Response: Acknowledged, the report has been revised to reflect this requirement.

- *Provide preliminary MR8 analysis to ensure the project will not negatively affect the existing wetland. [Storm Report; Pg 15 of 211]*

  Response: Per Soundview Consultants report titled “Wetland and Fish and Wildlife Habitat Assessment Report,” the wetland category and habitat score of onsite and offsite wetlands do not trigger hydroperiod analysis.

- *Verify-8.2 acres per GIS and the project limits must include the converted areas of Shaw Road. [Storm Report; Pg 17 of 211]*

  ***Response**:* Including the Shaw Road improvements, the total project area is 7.83 AC (Parcel Area = 7.35 AC, Shaw Road Improvements = 0.48 AC)

- *At time of civil application, clarify this section. The first sentence states that the project essentially does not receive offsite surface runoff, but the second sentence states that Shaw Road drains onto the property. Also, in the post-devloped condition, Shaw Road will no longer discharge to the property, raising concerns about maintaining the wetland hydroperiod (MR8). [Storm Report; Pg 19 of 211]*

  Response: This section has been revised and the Shaw Road improvements added to the calculations..

- *The road widening of Shaw Road (converted surface) must be included in the thresholds and accounted for in the sizing of the stormwater facilities. [Storm Report; Pg 24 of 211]*

  Response: The Shaw Road improvements are accounted for in the stormwater calculations as part of the bypass basin.

- *Should be identified on the predeveloped and post-developed basin maps. Note: the road widening should be modeled as Forest (converted surface area) in the predeveloped condition. In the post developed condition, only a portion of the public ROW is tributary to the project site due to installation of the retaining wall.[Storm Report; Pg 24 of 211]*

  Response: Has been identified on predeveloped and postdeveloped basin maps and the narrative and calculations have been revised.

- *Based on the Basin Map, it does not appear that this area includes the Shaw Road tributary area.[Storm Report; Pg 24 of 211]*

  Response: Acknowledged, this has been revised on the basin maps.

- *Clarification needed. [Storm Report; Pg 25 of 211]*

  Response: Acknowledged, narrative has been revised.

- *At time of civil application, it is likely that the Shaw Road converted surfaces will be bypassed. Also, large areas of Lots 7, 8, and 10 as well as Tract C are not captured by the onsite conveyance system and bypass the detention facility. [Storm Report; Pg 26 of 211]*

  Response: Acknowledged, narrative and WWHM calculations have been revised.

- *At time of civil application, clarify how the planter strips associated with the road sections is being accounted for. [Storm Report; Pg 26 of 211]*

  Response: Road A planter strips have been accounted for in WWHM calculations.

- *See comments, Section 4.1. [Storm Report; Pg 26 of 211]*

  Response: Acknowledged, narrative has been revised.

- *The discharge location is the upper reach of Deer Creek, a stream known to have aquatic life, so Enhanced Treatment required. [Storm Report; Pg 27 of 211]*

  Response: The report has been revised to reflect this requirement.

- *Section 5.2 references a "combined detention" facility and the Treatment Facility Selection Flow Chart (pg. 68) indicates a wetvault, but the preliminary grading plan calls out a downstream stormfilter structure. Revise accordingly.[Storm Report; Pg 27 of 211]*

  Response: The reference to “combined detention” facility has been removed as that is no longer proposed.

- *The road widening of Shaw Road (converted surface) must be included in the project thresholds and accounted for in the sizing of the stormwater facilities. [Storm Report; Pg 30 of 211]*

  Response: Acknowledged, predeveloped basin has been revised and WWHM calculations include the Shaw road improvements.

- *The road widening of Shaw Road (converted surface) must be included in the project thresholds and accounted for in the sizing of the stormwater facilities (bypass?). [Storm Report; Pg 32 of 211]*

  Response: Acknowledged, postdeveloped basin has been revised and WWHM calculations include the shaw road improvements.

- *Based on the preliminary grading plan, there are large areas of Lots 7, 8, and 10 as well as Tract C which are not captured by the onsite conveyance system and bypass the detention facility. At time of civil application, these areas shall be appropriately modeled in WWHM.[Storm Report; Pg 32 of 211]*

  Response: The site plan, storm report and WWHM calculations have been revised to include bypass areas.

- *Provide preliminary MR8 analysis to ensure the project will not negatively affect the existing wetland. [Storm Report; Pg 34 of 211]*

  Response:

- *Based on the Basin Map, it does not appear that this area includes the Shaw Road tributary area.[Storm Report; Pg 36 of 211]*

  Response: Acknowledged, calculations have been revised to include Shaw Road improvements.

- Verify-there are a number of areas on the preliminary grading plan that exceed the "flat" slope criteria (0-5%). These areas should be accounted for in the preliminary modeling. See Road A planter strips, perimeter slopes, as well as the slope areas associated with Lots 7, 8, and 10 as well as Tract C. At time of civil application, these areas shall be appropriately modeled in WWHM.[Storm Report; Pg 37 of 211]

  Response: Acknowledged, calculations have been revised to include the different sloped surface covers.

- *See comments on the Post-developed basin exhibit.[Storm Report; Pg 37 of 211]*

  Response: Acknowledged, calculations have been revised.

- *Verify-this makes no sense.[Storm Report; Pg 51 of 211]*

  Response: WWHM Calculations have been revised. This page is not applicable to the project as volume-based water quality treatment is not proposed, and the site is not meeting the LID standard.

- *See comments on the Post-developed basin exhibit.[Storm Report; Pg 54 of 211]*

  Response: Acknowledged, developed basin exhibit and WWHM calculations have been revised.

- *Clarify-Section 5.2 references a "combined detention" facility, but the preliminary grading plan calls out a downstream stormfilter structure.[Storm Report; Pg 68 of 211]*

  Response: The reference to “combined detention” facility has been removed as that is no longer proposed.

- *Further clarification is needed here. It appears that ESNW was simply informed that detention will be used rather than a geotechnical recommendation addressing the feasibility of Onsite BMPs per the Ecology Manual, Minimum Requirement 5. This sentence seems to only address the existing native soils. The existing site is being substantially regraded and filled, up to 32ft deep. Is it not possible to construct permeable pavement(s) on the imported fill considering the Ecology Manual allows a minimum feasiblility infiltration rate of 0.3 in/hr? However, there may be other BMP infeasibility criteria outlined in the Ecology Manual that would prevent the use of permeable pavement. For example, downstream impacts associated with lateral flow, or potential erosion hazards, and/ or slope stability concerns due to infiltrated stormwater, but the current application materials do not appear sufficient to support a definitive project-wide infeasibility determination for the use of permeable pavement on the imported fill. [Storm Report; Pg 78 of 211]*

  Response: Please see Earth Solutions NW Response to Comments dated March 4, 2024, included in this resubmittal.

- *No reference to Ecology Manual? [Storm Report; Pg 81 of 211]*

  Response: Please see Earth Solutions NW Response to Comments dated March 4, 2024, included in this resubmittal.

- *There are proposed fills up to 32ft deep. Provide geotechnical confirmation that the proposed fills meet the intent of this report. [Storm Report; Pg 82 of 211]*

  Response: Please see Earth Solutions NW Response to Comments dated March 4, 2024, included in this resubmittal.

- *Verify-northeast? [Storm Report; Pg 82 of 211]*

  Response: Grades decend to the northeast and northwest.

- *At time of civil application, provide geotech confirmation of slope stability at the location of the proposed stormwater facility. [Storm Report; Pg 90 of 211]*

  Response: Acknowledged, the slope stability will be verified during final engineering.

Engineering Traffic Review *– Bryan Roberts; (253) 841-5542;broberts@puyallupwa.gov*

- *General*

  Per previous comments, sight distance analysis not provided for the Crystal Ridge Driveway. 30mph (40mph design) collector requires 350ft of ESD, 325ft of SSD

  Response: A entering sight distance onto Crystal Ridge Dr. has been included as Sheet 5 of the plans.

  - *Setback 14.5ft from face of curb to evaluate ESD sight lines.*

  Response: The driver position has been set to 14.5’ from the face of curb.

  - *Identify street tree placement, monument signage, fences, berms, etc. that could obstruct sight distance.*

  Response: Trees within the sight triangles are identified on the Entering Sight Distance exhibit.

  - *Identify sight obstructions for off-site private property. Development may be required to pursue private easement to ensure clear sight lines on private property are maintained*

  Response: Acknowledged, sight lines encroach onto private property and a easement will be pursued.

Tract B exceeds 200ft maximum length per Engineering standards

Response: New Tract B is public.

Road "A" does not meet minimum CL tangent length (250ft)

Response: Per Table 100-2 in the City of Puyallup 2019 Roadway Design, tangent length for a residential road is to be 100ft. This is being met on the new Road A configuration.

Site plan needs to show driveway locations

Response: Updated plans now show proposed driveway cuts.

- *Lot 1 & Lot 20 must have their driveways at least 35ft from Crystal Ridge intersection (measured from radius PT & closest edge of driveway)*

Response: Acknowledged, this is being met.

- *Lot 11 must be at least 35ft away from future 20th Ave SE intersection.*

Response: Acknowledged, this is being met.

Driveway depth/length must allow at least 22ft from the garage to the internal access. This will ensure vehicles parking in driveways will not interfere walking path & driveway access

Response: Acknowledged, internal driveways will be shown on final civil lot plans.

Show preliminary streetlight placement locations per City standards. During civil review a separate street lighting plan and channelization plan is required for the City's review. Internal roadway and Crystal Ridge Dr will require streetlights.

Response: Acknowledged, this has been added to the plans.

Provide preliminary channelization on site plan

Response: No onsite channelization is proposed. Disturbed striping on Crystal Ridge Dr. will be replaced.

- *Main access off Crystal Ridge Dr must be positioned to allow for a WBL turn pocket (at signal) + TWLTL across proposed access*

Response: Acknowledged.

City will require 25ft ROW dedication on the north side of lot 11 to accommodate possible future connection aligned with 20th Ave.

Response: Acknowledged, this is being met.

- *The length of this ROW dedication will be approximately 170ft.*

Response: Acknowledged.

- *On the north side of lot 11, remove retaining wall from ROW.*

Response: Retaining wall is now in Lot 11 (NOW LOT 16).

- *For Arterials, intersections and driveways are required to be aligned across the street for safety reasons. When the northern parcel develops, the 25ft dedication will allow this parcel to construct a City standard roadway (50ft ROW) that will align with 20th Ave. This would also allow the north parcel to meet the City's minimum driveway spacing requirement (300ft). This spacing requirement also applies to driveways across the street.*

Response: Acknowledged, the area north of Lot 16 is being dedicated as Right of Way.

- For the 20th Ave SE connection, dedication needs to account for future 25ft radii + curb/gutter/sidewalk/planter strip at Road A and Shaw Rd.

Response: Acknowledged, the radius of the lot 16 extents have been revised to account for future road.

Shaw Rd wall design will need to provide guardrail. Show on site plan

Response: A wood fence will be installed on the property line above the Shaw Road retaining wall.

Show all locations where handrail is necessary

Response: A fence or handrail is now being shown above the exposed wall of the vault.

Type III barricade for future extended roadways (01.01.21) will be required

Response: A Type III barricade will be included at final engineering.

Ensure the existing signal cabinet has at least 3ft of paved pad round the base to provide adequate room for maintenance staff.

Response: Acknowledged, this will be fully addressed at final engineering.

Final horizonal alignment and elevations are not known at this time. North of 23rd, the future roadway section will have spiral transitions and will likely be superelevated. The continuous 10ft ROW dedication along Shaw Rd frontage likely won't capture the correct ROW alignment

Response: Acknowledged, ROW is proposed to be dedicated adjacent to 20th Ave Ct SE.

Along the Shaw Rd frontage (adjacent to lot 13) there is an angle point between curve C23 & C24. This shift in ROW/wall alignment is not acceptable.

Response: This ROW alignment was received from city staff, acting as pass through for KPG, on 10/27/2021 and was imported directly into the drawing. See relevant email chain, included in this resubmittal.

Sheet 2 of 3

If an easement is allowed by the City in lieu of ROW dedication, City Standards require a minimum 40-ft wide public easement. An Alternative Methods Request must be submitted and approved to allow any easement reduction. If an AMR is submitted, engineering staff cannot support the reduction request since the existing property is undeveloped and the proposed lot layout can be adjusted to accommodate the standard. [Plans; Sht 2 of 3]

Response: The area north of Lot 16 will be classified as ROW dedication.

At time of civil application, provide signage and Type III barricade per CS 101.6 and 101.12. Plans; Sht 2 of 3]

Response: Acknowledged, this will be addressed during final engineering.

Deer Creek 100 foot buffer line apprx location – additional buffer area may apply to wetlands [plat markup, sheet 2]

Response: This area is now classified as “Tract E” and will provide space for landscaping and the detention vault.

Provide a (paved with gravel shoulders) public ROW pathway to meet pedestrian block length requirements PMC 19.12.050 (2)(E) [plat markup, sheet 2]

Response: The project has since been redesigned.

Provide Distance and Bearing. [Plans; Sht 2 of 3]

Response: Acknowledged. Distance and Bearing are being shown for all lines and curves.

Tract B exceeds length allowed for private tract roadway. This will need to be a public street. Pedestrian access shall be stubbed to P/L. See Traffic Engineering notes for further detail [plat markup, sheet 2]

Response: New Tract B is being classified as Public.

Callout existing Shaw Rd ROW widths. [Plans; Sht 2 of 3]

Response: Acknowledged, Shaw Road ROW Widths are now being called out. See C2.

Per comments in the Preliminary Storm Report, additional clarification/justification is needed regarding the feasibility of permeable pavements. [Plans; Sht 2 of 3]

Response: Please see Earth Solutions NW Response to Comments dated March 4, 2024, included in this resubmittal.

Extension line should be back of curb. [Plans; Sht 2 of 3]

Response: Acknowledged, this has been revised.

Verify-Section 36? [Plans; Sht 2 of 3]

Response: The plans have been revised to correctly reflect the Section 36 corner.

35-ft curb radius per Table 2 (residential to collector). [Plans; Sht 2 of 3]

Response: Per Table 100-2 in the City of Puyallup 2019 Roadway Design, curb radius should be 25'. Per note (6), the lower classification curb radii shall be used, as it's a collector and a residential street intersection. Plans have been revised to show a 25' curb radius.

1-ft No Access Easement along Lot 1, 18, and 20 [Plans; Sht 2 of 3]

***Response**:* 1-ft No Access Easement is now being called out. See C2 of the plan set.

Sheet 3 of 3

Provide public ROW dedication to align with existing public ROW (apprx. 30 ft dedication). Improvements may be required as per Traffic Engineering. Pedestrian improvements required regardless of ROW improvements required. [plat markup sheet 3]

Response: ROW dedication is being provided north of Lot 16.

Retaining wall must be moved interior to property line, setback and maximum heights stipulated by PMC 20.58.005 (2) - 8 ft setback from P/L, 3.5 ft max height [plat markupsheet 3]

Response: Retaining wall has been moved interior to property line per PMC 20.58.005

Watermain shall be setback a minimum of 10-ft from wall foundation. Maintain 10-ft (min) separation to sewer main.[Plans; Sht 3 of 3]

Response: Acknowledged, this is being met.

Install city standard barricade and signs stating street to be extended in the future [plat markup sheet 3]

Response: Acknowledged. Barricade and Signs will be called out on final engineering.

At time of civil, a turning exhibit shall be provided using the City vactor truck dimensions. [Plans; Sht 3 of 3]

Response: Acknowledged. This will be addressed during final engineering.

At time of civil, control structure and water quality structure must be accessible to the City vactor truck (8-ft front reach; 20-ft side reach). [Plans; Sht 3 of 3]

Response: Acknowledged. This will be addressed during final engineering.

At time of civil, maintenance road shall be mitigated for flow control and water quality. [Plans; Sht 3 of 3]

Response: Acknowledged. This will be addressed during final engineering.

At time of civil, provide turnaround for City maintenance vehicle(s). [Plans; Sht 3 of 3]

Response: Acknowledged. This will be addressed during final engineering.

Please be aware that Ecology, Vol. V, Section 4.5.3 restricts the use of flow dispersal trenches to less than 0.5cfs 100yr peak flow rates . [Plans; Sht 3 of 3]

Response: An outfall system meeting the standards of the Department of Ecology Stormwater Management Manual will be designed at final engineering.

WQ facilities located downstream of detention shall be sized based on the full 2-yr release rate per Ecology. [Plans; Sht 3 of 3]

***Response**:* The water quality treatment facility will be sized using the full 2-yr release rate.

At time of civil, maintenance access road shall comply with CS 205.2. As shown, it appears that the maximum slope is exceeded.[Plans; Sht 3 of 3]

Response: Acknowledged. This will be addressed during final engineering.

Walls to be HOA responsibility [Plans; Sht 3 of 3]

Response: Acknowledged.

At time of civil, concentrated runoff collected at the bottom of the wall (as well as wall footing drains) shall be properly dispersed. (typ) [Plans; Sht 3 of 3]

Response: Acknowledged. This will be addressed during final engineering.

Retaining walls facing the exterior of plats must meet setback and landscaping the standards of PMC 20.58.005 (2)(A) [plat markup, sheet 3]

Response: The plans have been revised and PMC 20.58.005 (2) is now being met on all applicable walls.

Lots shall drain towards the ROW where feasible. The applicant shall provide drainage conveyance(s) to capture surface water for any lot that drains onto an adjacent lot. Captured surface water shall be discharged at a location and in such a manner as to prevent erosion. [Plans; Sht 3 of 3]

Response: *Acknowledged, this will addressed at final engineering.*

Walls over 4ft require separate building permit. [Plans; Sht 3 of 3]

***Response**:* Acknowledged. Building permits will be applied for during final engineering.

Any necessary grading on parcels outside of the subdivision limits will require a Temporary Construction Easement from the underlying property owner. A copy of the TCE shall be provided to the City upon request. [Plans; Sht 3 of 3]

Response: There is no proposed grading outside of subdivision limits apart from the Shaw Road ROW.

Watermain to be located on the south side of centerline per CS.[Plans; Sht 3 of 3]

***Response**:* Acknowledged, watermain location has been revised.

Sewer main to be located on the north side of centerline per CS.[Plans; Sht 3 of 3]

Response: Acknowledged, sewerline location has been revised.

There needs to be some accommodation to collect runoff from the regraded portion of Shaw Road to prevent erosion and undermining the existing roadway. [Plans; Sht 3 of 3]

***Response**:* There is now a 4:1 graded, ditch adjacent to the shoulder of Shaw Road E. This will collect and channel water to prevent erosion.

Provide public easement for wall maintenance. [Plans; Sht 3 of 3]

Response: *A 10'* Easement for wall maintenance has been added and can be seen on Sheet C2.

At time of civil, wall height must be coordinated with City CIP project with top of wall a minimum of 1-ft above proposed Shaw Road finished grade. Pedestrian handrail/guardrail required. [Plans; Sht 3 of 3]

Response: Acknowledged. This will be addressed during final engineering.

Large areas of steeply graded and wooded portions of the site are proposed to be fully cleared and graded. PMC 19.12.020 requires principles of Low Impact Development be incorporated into the development: Low Impact Development Principles. General principles of low impact development to be reflected in any subdivision layout include:(a) Emphasizing natural resource conservation;(b) Minimizing impervious surfaces, loss of existing vegetation,and storm water runoff;(c) Incorporating any natural drainage features.Mass grading of the large, native wooded topographical feature of the site may not be consistent with this standard. Please consider a design that incorporates the retention of more of the natural grade and native trees on site; areas meeting the 40%slope critical area definition may need to be set aside by virtue of critical area designation. [plat markup, sheet 3]

Response: Critical areas have been identified and are proposed to remain undisturbed in the developed condition. Critical area tracts will be flagged in the field and protected throughout development.

Based on the contours, it appears that surface water is being concentrated along the back of sidewalk. Provide drainage swale (or other conveyance) to capture runoff prior to crossing subdivision line and discharge at an approved location; or redesign to maintain sheet flow in the post-developed condition. [Plans; Sht 3 of 3]

Response: This area has been redesigned to capture as much stormwater runoff as practical, a small strip of unrecoverable runoff will bypass to the Shaw Rd ROW.

Verify-Section 36? [Plans; Sht 3 of 3]

Response: Plans have been revised to correctly identify the corner of Section 36.

15 ft landscape requirement on Crystal Ridge frontage. Show call out [plat markup, sheet 3]

Response: Acknowledged, this is being shown and called out on the revised plans.

We believe that the above responses, together with the enclosed revised plans and technical documents, address all of the comments in your letter dated September 28, 2022. Please review and approve the enclosed at your earliest convenience. If you have questions or need additional information, please do not hesitate to contact me at this office. Thank you.

Sincerely,

Cara Visintainer, P.E.
Senior Project Engineer

CV/kb
12663c.005.docx
enc: As Noted
cc: