



**City of Bellevue
Development Services Department
Land Use Staff Report**

Proposal Name: Residence for Lokesh Joshi and Chandra Pandey

Proposal Address: 5020 155th PL SE

Proposal Description: Critical Areas Land Use Permit review of a proposal to demolish the existing residence and construct a new, two-story, single-family residence with an attached 3-car garage. The new residence (2,963 SF) will expand beyond the footprint of the existing residence footprint (approx. 2,284 SF). The project will impact a 50-foot buffer from a steep slope.

File Number: 25-105028-LO

Applicant: Tracy Brink, McCullough Architects

Decisions Included: Critical Areas Land Use Permit
(Process II. LUC 20.30P)

Planner: Amanda Hunt, Associate Land Use Planner

**State Environmental Policy Act
Threshold Determination:** **Exempt per WAC 197-11-800 (1)**

Director's Decision: **Approval with Conditions**
Rebecca Horner, Director
Development Services Department

By: Reilly Pittman for
Antoinette Pratt, Land Use Director

Application Date: February 26, 2025
Notice of Application Publication Date: June 12, 2025
Decision Publication Date: April 29, 2026
Project Appeal Deadline: May 13, 2026

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.

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Attachments

- 1. Site Infrastructure and Building Design Plans – McCullough Architects dated February 17, 2026 and Momentum Civil dated November 11, 2025
- 2. Geotechnical Evaluation – Earth Solutions NW dated October 25, 2024
- 3. Geotechnical Evaluation (Addendum) – Earth Solutions NW dated November 19, 2025
- 4. Critical Areas Report – Altmann Oliver Associates, LLC dated May 27, 2025
- 5. Mitigation Plan - Altmann Oliver Associates, LLC dated February 18, 2026

I. Proposal Description

The applicant has requested a Critical Areas Land Use Permit to demolish the existing residence and construct a new, two-story, single-family residence. The new residence (approx. 2,963 square feet) will expand beyond the footprint of the existing residence footprint (approx. 2,284 square feet). The new home will include a 3-car garage, front yard terrace, new and replaced retaining walls, and utility improvements. The project will impact a steep slope critical area 50-foot buffer. The new residence and other residential improvements (i.e., patio, driveway) will result in 744 square feet of combined new structural and hard surface coverage in the 50-foot steep slope buffer area (see Attachment 1). No impacts to the steep slope critical area are proposed and no trees will be removed in the critical area as part of this proposal. The proposal also includes 1,499 square feet of mitigation planting and 1,221 square feet of restoration planting within the steep slope critical area and 50-foot top of slope buffer, resulting in a 1:1 impact to mitigation ratio. See Figure 1 below for the project proposal site plan and on-site critical areas.

Figure 1



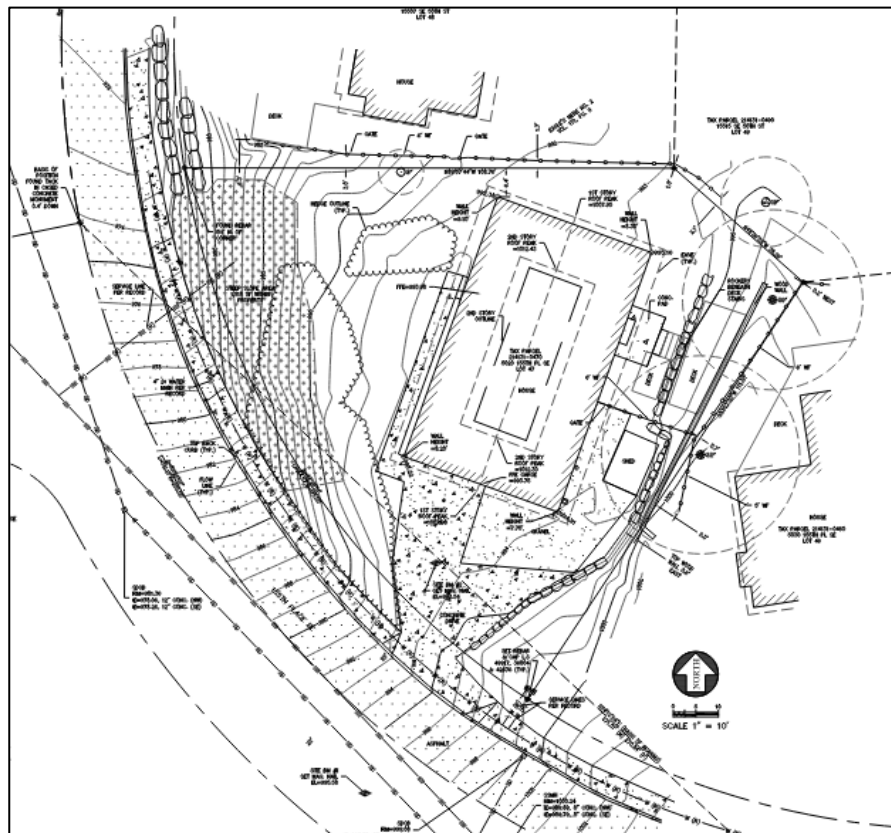
A Critical Areas Land Use Permit (CALUP) with a Critical Areas Report is required if a proposal involves development within the critical area or critical area buffer, pursuant to LUC 20.25H.115.C. Per LUC 20.25H.230, where the proposal involves restoration of degraded conditions in exchange for a reduction in regulated critical area buffer on a site, the critical areas report must demonstrate a net increase in certain critical area function. The critical areas report documents that the existing degraded ecological conditions within portions of the steep slope and buffer, and that the proposed mitigation will increase the ecological functions and values of the steep slope beyond its existing condition. Approval of a Critical Areas Land Use Permit is required for the proposed permanent impacts that will be mitigated and any temporary disturbances that will be restored.

II. Site Description, Zoning, Land Use and Critical Areas

A. Site Description

The subject parcel, 9,907 square feet (0.227 acres) in size, gains direct access from 155th PL SE. The site is within the Newcastle neighborhood subarea of Bellevue and contains a single-family residence, concrete driveway, two sheds, rockeries, and other residential improvements. These existing features will be demolished as part of the project. Each property line is also adjacent to existing single-family residential development. The steep slope critical area is surveyed along the west property line and slopes downward toward 155th PL SE. Lawn, ornamental landscaping, including ground cover and shrubbery, one significant tree, and the understory of several off-site trees exist throughout the site. The footprint of the proposed single-family residence will be developed over the existing lawn area and partially over the existing impervious surface areas. See Figure 2 for the existing site conditions.

Figure 2



B. Zoning

The property is zoned Suburban Residential (SR-2), and the new single-family residence is an allowed in this land use district per LUC 20.10.440. Additionally, the property has a Comprehensive Plan Land Use Designation of SF-M (Single Family Medium Density), and is surrounded by properties with the same comprehensive plan land use designation.

C. Critical Areas Functions and Values

i. Geologic Hazard Areas

Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial development is inappropriately sited in areas of significant hazard. Some geologic hazards can be reduced or mitigated by engineering, design, or modified construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several of Bellevue's remaining large blocks of forest are located in steep slope areas, providing habitat for a variety of wildlife species and important links between habitat areas in the City. These steep slope areas also act as conduits for groundwater, which drains from hillsides to provide a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

The SR-2 zoning dimensional requirements found in LUC 20.20.010 are reasonably met by the proposed addition, but conformance will be verified during building permit review. All setbacks, height, lot coverage by structure, and impervious surface may be required to be verified by survey through the building permit inspection process. **See Permit Related Conditions of Approval in Section IX of this report.**

R-3.5	Required/Allowed	Proposed	Complies
Front Setback	20 feet	No change	N/A
Rear Setback	25 feet/15 feet*	15 feet	Can Comply
Side Setback	5 feet	No change	N/A
Combined Side Setback	15 feet/10 feet*	10 feet	Can Comply
Lot Coverage	35%	30%***	Can Comply
Impervious Surface	45%/50%**	50%***	Can Comply
Greenscape	50%	80%	Can Comply

*Dimensional standards can be reduced per LUC 20.25H.040 when the project can demonstrate avoidance of the critical area and buffer to the maximum extent practicable.

** On sites with infeasible infiltration, proposals can utilize the alternative maximum for impervious surface coverage (50%) per LUC 20.20.010. An updated calculation shall be provided with building permit submittal.

***The proposal appears to comply with maximum lot coverage and maximum impervious surface coverage per LUC 20.20.010. An updated calculation shall be provided with building permit submittal.

B. Consistency with Land Use Code Critical Areas Performance Standards:

The City of Bellevue Land Use Code Critical Area Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area or critical area buffer. The site contains a steep slope critical area with 50-foot steep slope buffer. The project is subject to the buffer modification standards and performance standards reviewed below.

C. Consistency with 20.25H.120: Geologic Hazard Buffers – Buffer Modification

Proposed modifications to the geologic hazard critical area buffer shall be documented through a critical areas report. The project is subject to the buffer modification standards reviewed below.

1. Within the critical areas report minimum buffers for landslide hazard areas and steep slopes, may be reduced to 15 feet if a geotechnical engineer or geologist assesses the critical area and determines that the risks for instability are minimal or that the structure, neighboring properties, or waterways will not be adversely affected buffer reduction for the critical area.

The project proposes to reduce the 50-foot steep slope buffer to a 15-foot steep slope buffer. The foundation of the new residence and all other proposed structural improvements will be located outside of the 15-foot top-of-slope buffer. Per the 2024 Geotechnical Evaluation, *“Based on the presence of firm native soil and bedrock on this site, in our opinion, the buffer from the top of slopes inclined at 40 percent or greater, over 10 feet in height, may be reduced to 15 feet. This dimension would meet or exceed the height of the adjacent steep slope hazard area along the northwestern portion of the site. It is important to note that this slope was modified from the natural contours as part of the adjacent roadway construction and is not part of a larger steep slope hazard”* (see Attachment 2, page 4). The licensed geologist also states that the *“the steep slopes presents a low potential for instability on the site or adjacent properties”*. The 35-foot buffer reduction to a 15-foot buffer is acceptable by the geotechnical engineer.

The only development proposed in the 15-foot buffer is a stormwater yard drain. To utilize a gravity flow stormwater system, the drain must convey across the northern property line, turn south along the top of the steep slope critical area, and make connection with the existing storm drain in the adjacent road right-of-way. The proposal has been revised to locate the stormwater drain as far as possible from the steep slope critical area while maintaining a minimum five-foot setback from the proposed residence. Per the 2025 Geotechnical Evaluation addendum, it is the geotechnical engineer's opinion that *“the proposed storm drainage alignment will not result in increased potential instability of the adjacent steep slope hazard area and represents a best-effort approach to balance site designs with code requirements”* (see Attachment 3). The proposal adheres to the requirements of LUC 20.25H.120.B.3.A.

2. If reduction of the buffer to less than 15 feet or construction on the landslide hazard or steep slope hazard is requested then the critical area study must also include the following:

- i. Exploration(s) that provide strength data such as soil Standard Penetration Tests (SPT) or other industry accepted methods. For construction above a landslide hazard or steep slope hazard area at least one exploration must be conducted near the top of the slope or above the proposed construction area and extend at least to the elevation of the base of the landslide hazard. For sites where structures are planned at the base of a landslide hazard area at least one exploration is required to be conducted near the top of the slope or the property boundary if the hazard extends off of the property. Another exploration should be performed near the base of the landslide hazard or if the landslide hazard extends off the property the exploration should be placed near the property boundary where the hazard exists.**

Excluding only the stormwater system drain, the foundation of the new residence and all other proposed structural improvements will be located outside of the 15-foot steep slope buffer. Per the 2024 Geotechnical Evaluation Subsurface Exploration Plan, three test pits were conducted on January 23, 2025 (see Attachment 2, page 17). TP-1 and TP-2 were conducted near the top of slope, and TP-3 was conducted further away from the slope in the proposed footprint of the new residence. The proposal adheres to the requirements of LUC 20.25H.120.B.3.b.i and the critical area study standard is met.

- ii. A comprehensive study of slope stability including an analysis of proposed cuts, fills, and other site grading and construction effects where the overall minimum factor of safety for slope stability is 1.5 for static conditions and 1.1 for seismic conditions as based on current building code seismic design conditions for the post construction conditions. Additionally, a slope stability analysis of the worst case conditions during construction must also be evaluated for static conditions and show a factor of safety of 1.5 or greater. These analyses must be included in a report including soil parameters and loading conditions utilized for the analysis.**

The 2024 Geotechnical Evaluation and 2025 Geotechnical Evaluation addendum includes a comprehensive study of slope stability, including an analysis of proposed fills, soil parameters, loading conditions, and other site grading and construction effects (see Attachments 2 and 3). Per the 2024 Geotechnical Evaluation, *"a factor-of-safety- of 1.5 has been applied to the passive earth pressure and coefficient of friction values provided in this section"*. The proposal adheres to the requirements of LUC 20.25H.120.B.3.b.ii and the critical area study standard is met.

- iii. Critical areas report shall be signed and stamped by both an geotechnical engineer and geologist, or an individual with both licenses.**

The 2024 Geotechnical Evaluation is signed by a Senior Project Geologist and is signed and stamped by a licensed Associate Principal Geologist. The 2025 Geotechnical Evaluation addendum is also signed and stamped by a licensed

Associate Principal Geologist. The proposal adheres to the requirements of LUC 20.25H.120.B.3.b.iii and the critical area study standard is met.

D. Consistency with 20.25H.125: Performance Standards – Landslide Hazards and Steeps

Development within a landslide hazard, steep slope critical area, or the critical area buffers of such hazards shall incorporate the following additional performance standards in design of the development, as applicable. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function.

1. Structures and Improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;

The applicant proposes to demolish the existing 2,726 square foot residence and construct a new 2,963 square foot residence, along with other new residential improvements. The existing residence and residential improvements (i.e., driveway) currently occupy approximately 2,356 square feet of 50-foot steep slope buffer. The new residence, driveway, patio/terrace, and walkway footprint will occupy approximately 3,100 square feet of 50-foot steep slope buffer. Therefore, the project therefore only proposes approximately 744 square feet of new permeant impact in the 50-foot steep slope buffer. No permanent impacts are proposed within the steep slope critical area.

In addition, approximately 1,221 square feet of temporary impacts are also proposed in the 50-foot steep slope buffer for site grading and stormwater system installation. Temporary buffer impacts will alter existing topography to the minimum extent practicable and will be restored per the Mitigation Plan (see Attachment 5). As a result, the project will restore temporary impact areas and avoid permanent alterations to the natural contour of the steep slope critical area. This standard is met.

i. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

As noted previously, the applicant proposes utilizing areas already impacted by the existing single family residential development, including the existing walkway, driveway, and previously disturbed lawn areas. Approximately 744 square feet of steep slope buffer will be permanently impacted by the new residence footprint and other residential improvements (i.e, patio, driveway, etc.), which are orientated along the edge of the geologist recommended 15-foot slope buffer. Other than mitigation planting, no impacts to the steep slope critical area are proposed. As a result, the steep slope critical area and its existing contours have been preserved.

Additionally, the new stormwater drainage system is proposed to manage the existing and new stormwater runoff. Collection of stormwater will be directed away from the steep slope critical area and into an on-site drainage pipe, which will connect to the existing stormwater drain in the roadway of 155th PI SE. The proposed native vegetation to be planted is conducive to steep slopes, which is expected to improve stability and drainage within the steep slope critical area and the 15-foot slope buffer area (see Attachment 5). This standard is met.

ii. The proposed development shall not result in great risk or a need for increased buffers on neighboring properties;

Per the 2024 Geotechnical Evaluation, the geotechnical engineer states that the *“proposed redevelopment will not increase the risk of slope failure nor will it result in a need for increased buffers on neighboring properties”* and the *“construction of the proposed single-family residence will not increase the risk to the surrounding areas, including the existing adjacent properties to the north and south”* (see Attachment 2, pg. 5 - 6). This standard is met. **See Section IX for conditions of approval associated with geotechnical documentation, inspections, and hold harmless agreement required for construction permit approval.**

iii. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes where graded slopes would result in increased disturbance as compared to use of retaining walls;

No freestanding rockeries or retaining walls are proposed within the steep slope critical area. Per the 2024 Geotechnical Evaluation, the geotechnical engineer states the *“slope is comprised of dense glacially consolidated soils and bedrock and is stable in the current configuration and condition. Provided construction techniques conform to local standards, construction of the driveway realignment will not increase the potential for instability”* (see Attachment 2, pg. 6). This standard is met.

iv. Development shall be designated to minimize impervious surfaces within the critical area and critical area buffer.

No impervious surfaces are proposed within the steep slope critical area. Approximately 744 square feet of 50-foot steep slope buffer will be impacted by the new residence footprint and other residential improvements, which are orientated along the edge of the geologist recommended 15-foot steep slope buffer. Disturbance within the 15-foot buffer will not include new impervious surfaces, only grading and temporary excavation for driveway realignment and stormwater line installation. This standard is met.

v. Where change in grade outside the building footprint is necessary, the site retention system should be stepped and regrading should be designed to minimize topographic modification. On slopes in excess of 40 percent, grading for yard area may be disallowed where inconsistent with this criteria;

Minor grading and temporary excavation for driveway realignment and stormwater line installation are proposed outside of the building footprint. These grading and temporary excavation activities will be located within the geologist recommended 15-foot slope buffer, which is also the residence’s proposed front yard area. The topographic modification proposed outside of the building footprint will therefore be minimal and will not impact the topographic condition of the steep slope. This standard is met.

vi. Building foundation walls shall be utilized as retaining walls rather than rockeries or retaining structures built separately and away from the building wherever feasible. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundations.

As stated above, no freestanding rockeries or retaining walls are proposed within the steep slope critical area or the geologist recommended 15-foot buffer. Two long retaining walls (under 30-inches) are proposed along the proposed front yard patio and

the eastern wall of the residence. The front wall will help support the proposed patio area. The eastern wall will support the driveway realignment and the building foundation near the east side yard area. The proposed new residence will utilize building foundation walls as the primary retention system (see Attachment 2, pg. 7). The building foundation walls will also be located outside of the geologist recommended 15-foot slope buffer. This standard is met.

- vii. On slopes in excess of 40 percent, use of pole-type construction which conforms to the existing topography is required where feasible. If pole-type construction is not technically feasible, the structure must be tiered to conform to the existing topography and to minimize topographic modification;**

As described above, the proposed building foundation walls will be located outside of the geologist recommended 15-foot slope buffer, and the steep slope critical area. Per the 2025 Geotechnical Evaluation, the geotechnical engineer states, “*ESNW anticipates the residence will utilize a cast-in-place foundation wall in its construction. This configuration will be utilized to conform to the existing topography to the extent feasible*” (see Attachment 2, pg. 7). No topographic modification in the steep slope critical area is proposed. This standard is met.

- viii. On slopes in excess of 40 percent, piled deck support structures are required where technically feasible for parking or garages over fill-based construction types; and**

No piled deck support structures for parking or the garage are proposed, and no topographic modification in the steep slope critical area is proposed. This standard is met.

- ix. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.**

The project proposes 1,388 square feet of permanent impact and 1,221 square feet of temporary impact in the 50-foot steep slope buffer (see Attachment 5). Subtracting the buffer area currently covered by the existing residence and improvements, the new residence and improvements will only create approximately 744 square feet of new structural and hard surface coverage in the 50-foot steep slope buffer. None of the new hardscape area will be located in the geologist recommended 15-foot steep slope buffer.

Permanent impact mitigation includes 1,107 square feet of combined native vegetation enhancement, and invasive species and impervious surface removal in the steep slope critical area. Temporary impact mitigation includes 1,221 square feet of native vegetation enhancement within the 15-foot steep slope buffer. Total plantings for the project include a mix of 10 trees and 779 native groundcovers and shrubs (see Attachment 5). The 744 square foot new permanent disturbance area will be mitigated at a ratio of one-to-one, meeting the requirements of LUC 20.25H.210. **See Section IX for condition of approval associated with temporary restoration and mitigation plans required for construction permit approval.**

IV. Public Notice and Comment

Application Date:	February 26, 2025
Public Notice (500 feet):	June 12, 2025
Minimum Comment Period:	June 26, 2025

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on June 12, 2025. It was mailed to property owners within 500 feet of the project site. Eleven public comments were received at the writing of this staff report discussing nine key concerns and one comment from the president of the Horizon Crest Community Association. The president of the Horizon Crest Community Association has acknowledged the applicants have “effectively communicated with this neighborhood organization when it comes to demonstrating that their proposed residence construction project meets the established Horizon Crest CC&R stipulations when it comes to setbacks and number of floors”. The nine key concerns and the Department’s responses to public comments are summarized below:

1. View Impacts: The height of the proposed building may impact the surrounding neighbor’s current views of Seattle and Lake Washington, and property values.

City Staff Response: Impacts to views, view corridors, and property values, are not regulated by the City of Bellevue. The project site is in the SR-2 zoning district and is regulated by LUC 20.20.010. Per LUC 20.20.010, single family residential development has a pitched roof height limitation of 35-feet, as measured from Average Existing Grade. The proposed height of the new residence is 34.58’, as measured from Average Existing Grade, and therefore is compliant with development regulations contained within LUC 20.20.010.

Building height, and other regulated dimensional standards will be reviewed and verified during the construction permit review. All setbacks, height, lot coverage by structure, and impervious surface may be required to be verified by survey through the building permit inspection process. **See Single Family Building Permit Required Condition of Approval in Section IX of this report.**

2. Building Setbacks: It appears the proposed residence does not meet the City’s established setback requirements.

City Staff Response: Residential development located in a critical area or critical buffer is regulated by LUC 20.25H.040. Per LUC 20.25H.040, dimensional standards can be reduced when the project demonstrates avoidance of the critical area and buffer to the maximum extent practicable. The applicant has located the proposed residence footprint to completely avoid the critical area and only partially impact the critical area buffer, avoiding the buffer to the maximum extent practicable. The project’s proposed 15-foot rear yard setback and 5-foot side yard setbacks are therefore compliant with development regulations contained within LUC 20.25H.040 and LUC 20.20.010.

Building setbacks, and other regulated dimensional standards will be reviewed and verified during the construction permit review. All setbacks, height, lot coverage by structure, and impervious surface may be required to be verified by survey through the

building permit inspection process. **See Single Family Building Permit Required Condition of Approval in Section IX of this report.**

3. **Building Size:** The house size is sufficiently larger than the size of current adjacent homes, and if constructed, it will not be consistent with the character of the neighborhood.

City Staff Response: Residential development in the SR-2 zoning district is regulated by LUC 20.20.010. Per LUC 20.20.010, single family development has a maximum lot coverage limit of 35% and a maximum impervious surface limit of 45%, or 50% when on-site infiltration is infeasible. The project is proposing 30% lot coverage and 50% impervious surface, due to site infiltration infeasibility. Therefore size of the proposed project is in compliance with the zoning code, standards, and regulation for LUC 20.20.010 in the SR-2 zoning district.

Lot coverage, impervious surface, and other regulated dimensional standards will be reviewed and verified during the construction permit review. All setbacks, height, lot coverage by structure, and impervious surface may be required to be verified by survey through the building permit inspection process. **See Single Family Building Permit Required Condition of Approval in Section IX of this report.**

4. **Stormwater Runoff & Landslide/Erosion Risk:** Some properties located south of the subject site have reportedly experienced flooding and heavy stormwater runoff in the past. There have also been reports of cracks in the roadway, which have raised concerns of the road stormwater drain's ability to manage surface water on the street before it flows downhill. There are also concerns regarding erosion, water runoff, and soil movement that may result from the construction activity, vegetation removal, or long term structural changes.

City Staff Response: The project shall adhere to the geologist recommended 15-foot buffer from the top of the slope. No disturbance to the on-site steep slope critical area is proposed, and no permanent disturbance to the 15-foot buffer is proposed. As discussed in Section III of this report, a licensed geotechnical engineer has confirmed the project meets the safety and engineering standards for building near the steep slope critical area. Specifically, the geologist has stated "the proposed single-family residence will not increase the geologic hazard threat to adjacent properties and will not adversely impact other critical areas" (see Attachment 2). A letter from the geotechnical engineer stating that the plans conform to the recommendations in the geotechnical report and any addendums and supplements must be submitted to the clearing and grading section prior to issuance of the construction permit. **See Geotechnical Review and Geotechnical Monitoring Conditions of Approval in Section IX of this report.**

Based on the geologist's field observations and understanding of the local geologic setting, it is their opinion that the final design (under anticipated conditions) can be certified as safe, and that the project's ability to capture and convey stormwater away from the adjacent slope is critical as on-site infiltration is not recommended. As stated in Section III of this report, the collection of stormwater will be directed away from the steep slope critical area and into an on-site drainage pipe, which will connect to the existing stormwater drain in the roadway of 155th PI SE. The proposed native vegetation to be

planted is also expected also to improve stability and drainage within the steep slope critical area and the 15-foot slope buffer area (see Attachment 5).

5. Long Term Monitoring and Mitigation Measures: Long-term monitoring and mitigation measures should be included in the approval process if the permit is granted.

City Staff Response: As discussed in Section VIII of this report below, a Mitigation Plan and Monitoring Program has been prepared for the proposed temporary and permanent impacts in the critical area buffer (see Attachment 5). Competition of the Mitigation Plan and Monitoring Program will offset the temporary and permanent impacts, improve ecological conditions, and increase habitat value in the steep slope critical area. The plan includes performance standards and provides a five-year monitoring program to ensure successful installation. A cost estimate is required to be submitted under the future building permit for the cost of installation and five years of maintenance and monitoring. A maintenance surety will be required at 100 percent of the cost of maintaining and monitoring growth and health of the plants, including materials and labor. **See Mitigation and Monitoring Related Condition of Approval in Section IX of this report.**

6. Disruptions during Construction: There are concerns for disruptions in the neighborhood caused by the proposal residential construction.

City Staff Response: While construction noise is expected during the construction period, the updated Bellevue Noise Control Ordinance, Chapter 9.18 BCC, regulates hours of construction-related noise emanating from the site. The Ordinance provides for an exemption from the noise restrictions related to repair, addition or maintenance projects on existing single-family homes for the hours of 7:00 a.m. to 8:00 p.m. on weekdays and 9:00 a.m. to 8:00 p.m. on weekends. Operation of heavy equipment is limited to 7:00 a.m. to 6:00 p.m. on weekdays and 9:00 a.m. and 6:00 p.m. on Saturdays and prohibited on Sundays and other legal holidays. Allowed hours of construction noise will be conditioned through the building permit process. **See Single Family Building Permit Required Condition of Approval in Section IX of this report.**

7. Neighborhood Regulations: The project does not appear to be consistent with the intent of the neighborhood codes, covenants, and restrictions (CC&R).

City Staff Response: The City of Bellevue does not enforce or regulate private covenants, conditions, and/or restrictions. As discussed in Section III of this report, the project has demonstrated compliance with all applicable dimensional standards (i.e., height, setbacks, coverage, etc.) required in the SR-2 zoning district. The project is therefore compliant with City of Bellevue residential development standards. Building dimensional standards will be reviewed and verified during the construction permit. **See Single Family Building Permit Required Condition of Approval in Section IX of this report.**

8. Zoning: The project does not appear to comply with City zoning rules.

City Staff Response: The subject property is zoned SR-2. Per Chart 20.10.440 of LUC 20.10.440, "One to Four Dwelling Units per Lot" are an allowed use in the SR-2 zoning district. The project proposals one new single-family residence, and is therefore compliant with the allowed uses of the SR-2 zoning district. The proposal also complies with the zoning dimensional standards in LUC 20.20 or as allowed under LUC 20.25H as discussed previously in this report.

9. Neighborhood Subarea: The subject property is located in the City of Bellevue, not the City of Newcastle.

City Staff Response: The subject property is located in the City of Bellevue, however the property is located in the Newcastle Subarea of Bellevue. The Newcastle Subarea is near the City of Newcastle but is within the City of Bellevue boundaries.

V. Summary of Technical Reviews

- A. Clearing and Grading:** The Clearing and Grading section of the Development Services Department has reviewed the proposed site development for compliance with clearing and grading codes and standards. The clearing and grading staff have approved the application with conditions regarding geotechnical review of the final construction plans, monitoring during construction, and rainy season restrictions. **See Geotechnical Permit and Rainy Season Restriction Related Conditions of Approval in Section IX of this report.**
- B. Utilities:** The design review application has been reviewed, and no further utility revisions are needed at this time. The Utility Department approval of the administrative design review is based on the conceptual utility design only. This conceptual review of the proposal has no implied approvals of the engineering design and specifications. Changes to the site layout may be required to accommodate the utilities.

VI. Changes to Proposal Due to Staff Review

No changes to the project proposal were made as of writing this staff report.

VII. Decision Criteria

A. 20.25H.255.B Critical Areas Report Decision Criteria

The Director may approve, or approve with modifications, a proposal to reduce the regulated critical area buffer on a site where the applicant demonstrates:

- 1. The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in overall critical area or critical area buffer functions;**

Finding: The steep slope critical area and 50-foot steep slope buffer contain primarily lawn, ornamental shrubs, perennials plant species, a rockery, and existing single-family development. The proposed new single-family residence and other residential improvements (i.e., patio, driveway) are to be located in areas previously disturbed by the

construction of the existing residence and previously installed landscaping, which are within the 50-foot steep slope buffer. The applicant's critical areas report found that the resulting site design will increase the overall habitat value of the property by increasing the plant species and structural diversity within the steep slope critical area and buffer. The applicant also proposes to increase the quality of preserved habitat and enhance the degraded portions of steep slope critical area by removing any invasive plant species. This criterion is met.

2. The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in the most important critical area or critical area buffer functions to the ecosystem in which they exist;

Finding: The proposed Mitigation Plan and Monitoring Program will result in an overall net gain in critical area functions to the ecosystem by increasing plant species and structural diversity of the critical area and the overall site. The applicant proposes to mitigate and enhance the critical area ecological functions with 1,107 square feet of combined native vegetation enhancement and invasive species and impervious surface removal in the steep slope critical area. This criterion is met.

3. The proposal includes a net gain in stormwater quality function by the critical area buffer or by elements of the development proposal outside of the reduced regulated critical area buffer;

Finding: The proposal includes a Temporary Erosion and Sediment Control Plan that meets City of Bellevue and Washington State Department of Ecology (DOE) stormwater collection standards (see Attachment 1). Additionally, the proposed native plantings will improve stormwater functions within the steep slope and steep slope buffer, allowing filtration of stormwater and helping to remove pollutants from stormwater on the slope. Overall, a net gain in stormwater quality function is proposed. This criterion is met.

4. Adequate resources to ensure completion of any required restoration, mitigation and monitoring efforts;

Finding: A Mitigation Plan and Monitoring Program has been prepared for the proposed temporary and permanent impacts in the on-site critical area buffer (see Attachment 5). The proposed mitigation includes 1,107 square feet of combined native vegetation enhancement and invasive species and impervious surface removal in the steep slope critical area. Temporary impact mitigation includes 1,221 square feet of native vegetation enhancement within the 15-foot steep slope buffer. Completion of the Mitigation Plan and Monitoring Program will offset the temporary and permanent impacts, improve ecological conditions, and increase habitat value in the steep slope critical area.

The plan includes performance standards and provides a five-year monitoring program to ensure successful installation. A cost estimate is required to be submitted under the future building permit for the cost of installation and five years of maintenance and monitoring. A maintenance surety will be required at 100 percent of the cost of maintaining and monitoring growth and health of the plants, including materials and labor. **See Mitigation and Monitoring Related Condition of Approval in Section IX of this report.**

5. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and

Finding: The applicant's critical areas report found that the steep slope critical area and 50-foot steep slope buffer has limited habitat function and does not have a specific habitat for an individual species of local importance (see Attachment 4). The project proposal will not exceed 744 square feet of new permanent impact to the 50-foot steep slope buffer, and will increase the overall habitat value and diversity of native plant species within the steep slope critical area and buffer. The geotechnical engineering report also found that the proposed residence will not impact slope stability on-site or on adjacent properties if the recommendations of the geotechnical engineering report are followed. The modifications and performance standards therefore will not have a detrimental effect on critical areas on-site and buffers off-site. This criterion is met.

6. The resulting development is compatible with other uses and development in the same land use district.

Finding: The proposal to construct a new 2,963 square foot single family residence and other residential improvements (i.e, patio, driveway) on a site zoned for single-family residential maintains consistency with the surrounding residential land use district. This criterion is met.

B. 20.30P.140 Critical Area Land Use Permit Decision Criteria – Decision Criteria

The Director may approve, or approve with modifications an application for a Critical Area Land Use Permit if:

1. The proposal obtains all other permits required by the Land Use Code;

Finding: The applicant must submit any other required construction permits. **See Single Family Building Permit Required Condition of Approval in Section IX of this report.**

2. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;

Finding: The proposed new single family residence and associated residential improvements (i.e, patio, driveway) will be partially located in an previously disturbed area in the 50-foot steep slope buffer, where it will replace disturbed lawn area and the existing single family residence and driveway. The proposal will only impact the previously disturbed portions of the 50-foot steep slope buffer and will provide new native vegetation and invasive plant species removal within the steep slope critical area. The purpose of the critical area regulations in LUC 20.25H is to protect critical area function and value while still allowing reasonable development to occur. The proposed project results in a site that can be expected to retain existing habitat functions and improve upon them through the planting of native vegetation and removal of invasive plant species, while allowing development and usable areas for the property owners.

3. **The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and ;**

Finding: As discussed in Section III of this report, the performance standards of LUC 20.25H are being met.

4. **The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;**

Finding: The proposed activity will be served by existing and adequate public facilities.

5. **The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and**

Finding: A Mitigation Plan and Monitoring Program has been submitted (see Attachment 5). A maintenance surety will be required to ensure plant survival over the 5-year monitoring period. The maintenance surety will be based on a cost estimate of maintenance costs. **See Mitigation Related Conditions of Approval in Section IX of this report.**

6. **The proposal complies with other applicable requirements of this code.**

As discussed in this report, the proposal complies with all other applicable requirements of the Land Use Code.

VIII. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the Critical Areas Land Use Permit to impact a 50-foot steep slope buffer to demolish an existing single family residence and construct a 2,963 square footage new single family residence with other residential improvements (i.e., driveway, patio) located at 5020 155th PL SE Bellevue, WA 98006. **Approval of this Critical Areas Land Use Permit does not constitute a permit for construction. A building permit is required and all plans are subject to review for compliance with applicable City of Bellevue codes and standards.**

Note - Expiration of Critical Area Permit Approval: In accordance with LUC 20.30P.150, a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a building permit or other necessary development permits within one year of the effective date of the approval.

IX. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code- BCC 23.76	Arturo Chi, 425-452-4119
Utilities Code – BCC 24	Rose Vogt, 425-452-2757
Land Use Code- BCC Title 20	Amanda Hunt, 425-229-6545

The following conditions are imposed under the Bellevue City Code referenced:

- 1. Single Family Building Permit Required:** Approval of this Critical Areas Land Use Permit does not constitute an approval of any development permit. An application for a single family building permit, including clearing & grading review, must be submitted and approved before construction can begin. Plans submitted as part of any permit application shall be consistent with the activity permitted under this approval.

Authority: Land Use Code 20.30P.140, Clearing & Grading Code 23.76.035
Reviewer: Amanda Hunt, Land Use; Art Chi, Clearing & Grading

- 2. Geotechnical Review:** The project geotechnical engineer must review the final plans, including all foundation, retaining wall, shoring, and vault designs. A letter from the geotechnical stating that the plans conform to the recommendations in the geotechnical report and any addendums and supplements must be submitted to the clearing and grading section prior to issuance of the construction permit.

Authority: Clearing & Grading Code 23.76.050
Reviewer: Art Chi, Clearing & Grading

- 3. Geotechnical Monitoring:** The project geotechnical engineer of record or his representative must be on site during critical earthwork operations. The geotechnical engineer shall observe all excavations and fill areas. In addition, the engineer shall monitor the soil cuts prior to construction of rockeries and verify compaction in fill areas. The engineer must submit field report in writing to the DSD inspector for soils verification and foundation construction. All earthwork must be in general conformance with the recommendations in the geotechnical report.

Authority: Bellevue City Code 23.76.160
Reviewer: Art Chi, Clearing & Grading

- 4. Rainy Season Restrictions:** No clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation control measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093
Reviewer: Art Chi, Clearing & Grading

- 5. Mitigation Planting:** The proposed mitigation planting shown on the submitted mitigation planting plan is required to be installed. The planting plan is required to be submitted as part of the building permit application. All permanent and temporary disturbance is required to be mitigated and/or restored. The plans submitted with the building permit shall depict the extent of construction disturbance and provide mitigation and restoration.

Authority: Land Use Code 20.30P.140
Reviewer: Amanda Hunt, Land Use

- 6. Planting Cost Estimate:** A cost estimate is required to be submitted prior to building permit issuance for the costs to install, maintain, and monitor the planting for five years.

Authority: Land Use Code 20.30P.140

Reviewer: Amanda Hunt, Land Use

7. **Maintenance Surety:** In order to ensure the mitigation is successfully established, a maintenance surety is required for an amount equal to 100 percent of the cost estimate. The surety shall be held for a period of five years from the date of successful installation. The maintenance assurance device will be released to the applicant upon receipt of documentation of reporting successful establishment in compliance with the performance standards.

Authority: Land Use Code 20.30P.140

Reviewer: Amanda Hunt, Land Use

8. **Mitigation Maintenance & Monitoring:** The mitigation planting area shall be maintained and monitored for five (5) years as required by LUC 20.25H.220. An annual monitoring report is to be submitted to Development Services, Land Use Division in each of the five consecutive years following installation. The monitoring report shall include detailed information regarding the goals and standards outlined in the approved management plan. Photos from selected photo points shall be included in the monitoring reports to document the planting and ongoing success. Annual monitoring reports are to be submitted to Land Use each of the five years. The reports, along with a copy of the planting plan, can be sent to Amanda Hunt at AHunt@bellevuewa.gov or to the address below:

Environmental Planning Manager
Development Services
Department City of Bellevue
PO Box 90012
Bellevue, WA 98009-9012

Authority: Land Use Code 20.30P.140; 20.25H.220

Reviewer: Amanda Hunt, Land Use

9. **Hold Harmless Agreement:** The applicant shall submit a hold harmless agreement in a form approved by the City Attorney which releases the City from liability for any damage arising from the location of improvements within a critical area, critical area buffer, and critical area structure setback in accordance with LUC 20.30P.170. The hold harmless agreement is required to be recorded with King County prior to clearing and grading permit issuance. Staff will provide the applicant with the hold harmless form.

Authority: Land Use Code 20.30P.170

Reviewer: Amanda Hunt, Land Use

10. **Land Use Inspection Required:** Inspection of mitigation planting must be completed by the Land Use Planner or Clear and Grade Inspector as part of the building permit inspection process. A Land Use inspection will be added to the building permit.

Authority: Land Use Code 20.25H.210

Reviewer: Amanda Hunt, Land Use

<u>HEATED AREA</u>	
MAIN LEVEL HEATED AREA:	2,163 S.F.
UPPER LEVEL HEATED AREA:	2,199 S.F.
TOTAL HEATED AREA:	4,362 S.F.
GARAGE AREA:	750 S.F.
TERRACE AREA:	812 S.F.
ROOF DECK AREA:	233 S.F.

<u>F.A.R.</u>	
MAIN LEVEL GROSS AREA:	2,782 S.F.
UPPER LEVEL GROSS AREA:	2,161 S.F.
TOTAL GROSS AREA PROPOSED: (49.9% LOT AREA)	4,943 S.F.
ALLOWED GROSS FAR AREA: (50% LOT AREA)	4,953 S.F.
REFER TO SHEET A1.1 FOR CALCULATION DIAGRAMS	

1520 - 155TH PL SE, BELLEVUE WA 98006	
SITE DATA	
TPN	214131-0470
QSTR	NE-23-24N-5E
ZONING	SR-2
LOT AREA	9,907± sq.ft.
	0.227 ACRES
FRONT SETBACK	20'
REAR SETBACK (MODIFIED)	15'
SIDE SETBACK	5'
TWO SIDE SETBACK (MODIFIED)	10'
CRITICAL AREAS - STEEP SLOPES	
TOP OF SLOPE - BUFFER (PER GEOTECH REPORT)	15'
TOP OF SLOPE - STRUCTURE SETBACK	0'
LOT COVERAGE ALLOWED (35%)	3,467 sq. ft.
LOT COVERAGE PROPOSED (33.74%) 30%	2,963 sq. ft.
HARD SURFACE ALLOWED (75%)	7,430 sq. ft.
HARD SURFACE PROPOSED (48.74%)	4,829 sq. ft.
GREENSCAPE MIN. TO PROVIDE (50% FRONT YARD)	(0.5)2,694 sq. ft. =1,347 sq. ft.
GREENSCAPE PROPOSED (80%)	2,162 sq. ft.
SITE MAPPED AS INFILTRATION INFEASIBILITY AREA	
ALTERNATIVE IMPERVIOUS SURFACE ALLOWED (50%)	4,954 sq. ft.
IMPERVIOUS SURFACE PROPOSED (49.58%)	4,912 sq. ft.
MAX. BUILDING HEIGHT (FLAT/RIDGE)	30/35 ft.
AVE. EXIST. GRADE (CALC.)	EL. 992.96'
MAX. ALLOWED BLDG. HT.(RIDGE)/35 FT.	EL. 1027.96'
PROPOSED BUILDING HEIGHT/34.58 FT.	EL. 1027.54'

LEGAL DESCRIPTION:
LOT 47, EAGLE'S MERE NO. 2, ACCORDING TO THE PLAT THEREOF
RECORDED IN VOLUME 101 OF PLATS, PAGE 9, RECORDS OF KING
COUNTY, WASHINGTON.

AVERAGE EXISTING GRADE CALCULATION

	ELEVATION POINT POINT	ELEVATION
A	1	988.4
B	2	990.5
C	3	991.4
D	4	992.25
E	5	992.25
F	6	992.5
G	7	992.7
H	8	993.2
I	9	993.2
J	10	993.5
K	11	993.5
L	12	993.5
M	13	996
N	14	994.2
O	15	993.75
P	16	994
Q	17	994
R	18	993.5
S	19	993.75
T	20	993.75
U	21	993.75
V	22	993.75
W	23	993.75
X	24	993.25
Y	25	992.5
Z	26	991.75
AA	27	991.25

20.20.900 TREE RETENSION AND REPLACEMENT

MIN. TREE CREDITS REQUIRED (PER ARBORIST REPORT)
 TREE CANOPY SITE AREA= 9,907 S.F. - 6167 S.F.= 3,740 S.F.
 3,740 S.F. / 1000 (2)= 8 REQ'D. TREE CREDITS

PRE-DEVELOPMENT ON-SITE CREDITS= 6.0

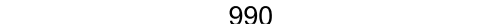
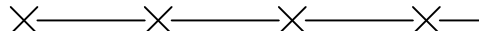
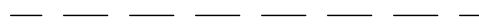
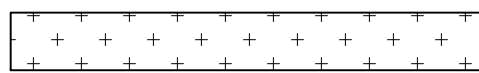
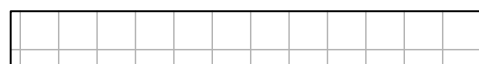
CREDITS PROPOSED FOR REMOVAL= 0.0

CREDITS RETAINED= 6.0

REQUIRED SUPPLEMENTAL TREE CREDITS= 2.0

GEODETIC DATUM

GARAGE SLAB (FRONT)= EL. 996.00'
MAIN SUBFLOOR LEVEL= EL. 996.33'
UPPER SUBFLOOR LEVEL= EL. 1008.38'
MAX. PROPOSED ROOF HEIGHT= EL. 1027.54'

<u>SITE PLAN KEY</u>	
PROPERTY LINE	
SETBACK / BUFFER	
EXISTING TOPO. (M.J.R.)	
EXISTING TOPO. (MNR.)	
PROPOSED TOPO.	
LIMITS OF DISTURBANCE	
TREE PROTECTION FENCING	
STRUCTURE (DEMO)	
EDGE OF PAVING	
LINE OF STRUCTURE	
LINE OF ROOF O.H.	
CRITICAL AREA	
CONCRETE PAVING	
SAND SET PAVERS	

DRAINAGE STRUCTURES
(PER CIVIL PLANS)

A.D.	AREA DRAIN
C.B.	CATCHBASIN
C.O.	CLEANOUT
D.S.	DOWNSPOUT
Y.D.	YARD DRAIN

5601 - 6th Ave South, #317
Seattle, WA. 98108
206.443.1181
mccullougharchitects.com

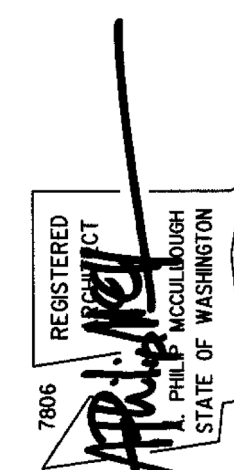
UNPUBLISHED WORK 2024 ☺ McCullough Architects

Revisions	Comment
12/01/2025	RESPONSE
02/17/26	RESPONSE

2025.02.18
24-005

Date:
Job No:
Project No:
Drawn:
Approved:

Owner
Lokesh Joshi



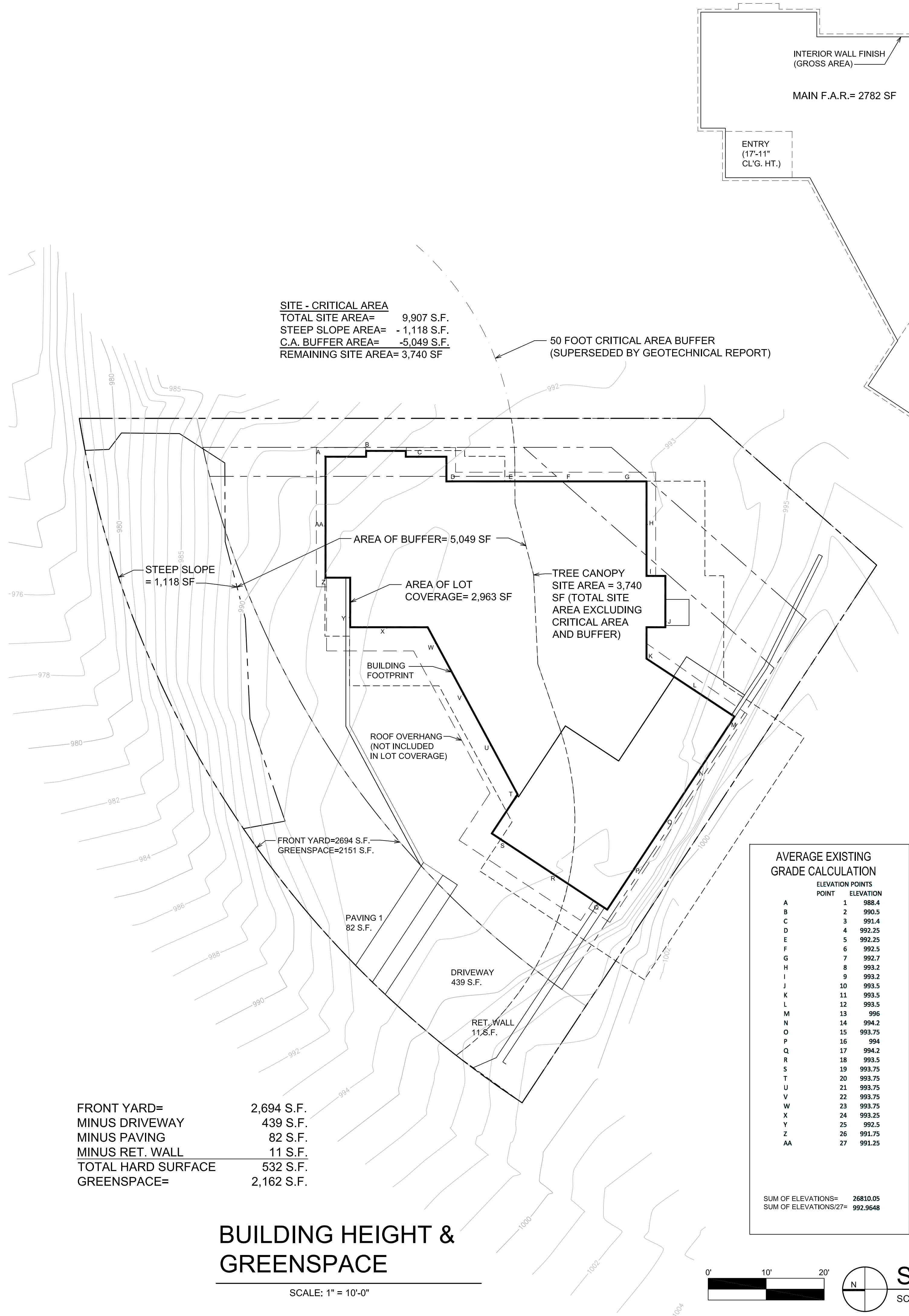
5020 155th PL S.E.

Bellevue
Washington
98008

CALUP RESPONSE

Site Plan

A1.0



SITE - CRITICAL AREA
TOTAL SITE AREA= 9,907 S.F.
STEEP SLOPE AREA= - 1,118 S.F.
C.A. BUFFER AREA= -5,049 S.F.
REMAINING SITE AREA= 3,740 SF

50 FOOT CRITICAL AREA BUFFER
(SUPERSEDED BY GEOTECHNICAL REPORT)

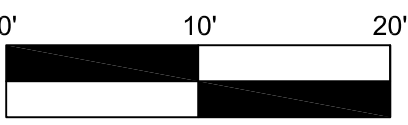
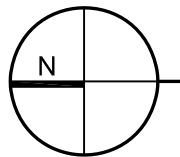
AVERAGE EXISTING GRADE CALCULATION		
	ELEVATION POINT	ELEVATION
A	1	988.4
B	2	990.5
C	3	991.4
D	4	992.25
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I	9	993.2
J	10	993.5
K	11	993.5
L	12	993.5
M	13	996
N	14	994.2
O	15	993.75
P	16	994
Q	17	994.2
R	18	993.5
S	19	993.75
T	20	993.75
U	21	993.75
V	22	993.75
W	23	993.75
X	24	993.25
Y	25	992.5
Z	26	991.75
AA	27	991.25

SUM OF ELEVATIONS=

26810.05

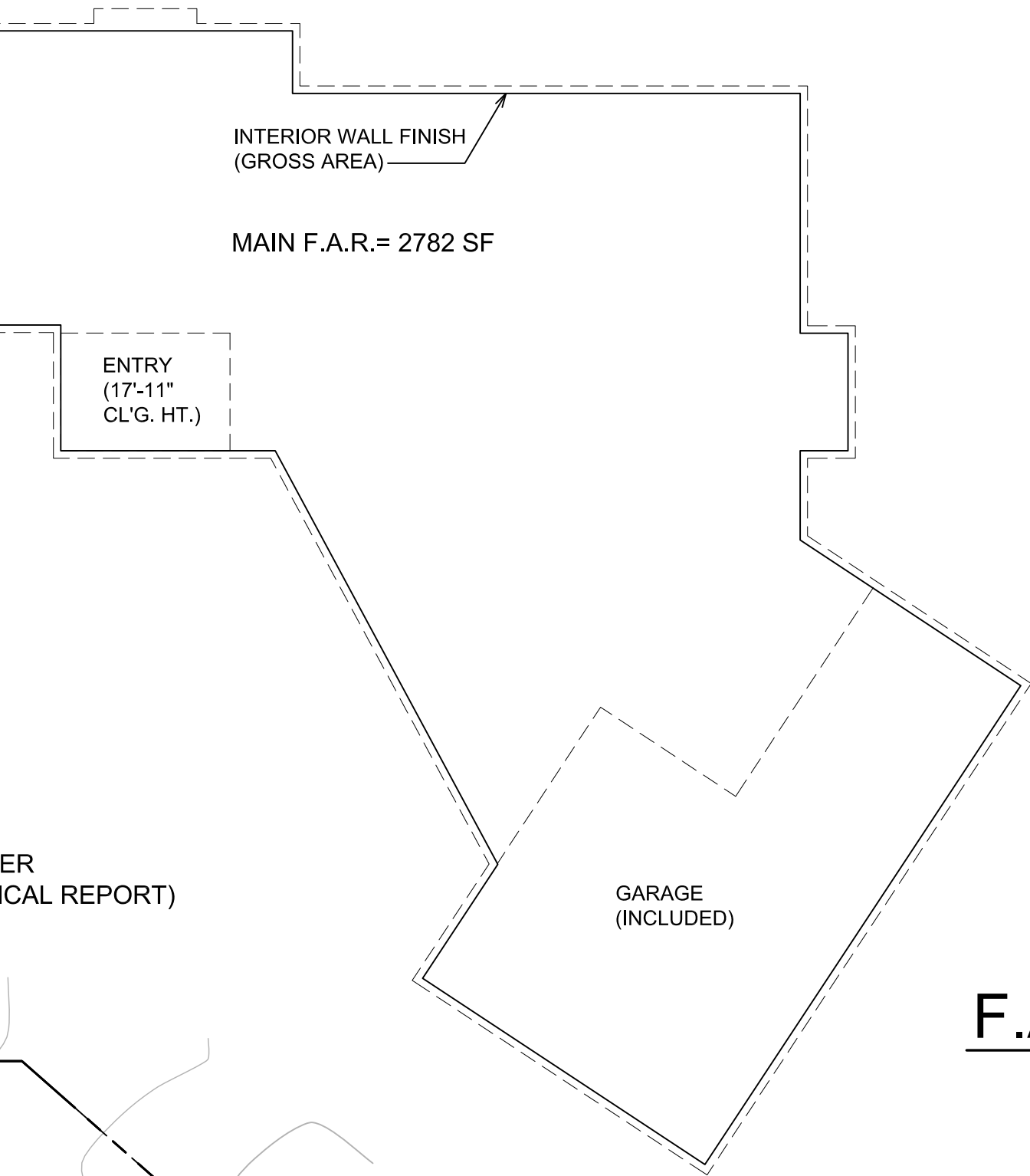
SUM OF ELEVATIONS/27=

992.9648



SITE CALCULATIONS

SCALE: 1" = 10'-0"



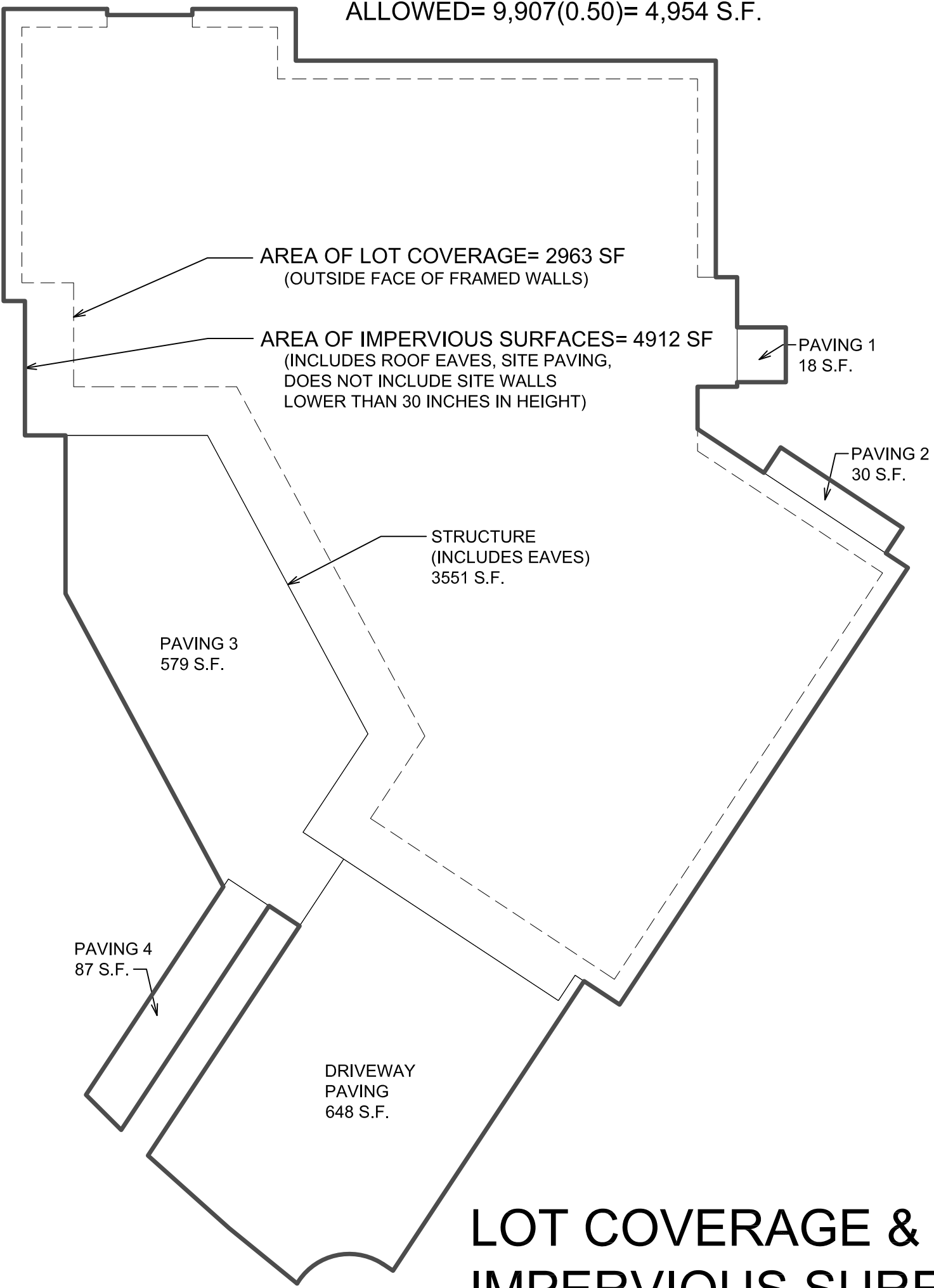
F.A.R. CALCULATION

SCALE: 1" = 10'-0"

PROPOSED IMPERVIOUS SURFACES:

STRUCTURE=	3551 S.F.
PAVING 1=	18 S.F.
PAVING 2=	30 S.F.
PAVING 3=	579 S.F.
PAVING 4=	87 S.F.
DRIVEWAY=	648 S.F.
TOTAL PROPOSED=	4,912 S.F.

ALLOWED= 9,907(0.50)= 4,954 S.F.



LOT COVERAGE & IMPERVIOUS SURFACES

SCALE: 1" = 10'-0"

DEFINITIONS

BUILDING HEIGHT – SINGLE-FAMILY USES IN SINGLE-FAMILY LAND USE DISTRICTS . THE VERTICAL DISTANCE MEASURED FROM THE AVERAGE ELEVATION OF THE EXISTING GRADE AROUND THE BUILDING TO THE HIGHEST POINT OF A FLAT ROOF, OR TO THE RIDGE OF A PITCHED ROOF.

FLOOR AREA RATIO (FAR) – SINGLE-FAMILY DWELLING. A MEASURE OF DEVELOPMENT INTENSITY EQUAL TO THE GROSS FLOOR AREA DIVIDED BY NET ON-SITE LAND AREA (SQUARE FEET), INCLUDED IN THE CALCULATION OF GROSS FLOOR AREA IS THE FLOOR AREA OF THE GROUND FLOOR PLUS THAT OF ANY ADDITIONAL STORIES OF ALL BUILDINGS ON THE LOT, INCLUDING ACCESSORY STRUCTURES, HIGH-VOLUME SPACES – 18 FEET OR GREATER IN HEIGHT – ARE COUNTED TWICE. EXCLUDED IN THE CALCULATION OF GROSS FLOOR AREA IS THE FLOOR AREA OR PARTIALLY EXPOSED LOWER LEVELS THAT ARE LESS THAN FIVE FEET ABOVE FINISHED GRADE, ATTIC AREAS WHICH ARE UNFINISHED AND NONHABITABLE, AND CARPORTS, PORCHES, AND DECKS THAT ARE OPEN ON AT LEAST TWO SIDES. SEE ALSO LUC 20.20.010, NOTE (43).

GREENSCAPE. ALL LIVING PLANT, TREE, HEDGE, AND SHRUB MATERIAL. HARDSCAPE MATERIALS, WHETHER PERVIOUS OR IMPERVIOUS BY DESIGN, SHALL NOT BE CONSIDERED GREENSCAPE.

HARD SURFACE. AN IMPERVIOUS SURFACE, PERMEABLE PAVEMENT, OR A VEGETATED ROOF.

IMPERVIOUS SURFACE. ANY STRUCTURE OR OTHER NONVEGETATED SURFACE AFFIXED TO THE GROUND THAT PREVENTS OR RETARDS THE ENTRY OF WATER INTO THE SOIL LAYER, OR THAT CAUSES WATER TO RUN OFF THE SURFACE IN GREATER QUANTITIES OR AT AN INCREASED RATE OF FLOW FROM THE FLOW RATE PRIOR TO ADDITION OF SUCH SURFACE. "IMPERVIOUS SURFACES" INCLUDE, WITHOUT LIMITATION: STRUCTURES, INCLUDING EAVES; VEHICULAR, BICYCLE, PEDESTRIAN OR OTHER CIRCULATION FACILITIES CONSTRUCTED OF SOLID SURFACES, INCLUDING PAVEMENT, CONCRETE, U GROUTED BRICK OR STONE; SOLID DECKS, PATIOS, SPORT COURTS, SWIMMING POOLS, HOT TUBS AND SIMILAR RECREATION FACILITIES; AND LANDSCAPE FEATURES, INCLUDING SHEDS, ARBORS, AND PLAY STRUCTURES.

LOT COVERAGE. THE PERCENTAGE OF A LOT WHICH IS BUILT UPON SUBJECT TO THE EXCLUSIONS LISTED IN LUC 20.20.012 AND THE EXCEPTIONS CONTAINED IN THE DIMENSIONAL REQUIREMENT CHART CONTAINED IN LUC 20.20.010.

LOT COVERAGE IS CALCULATED AFTER SUBTRACTING ALL CRITICAL AREAS AND STREAM CRITICAL AREA BUFFERS; PROVIDED, THAT COAL MINE HAZARDS (LUC 20.25H.130), HABITAT ASSOCIATED WITH SPECIES OF LOCAL IMPORTANCE (LUC 20.25H.150), AND SEISMIC HAZARDS (LUC 20.25H.120.A.4) SHALL NOT BE SUBTRACTED.

STEEP SLOPES. SLOPES OF 40 PERCENT OR MORE THAT HAVE A RISE OF AT LEAST 10 FEET AND EXCEED 1,000 SQUARE FEET IN AREA.

STRUCTURE. A COMBINATION OF MATERIALS CONSTRUCTED AND ERECTED PERMANENTLY ON OR UNDER THE GROUND OR ATTACHED TO SOMETHING HAVING A PERMANENT LOCATION ON OR UNDER THE GROUND. NOT INCLUDED ARE RESIDENTIAL FENCES, RETAINING WALLS LESS THAN 30 INCHES IN HEIGHT, ROCKERIES LESS THAN 30 INCHES IN HEIGHT AND SIMILAR IMPROVEMENTS OF A MINOR CHARACTER.

Comment
RESPONSE

Revisions
12/01/2025
02/17/26

Date:
2025.02.18

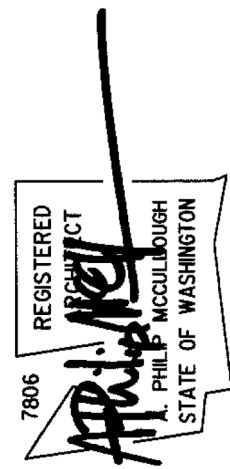
Job No:
24-005

Project No:

Drawn:

Approved:

Owner
Lokesh Joshi



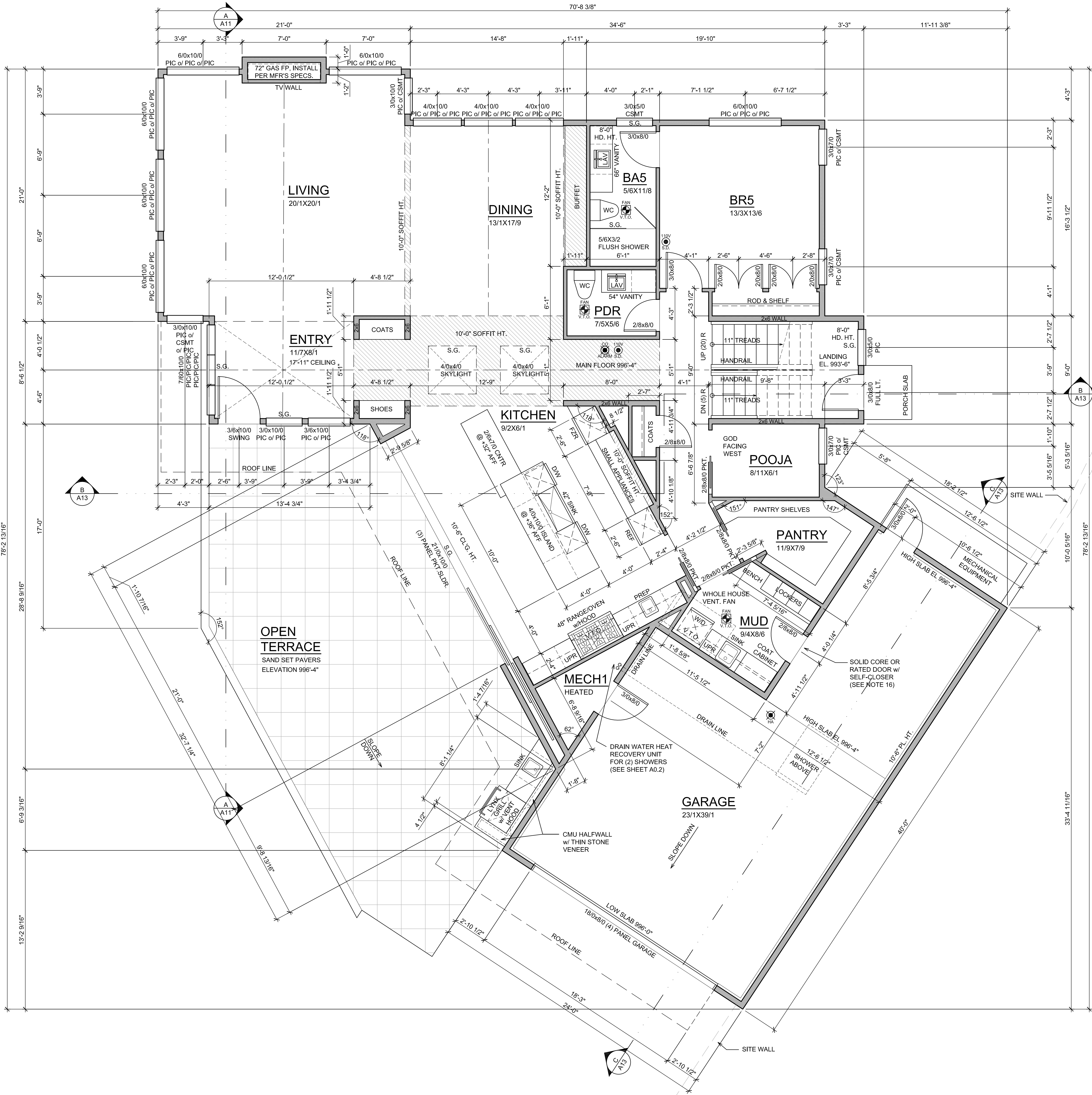
5020 155th PL S.E.

Bellevue
Washington
98008

CALUP RESPONSE

Site Plan

A1.1



- GENERAL NOTES:
- PLATE HEIGHT @ MAIN FLOOR IS 11'-1", U.N.O.
 - DIMENSION LINES ARE TO FACE OF STUD U.N.O.
 - WINDOW SIZES & ROUGH OPENINGS TO BE VERIFIED BY CONTRACTOR.
 - WINDOW HEAD HEIGHT AT MAIN FLOOR IS 10'-0" ABOVE SUBFLOOR, U.N.O. IF NOMINAL DOOR AND WINDOW HEIGHTS ARE SIMILAR, COORDINATE WITH DOOR AND WINDOW SPEC'S TO LOCATE FINAL ELEVATION OF THE HEAD HEIGHTS SO THAT ALL DOOR AND WINDOW TRIM ALIGN.
 - WINDOW AND DOOR SIZES ARE DIMENSIONED IN FEET AND INCHES (E.G. 2/8-2/8= 2'-8"W x 2'-8"H)
 - EXTERIOR WALLS TO BE 2x6 STUDS AT 16" o.c., INTERIOR WALLS TO BE 2x4 STUDS AT 16" o.c., U.N.O.
 - FIREBLOCK ALL PLUMBING PENETRATIONS AND STAIR RUNS PER I.R.C. SEC. R302.11.
 - SAFETY GLAZING PER I.R.C. SEC. R308.4.
 - ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED PER I.R.C. SEC. R317.1.
 - PER I.R.C. SEC. R311.7.5, MAX. RISER HEIGHT SHALL BE 7'-3/4", MIN. TREAD DEPTH SHALL BE 10". STAIR NOSINGS: 3/4" MIN., 1-1/4" MAX. RADIUS @ LEADING EDGE OF TREAD: 9/16" MAX.
 - PROVIDE HANDRAILS PER I.R.C. SEC. R311.7.8. TOP OF HANDRAIL SHALL BE NOT LESS THAN 34" OR MORE THAN 38" ABOVE THE TREAD NOSINGS. HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE FLIGHT PER R311.7.8.2. THE HANDRAIL GRIP-SIZE SHALL BE PROVIDED PER R311.7.8.3.
 - PROVIDE GUARDS (MIN. 36" HEIGHT) IN LOCATIONS PER I.R.C. SEC. R312.
 - INTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE TO ILLUMINATE THE LANDINGS AND TREADS. THE LIGHT SOURCE SHALL BE CAPABLE OF ILLUMINATING TREADS AND LANDINGS TO LEVELS OF NOT LESS THAN 1 FOOTCANDLE AS MEASURED AT THE CENTER OF TREADS AND LANDINGS. THERE SHALL BE A WALL SWITCH AT EACH FLOOR LEVEL TO CONTROL THE LIGHT SOURCE WHERE THE STAIRWAY HAS SIX OR MORE RISERS. EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED AT THE TOP LANDING OF THE STAIRWAY.
 - FACTORY BUILT FIREPLACES & CHIMNEYS SHALL BE LISTED & LABELED AND SHALL BE INSTALLED & TERMINATED IN ACCORDANCE TO THE CONDITIONS OF THE LISTINGS.
 - PROVIDE EXTERIOR AIR SUPPLY TO ANY FACTORY-BUILT FIREPLACE PER I.R.C. SEC. R1006.
 - PROVIDE (1) LAYER OF 1/2" G.W.B. AT THE GARAGE SIDE OF ALL WALLS SEPARATING THE GARAGE FROM THE RESIDENCE. ALL WALLS SUPPORTING A FLOOR CEILING ASSEMBLY BETWEEN THE GARAGE AND RESIDENCE, AND BETWEEN THE GARAGE AND ITS ATTIC. PROVIDE (1) LAYER 5/8" TYPE 'X' G.W.B. TO GARAGE CEILING IF BELOW HABITABLE ROOMS.
 - HOUSE/GARAGE DOOR SHALL BE 1-3/8" THICK WOOD SOLID CORE, OR 1-3/8" THICK SOLID OR HONEYCOMB CORE STEEL DOOR, OR 20-MINUTE RATED FIRE DOOR. PROVIDE SELF-CLOSING DEVICE.
 - WHOLE HOUSE VENTILATION TO BE PROVIDED PER 2018 MECHANICAL CODE, CHAPTER 4, SECTION 403.4 (SEE COVER SHEET A0.1)
 - HEAT ALARMS SHALL BE INSTALLED IN NEW GARAGES THAT ARE ATTACHED TO OR LOCATED UNDER NEW AND EXISTING DWELLINGS. HEAT ALARMS SHALL BE CONNECTED TO AN ALARM OR A SMOKE ALARM THAT IS INSTALLED IN THE DWELLING PER 2018 WASHINGTON STATE ADMENDMENTS IRC R314.2.3

- PLAN KEY:
- 110V S.D. INDICATES 110V SMOKE DET. PER I.R.C. 315.4 INTERCONNECTED W/ EMERGENCY BATTERY BACKUP
 - CO INDICATES CARBON MONOXIDE ALARM PER I.R.C. R315.1
 - HA INDICATES HEAT ALARM ALARM PER IRC R314.2.3
 - FAN V.T.O. INDICATES EXHAUST VENTILATION FAN PER COVER SHEET.
 - S.G. INDICATES SAFETY GLAZING REQUIRED PER IRC SEC. R308.4
 - PIC INDICATES PICTURE WINDOW
 - CSMT INDICATES CASEMENT WINDOW
 - V.T.O. VENT TO OUTSIDE

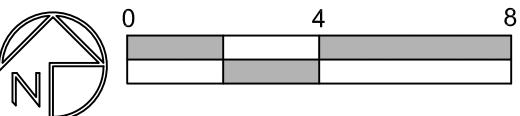
- M.E.P. NOTES:
- PROVIDE AN AIR-SOURCED, CENTRALLY DUCTED GAS HEAT PUMP w/ MIN. HSPF OF 9.5.
 - WSEC SIMPLE HEATING SYSTEM SIZE: 78,560 BTU / HR MAX. HEAT EQUIPMENT OUTPUT.
 - PROVIDE AIR INTAKE AT MECHANICAL ROOM CEILING.
 - WHERE MAKEUP AIR IS REQUIRED BY SECTION M1503.6 THE DAMPER SHALL BE A GRAVITY DAMPER OR AN ELECTRICALLY OPERATED DAMPER THAT AUTOMATICALLY OPENS WHEN THE EXHAUST SYSTEM OPERATES. DAMPERS SHALL BE LOCATED TO ALLOW ACCESS FOR INSPECTION, SERVICE, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION OR ANY OTHER DUCTS NOT CONNECTED TO THE DAMPER BEING INSPECTED, SERVICED, REPAIRED OR REPLACED.
 - KITCHEN EXHAUST HOODS EXCEEDING 400 CFM SHALL BE PROVIDED WITH MAKEUP AIR FROM THE SAME ROOM PER 2018 IRC SECTION M1503.6

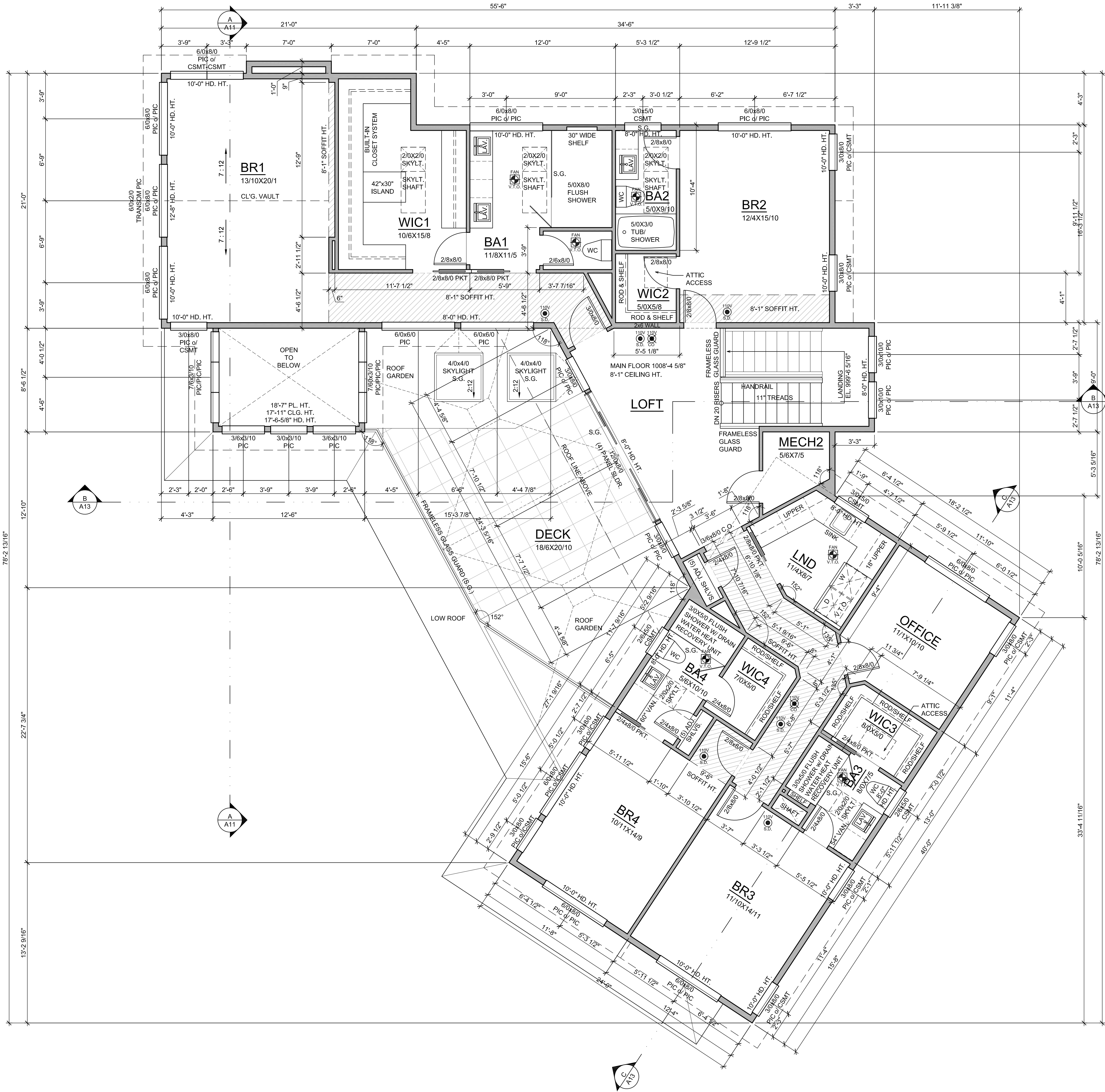
HEATED AREA	
MAIN LEVEL HEATED AREA:	2,163 S.F.
UPPER LEVEL HEATED AREA:	2,199 S.F.
TOTAL HEATED AREA:	4,362 S.F.
GARAGE AREA:	750 S.F.
TERRACE AREA:	812 S.F.
ROOF DECK AREA:	233 S.F.

F.A.R.	
MAIN LEVEL GROSS AREA:	2,782 S.F.
UPPER LEVEL GROSS AREA:	2,161 S.F.
TOTAL GROSS AREA:	4,943 S.F.
ALLOWED GROSS FAR AREA:	4,953 S.F.

MAIN FLOOR PLAN

SCALE: 1/4" = 1'-0"



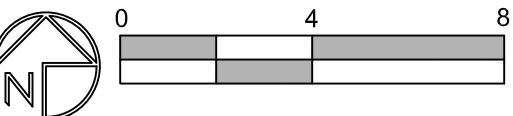
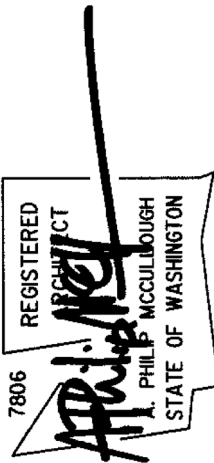


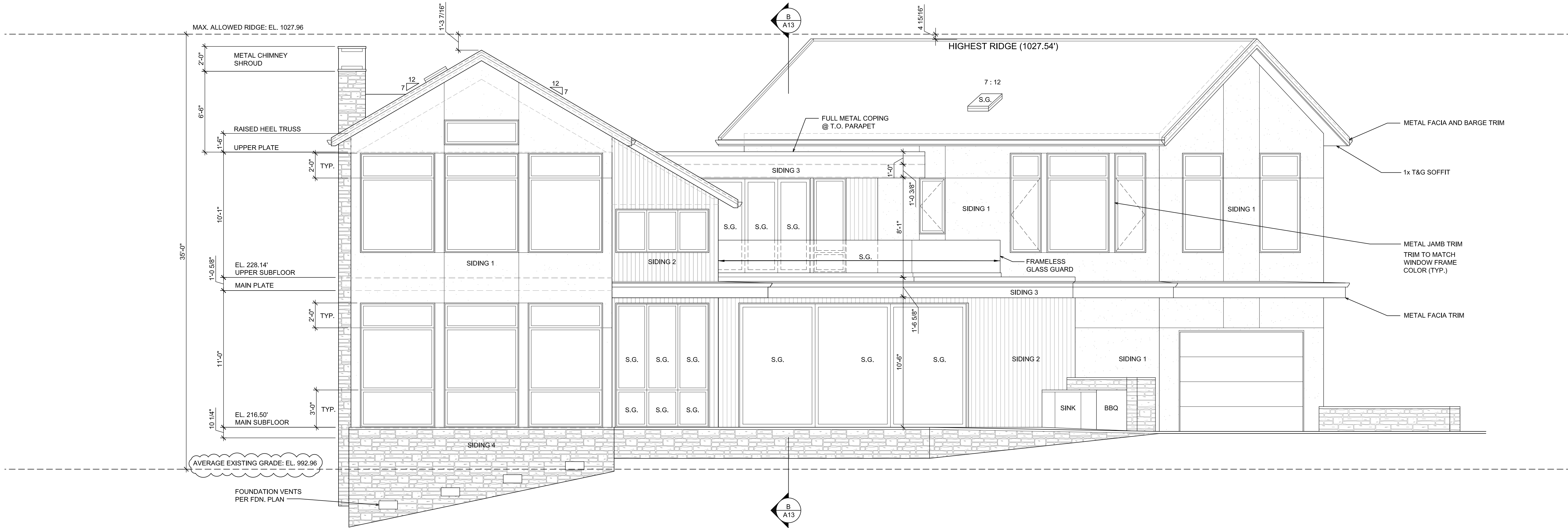
- GENERAL NOTES:
- PLATE HEIGHT @ UPPER FLOOR IS 10'-1", U.N.O.
 - DIMENSION LINES ARE TO FACE OF STUD U.N.O.
 - WINDOW SIZES & ROUGH OPENINGS TO BE VERIFIED BY CONTRACTOR.
 - WINDOW HEAD HEIGHT AT UPPER FLOOR IS 10'-0" ABOVE SUBFLOOR, U.N.O. IF NOMINAL DOOR AND WINDOW HEIGHTS ARE SIMILAR, COORDINATE WITH DOOR AND WINDOW SPECS TO LOCATE FINAL ELEVATION OF THE HEAD HEIGHTS SO THAT ALL DOOR AND WINDOW TRIM ALIGN.
 - WINDOW AND DOOR SIZES ARE DIMENSIONED IN FEET AND INCHES (E.G. 2/8-2/8= 2'-8"W x 2'-8"H)
 - EXTERIOR WALLS TO BE 2x6 STUDS AT 16" o.c., INTERIOR WALLS TO BE 2x4 STUDS AT 16" o.c., U.N.O.
 - FIREBLOCK ALL PLUMBING PENETRATIONS AND STAIR RUNS PER I.R.C. SEC. R302.11.
 - PROVIDE SAFETY GLAZING AT HAZARDOUS LOCATIONS PER I.R.C. SEC. R308.4.
 - PER I.R.C. SEC R311.7.5. MAX. RISER HEIGHT SHALL BE 7-3/4", MIN. TREAD DEPTH SHALL BE 10". STAIR NOSINGS: 3/4" MIN., 1-1/4" MAX. RADIUS @ LEADING EDGE OF TREAD: 9/16" MAX.
 - PROVIDE HANDRAILS PER I.R.C. SEC. R311.7.8. TOP OF HANDRAIL SHALL BE NOT LESS THAN 34" OR MORE THAN 38" ABOVE THE TREAD NOSINGS. HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE FLIGHT PER R311.7.8.2. THE HANDRAIL GRIP-SIZE SHALL BE PROVIDED PER R311.7.8.3.
 - PROVIDE GUARDS (MIN. 36" HEIGHT) IN LOCATIONS PER I.R.C. SEC. R312.
 - FACTORY BUILT FIREPLACES & CHIMNEYS SHALL BE LISTED & LABELED AND SHALL BE INSTALLED & TERMINATED IN ACCORDANCE TO THE CONDITIONS OF THE LISTINGS.
 - PROVIDE EXTERIOR AIR SUPPLY TO ANY FACTORY-BUILT FIREPLACE PER I.R.C. SEC R1006.

- PLAN KEY:
- 110V S.D. INDICATES 110V SMOKE DET. PER I.R.C. 313.4 INTERCONNECTED W/ EMERGENCY BATTERY BACKUP
 - 110V CO INDICATES CARBON MONOXIDE ALARM PER I.R.C. R315.1
 - FAN V.T.O. INDICATES EXHAUST VENTILATION FAN PER COVER SHEET.
 - S.G. INDICATES SAFETY GLAZING REQUIRED PER IRC SEC. R308.4
 - PIC INDICATES PICTURE WINDOW
 - CSMT INDICATES CASEMENT WINDOW
 - V.T.O. VENT TO OUTSIDE

UPPER FLOOR PLAN

SCALE: 1/4" = 1'-0"





WEST (FRONT) ELEVATION

SCALE: 1/4" = 1'-0"

TYPICAL EXTERIOR FINISH MATERIALS

TYPICAL SLOPED ROOF:
RAISED SEEM METAL ROOF
COLOR: TBD (DARK)

GUTTERS & DOWNSPOUTS:
4" CONT. METAL GUTTER
3"x4" REC. METAL DOWNSPOUT
COLOR: TBD (DARK)

WINDOWS & PATIO SLIDERS:
METAL CLAD FRAMES w/ INSUL. GLASS
OPERATION AS INDICATED
COLOR: TBD (DARK)

WINDOW / DOOR & TRIM:
METAL JAMB INFILL
COLOR: MATCH WINDOW FRAME

TERRACE WALLS:
PRECAST CONCRETE CAP
THIN STONE VENEER (MEDIUM)

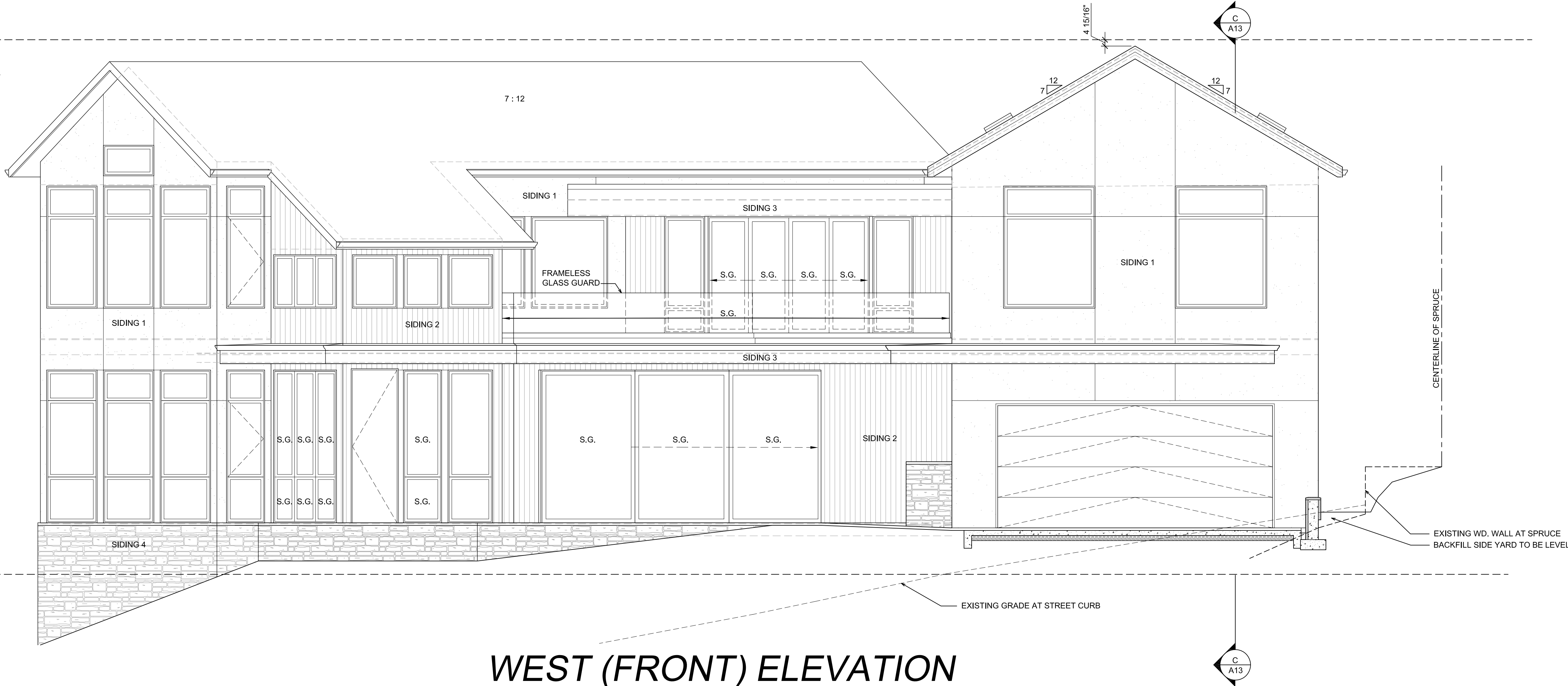
EAVE & PORCH & SOFFIT:
1x T&G CEDAR
COLOR: TBD (MATCH SIDING 2)

SIDING SYSTEM (1):
3-COAT STUCCO SYSTEM
o/ DRAINAGE MAT
COLOR: TBD (LIGHT)

SIDING SYSTEM (2):
1x T&G CEDAR (VERTICAL)
RAINSREEN SYSTEM
COLOR: TBD (MEDIUM)

SIDING SYSTEM (3):
PANEL SIDING
RAINSREEN SYSTEM
COLOR: TBD (MEDIUM)

SIDING SYSTEM (4):
THIN STONE VENEER
PRE-CAST CONC. WALL CAP
STYLE: TBD
COLOR: TBD (MEDIUM)



WEST (FRONT) ELEVATION

SCALE: 1/4" = 1'-0"

McCULLOUGH
ARCHITECTS

5601 - 8th Ave South, #317
Seattle, WA, 98108
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mccullougharchitects.com

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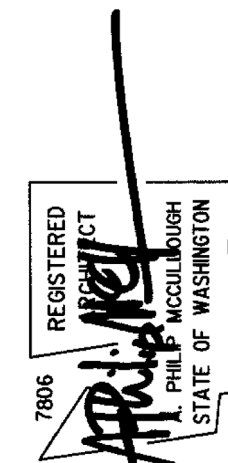
Comment
RESPONSE
RESPONSE

Revisions
12.01.25
02/17/26

2025.02.18
24-005

Date:
Job No:
Project No:
Drawn:
Approved:

Owner
Lokesh Joshi



5020 155th PL S.E.

Bellevue
Washington
98008

CALUP RESPONSE

Elevations

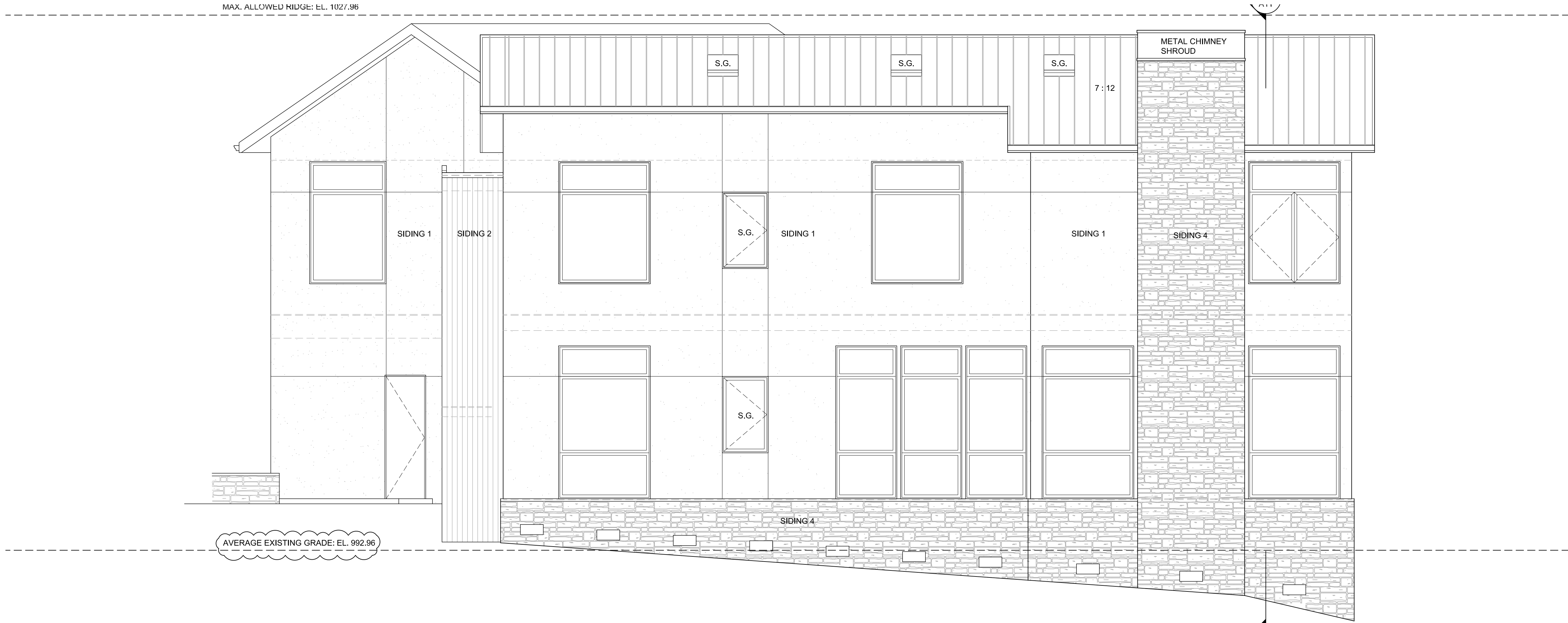
A9



NORTH (SIDE-REAR) ELEVATION

SCALE: 1/4" = 1'-0"

MAX. ALLOWED RIDGE: EL. 1027.96



AVERAGE EXISTING GRADE: EL. 992.96

NORTH (SIDE) ELEVATION

SCALE: 1/4" = 1'-0"

McCULLOUGH
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Seattle, WA, 98108
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Revisions
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RESPONSE
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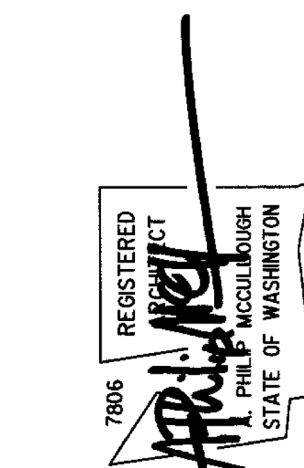
Project No:
24-005

Drawn:
24-005

Approved:
24-005

Owner:
Lokesh Joshi

Owner:
Lokesh Joshi



5020 155th PL S.E.

Bellevue
Washington
98008

CALUP RESPONSE

Elevations

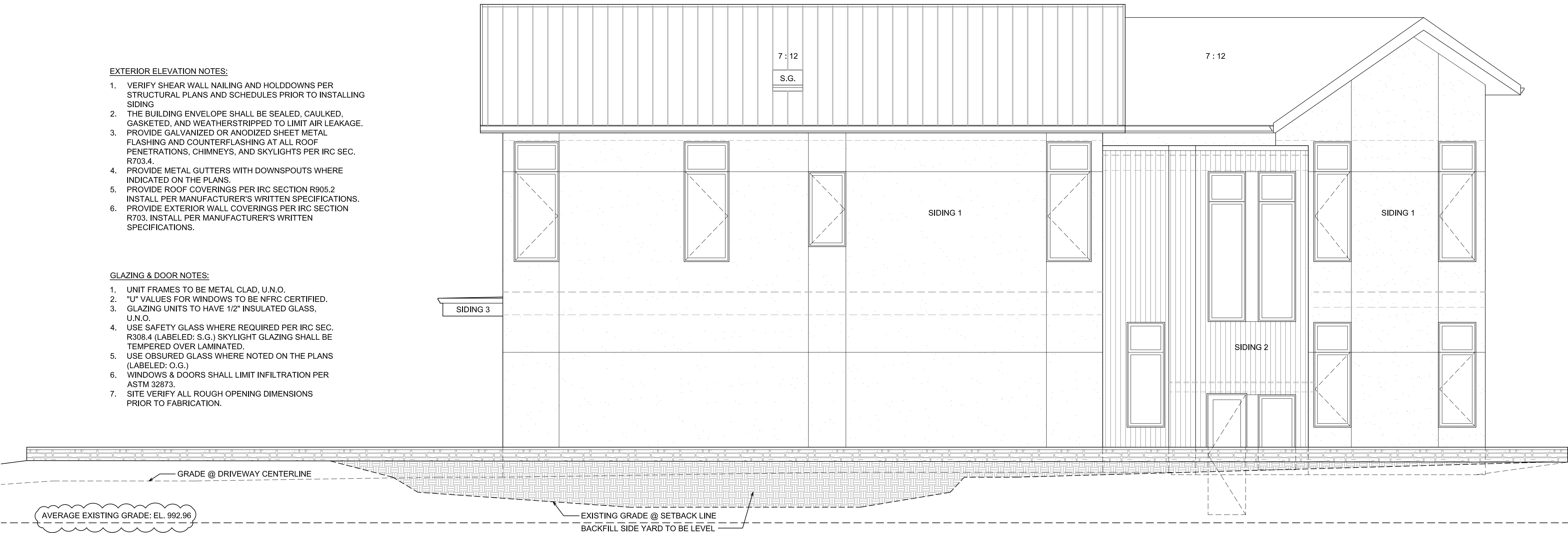
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EXTERIOR ELEVATION NOTES:

1. VERIFY SHEAR WALL NAILING AND HOLDDOWNS PER STRUCTURAL PLANS AND SCHEDULES PRIOR TO INSTALLING SIDING
2. THE BUILDING ENVELOPE SHALL BE SEALED, CAULKED, GASKETED, AND WEATHERSTRIPPED TO LIMIT AIR LEAKAGE.
3. PROVIDE GALVANIZED OR ANODIZED SHEET METAL FLASHING AND COUNTERFLASHING AT ALL ROOF PENETRATIONS, CHIMNEYS, AND SKYLIGHTS PER IRC SEC. R703.4.
4. PROVIDE METAL GUTTERS WITH DOWNSPOUTS WHERE INDICATED ON THE PLANS.
5. PROVIDE ROOF COVERINGS PER IRC SECTION R905.2
6. PROVIDE EXTERIOR WALL COVERINGS PER IRC SECTION R703. INSTALL PER MANUFACTURER'S WRITTEN SPECIFICATIONS.

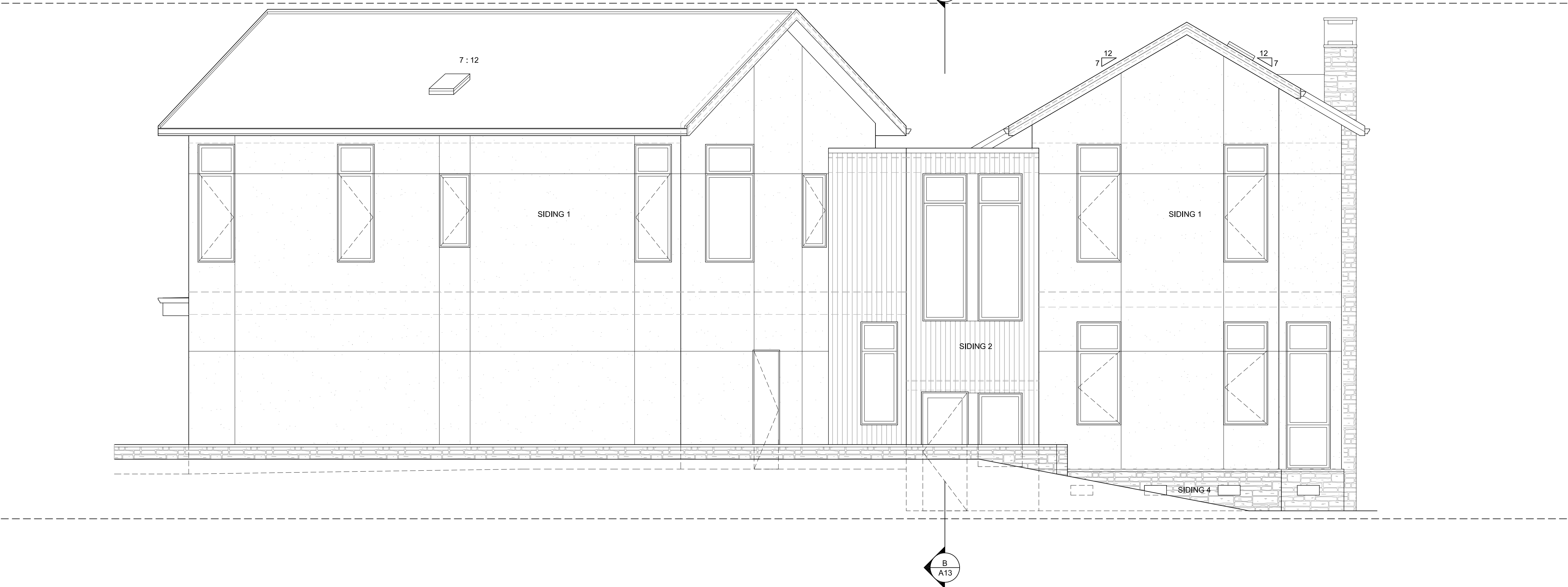
GLAZING & DOOR NOTES:

1. UNIT FRAMES TO BE METAL CLAD, U.N.O.
2. "U" VALUES FOR WINDOWS TO BE NFRC CERTIFIED.
3. GLAZING UNITS TO HAVE 1/2" INSULATED GLASS, U.N.O.
4. USE SAFETY GLASS WHERE REQUIRED PER IRC SEC. R308.4 (LABELED: S.G.) SKYLIGHT GLAZING SHALL BE TEMPERED OVER LAMINATED.
5. USE OBSCURED GLASS WHERE NOTED ON THE PLANS (LABELED: O.G.)
6. WINDOWS & DOORS SHALL LIMIT INFILTRATION PER ASTM 32873.
7. SITE VERIFY ALL ROUGH OPENING DIMENSIONS PRIOR TO FABRICATION.



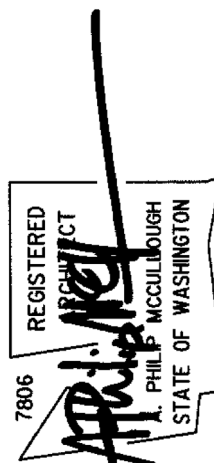
EAST (SIDE) ELEVATION

SCALE: 1/4" = 1'-0"

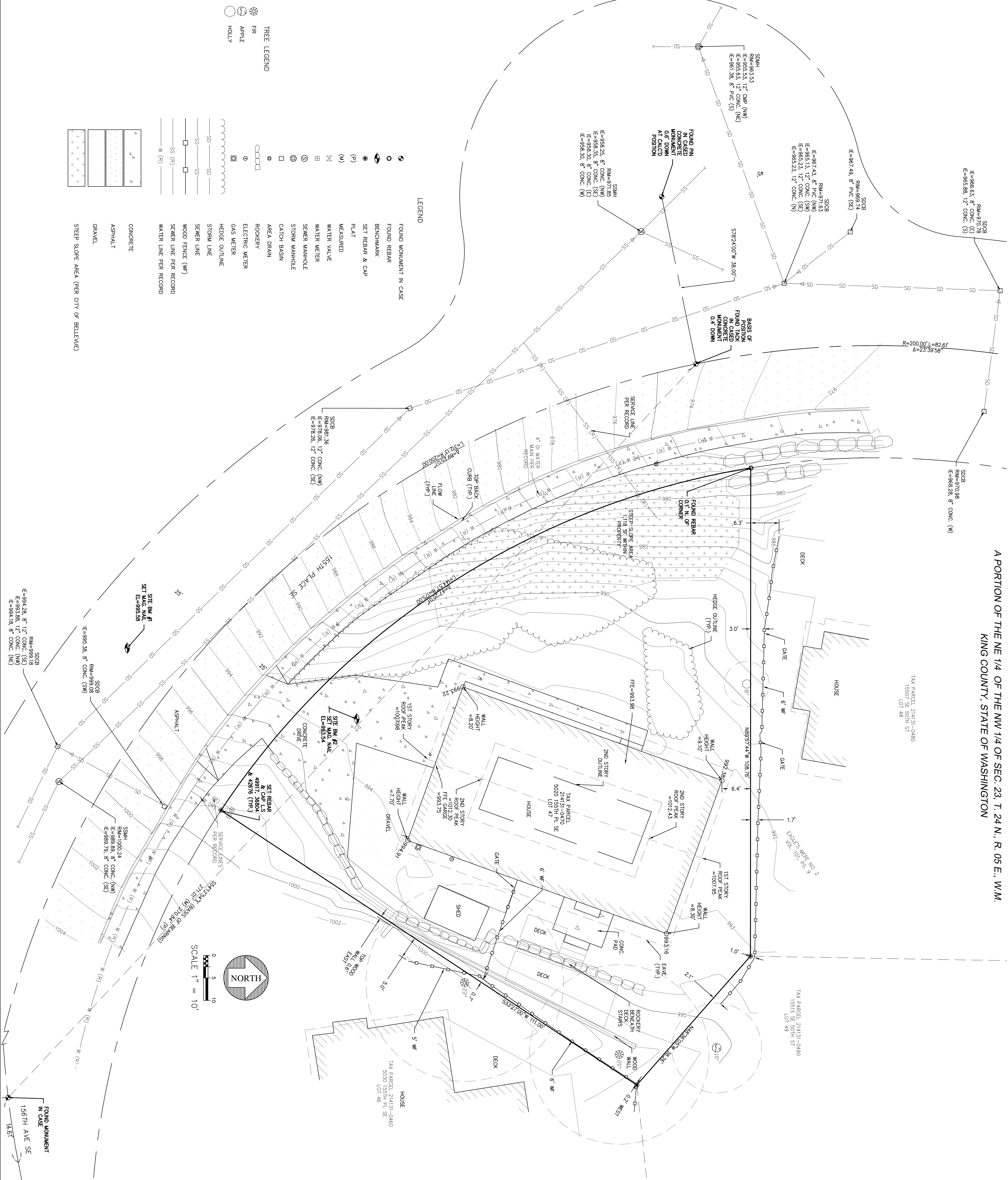
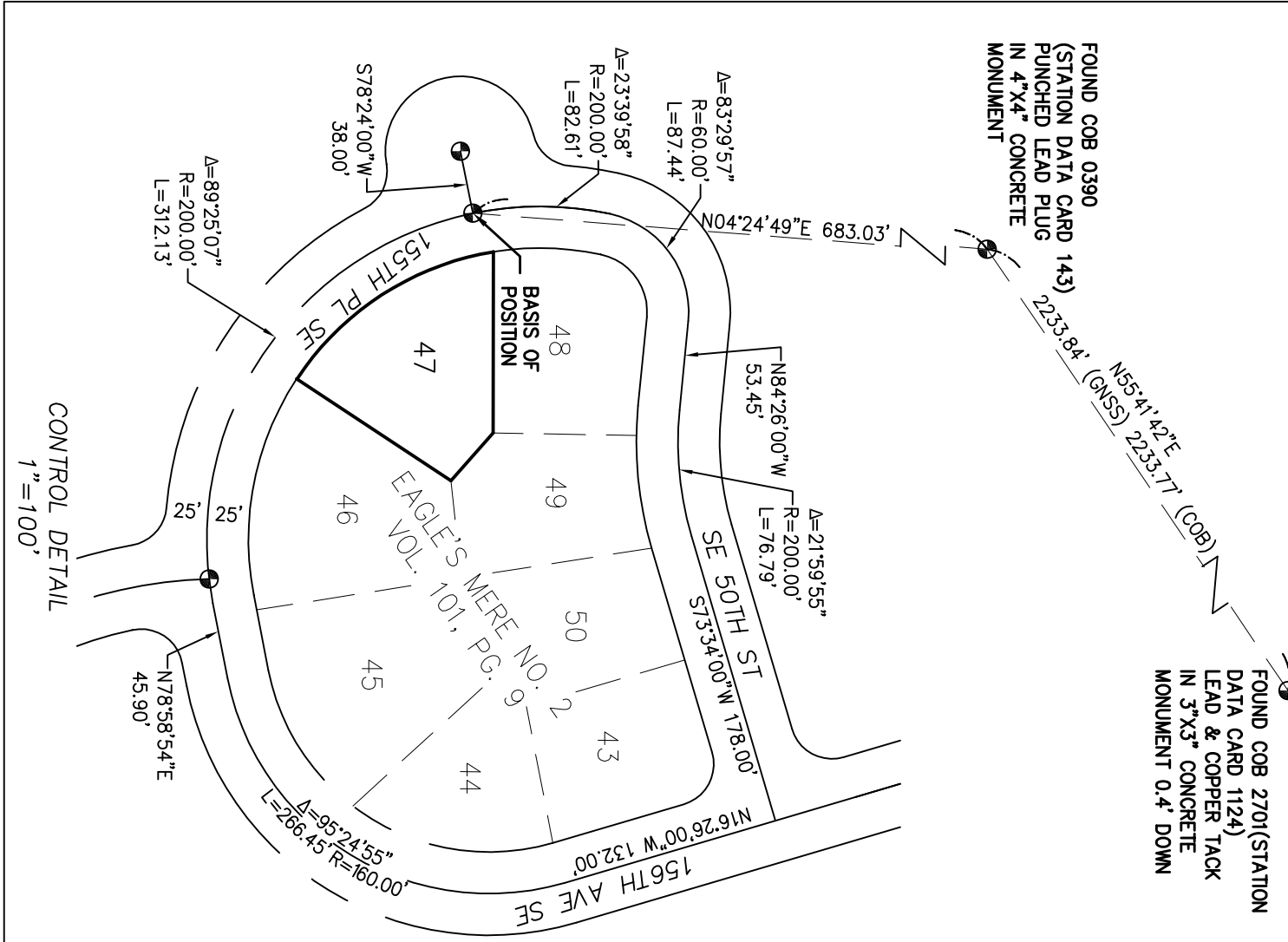


EAST (SIDE-REAR) ELEVATION

SCALE: 1/4" = 1'-0"



CHANDRA PANDEY
A PORTION OF THE NE 1/4 OF THE NW 1/4 OF SEC. 23, T. 24 N., R. 05 E., W.M.
KING COUNTY, STATE OF WASHINGTON

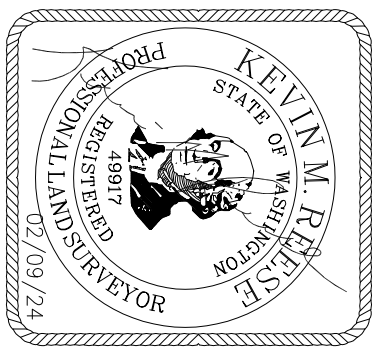


- SURVEY NOTES:
- HORIZONTAL DATUM: CITY OF BELLEVUE, WAD 1983/2011 WASHINGTON NORTH ZONE, TIED TO CITY OF BELLEVUE DATUM HOLDING C.O.B. SURVEY CONTROL POINT #A390 (GRID N:206795.944, E:1319599.420) AS THE BASIS OF POSITION AND #2701 (GRID N:208054.316, E:1321404.633) AS THE BASIS OF BEARING.
 - BASE OF POSITION: FIELD THE FOUND TACK IN CASED CONCRETE MONUMENT IN CENTERLINE OF 156TH PLACE SOUTHEAST (SEE MAP FOR LOCATION AND DESCRIPTION).
 - BASE OF BEARING: FIELD THE BEARING OF S 54°29'24" E BETWEEN THE ABOVE MENTIONED BASIS POSITION AND THE FOUND MONUMENT IN CASE AT GENERAL INTERSECTION OF 156TH PLACE SOUTHEAST AND 156TH AVE SE (SEE MAP FOR LOCATION AND DESCRIPTION).
 - THIS SURVEY HOUSE EAGLE'S WERE NO. 2 RECORDED IN VOLUME 101 OF PLATS, PAGES 9-11, A ROTATION OF +000.00 WAS APPLIED TO THE BEARINGS TO BE ON THE ABOVE NOTED DATUM, SHOWN HERE ON.
 - EAGLE'S WERE NO. 2 RECORDED IN VOLUME 101 OF PLATS, PAGES 9-11.
 - KING COUNTY ASSESSOR'S MAP FOR THE NORTHWEST QUARTER OF SECTION 23 TOWNSHIP 24 NORTH, RANGE 5 EAST.
 - VERTICAL DATUM: NAVD83
 - MASTER BENCHMARK: CITY OF BELLEVUE BENCHMARK NO. 807.3' PUNCHED BRASS DISK IN CASED CONCRETE MONUMENT AT THE CENTERLINE INTERSECTION OF SE 48TH DRIVE AND 156TH AVE SE, ELEVATION=993.13
 - SITE BM #1: SET MAG NAIL AND WASTER IN ASPHALT OF SOUTHERLY MARGIN OF 156TH PLACE SOUTHEAST ABOUT 24 FEET NORTHWEST OF A SEWER MANHOLE, ELEVATION=993.58.
 - SITE BM #2: SET MAG NAIL IN CONCRETE DRIVEWAY OF SUBJECT PROPERTY, ELEVATION=993.54.
 - TRAVERSING AND DATA COLLECTION WERE PERFORMED USING A SPECTRA AND/OR TRIMBLE ADDITIONAL FIELD WORK WAS PERFORMED USING SPECTRA SP-85 OR TRIMBLE R10 GNSS POSITIONING SYSTEMS. THE WASHINGTON STATE REFERENCE NETWORK, AND/OR THE NATIONAL GEODETIC SURVEY'S ONLINE POSITIONING USER SERVICE (OPUS).
 - THE SUBJECT PROPERTY SHOWN HEREON CONTAINS 9,907 SQUARE FEET OR 0.227 ACRES, MORE OR LESS.
 - UNDERGROUND UTILITIES SHOWN HEREON ARE PER A COMBINATION OF FIELD LOCATED SURFACE OBSERVABLE FEATURES AND RECORDS OF THE APPLICABLE UTILITIES AND SHOULD BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION.
 - MONUMENTS SHOWN AS FOUND AND TOPOGRAPHIC INFORMATION SHOWN HEREON ARE THE RESULT OF A SURVEY BY ENCOMPASS, COMPLETED IN FEBRUARY 2024.
 - THIS SURVEY WAS PERFORMED WHOLLY THE BENEFIT OF A TITLE REPORT, OTHER EASEMENTS AND ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
 - THE LEGAL DESCRIPTION SHOWN HEREON IS PER STATUTORY WARRANTY DEED NO. 20240105000304 DATED 01/05/2024.
 - THE PURPOSE OF THIS EXHIBIT IS TO SHOW THE BOUNDARY AND EXISTING CONDITIONS ON THE SUBJECT PROPERTY AND ADJOINING ROADS.
 - STEED SLOPE AREAS SHOWN HEREON ARE PER CITY OF BELLEVUE DEPARTMENTAL POLICIES OF 40 PERCENT FOR WETLANDS AND 15 PERCENT FOR UPLANDS EXCEPT CRITICAL AREAS OF 100 FEET IN AREA-- SHOWN IN 20.25H.125 DESIGNATION OF CRITICAL AREAS AND BUFFERS.
 - TOTAL STEEP SLOPE AREA WITHIN PROPERTY IS 1,118 SF.

LEGAL DESCRIPTION
LOT 47, EAGLE'S WERE NO. 2, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 101 OF PLATS, PAGE 9, RECORDS OF KING COUNTY, WASHINGTON.
SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

Encompass
ENGINEERING & SURVEYING
Western Washington Division
165 NE Juniper Street, Suite 201 • Issaquah, WA 98027 • Phone: (425) 392-0250
Eastern Washington Division
407 Swiftwater Blvd. • Cle Elum, WA 98922 • Phone: (509) 674-7433

TOPOGRAPHIC SURVEY
FOR
CHANDRA PANDEY



REVISIONS

DESCRIPTION	BY	DATE

THE PLANS SET FORTH ON THIS SHEET ARE AND SHALL REMAIN THE PROPERTY OF ENCOMPASS ENGINEERING & SURVEYING.

JOB NO.	24519
DATE	02/09/24
SCALE	1"=10'
DESIGNED	N/A
DRAWN	JLS
CHECKED	SDM
APPROVED	KMR
SHEET	1 OF 1

LOKESH JOSHI AND CHANDRA PANDEY
5023 155TH PL SE
BELLEVUE, WA 98006
EMAIL: LOKESHJOSHI@GMAIL.COM, CHANDRAPANDEY@GMAIL.COM
PHONE: (425) 615-3693

MOMENTUM CIVIL
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TACOMA, WA 98402
CONTACT: MARC PUDISTS, P.E.
EMAIL: MARCP@MOMENTUMCIVIL.COM
PHONE: (253) 319-1505

CONTACT: TAYLOR BALIAN, P.E.
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ENCOMPASS ENGINEERING AND SURVEYING
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MCCULLOUGH ARCHITECTS
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SEATTLE, WA 98108
CONTACT: TRACY BRINK
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PHONE: (206) 443-1181

EARTH SOLUTIONS NW LLC
15365 NE 90TH STREET, SUITE 100
REDMOND, WA 98052
CONTACT: SCOTT S. RIEGEL, L.G., L.E.G.
EMAIL: SCOTTR@ESNW.COM
PHONE: (425) 449-4704

1. All work shall conform to the 2021 edition of the City of Bellevue Utilities Department Engineering Standards.
2. The Contractor shall use a vacuum street sweeper to remove dust and debris from pavement areas.
3. When work is to occur in easements, the Contractor shall notify the easement grantor and the City's Inspector in writing a minimum of 48 hours in advance of beginning work (not including weekends or holidays). Failure to notify grantor and the City's Inspector will result in a Stop Work Order being posted until the matter is resolved to the satisfaction of the City. A written release from the easement grantor shall be furnished to the City's Inspector prior to permit sign-off.
4. Install flow diversion measures outside of the Critical Root Zone of trees to be protected.
5. At no time shall construction stormwater be directed towards trees to be protected.
6. Construction stormwater shall not be ponded within a tree's critical root zone.
7. All trenches shall be backfilled, compacted, and pavement in place in paved areas, prior to testing storm pipes for acceptance.

1. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLAN TO THE CITY OF BELLEVUE PUBLIC WORKS FOR REVIEW AND OBTAIN APPROVAL PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY. MOMENTUM CIVIL ASSUMES NO RESPONSIBILITY FOR TRAFFIC CONTROL.
2. ALL WORKMANSHIP SHALL BE DONE IN ACCORDANCE WITH AND CONFORM TO THE CITY OF BELLEVUE STANDARDS. IF CITY OF BELLEVUE STANDARDS DO NOT ADDRESS A PROJECT ELEMENT, THEN THE LATEST VERSION OF THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION SHALL APPLY UNLESS SUPERSEDED BY THIS PLAN SET, OR AN ORDER OF THE ENGINEER OR OWNER.
3. ALL EROSION CONTROL SHALL BE PERFORMED ACCORDING TO THE RECOMMENDATIONS CONTAINED IN THE PROJECT SPECIFIC GEOTECHNICAL REPORT BY EARTH SOLUTIONS NW LLC DATED OCTOBER 25, 2024 (UPDATED JANUARY 30, 2025).
4. CONTRACTOR TO INSTALL IRRIGATION SLEEVING AND ELECTRICAL AND LIGHTING CONDUIT BASED ON LANDSCAPE AND ELECTRICAL/LIGHTING PLANS, RESPECTIVELY.
5. IF NECESSITATED BY EXISTING CONDITIONS, THE PROPERTY OWNER SHALL HAVE A LICENSED ARBORIST CONDUCT A TREE SURVEY AND CLEARING ANALYSIS AND TREE CLEARING AND GRADING TO DETERMINE IF TREES BEYOND THE CLEARING LIMITS SHOWN WILL BE AFFECTED BY THE PROPOSED PROJECT AND IF ANY ADDITIONAL TREE REMOVAL IS NECESSARY.

PARCEL NUMBER(S): 2141310470
PROJECT ADDRESS: 5020 155TH PLACE SE
PARCEL AREA: 9,907 SF

SURFACE COVERAGE SUMMARY:	
NEW AND REPLACED POLLUTION GENERATING IMPERVIOUS SURFACE:	926+/- SF (0.02 AC)
NEW AND REPLACED NON-POLLUTION GENERATING IMPERVIOUS SURFACE:	4,087+/- SF (0.09 AC)
LANDSCAPING/TOPSOIL AMENDMENT AREA:	<u>4,206+/- SF (0.10 AC)</u>
TOTAL DISTURBED AREA:	9,219+/- SF (0.21 AC)

SITE VOLUME CALCULATIONS	
CUT VOLUME	35+/- CY
FILL VOLUME	175+/- CY
NET VOLUME	140+/- CY (FILL)

EARTHWORK NOTE: ALL VOLUMES ARE APPROXIMATE AND ARE PROVIDED FOR PERMITTING PURPOSES ONLY AND REPRESENT THE FINISH GRADE TO EXISTING GRADE AS SHOWN ON THE PLANS. CONTRACTOR SHALL RELY ON THEIR OWN ESTIMATES FOR DETERMINING ACTUAL EARTHWORK QUANTITIES. THE VOLUMES LISTED ABOVE DO NOT ACCOUNT FOR STRIPPINGS, IMPORTED SUBGRADE MATERIALS, PAVEMENT DEPTHS, TRENCHING, STRUCTURAL EXCAVATION, EXPANSION/COMPACTION FACTORS, OR ANY SOIL TYPE RESTRICTIONS.

FILL MATERIAL SHALL NOT CONTAIN PETROLEUM PRODUCTS, OR ANY KNOWN SUBSTANCES THAT ARE TOXIC, HAZARDOUS, DANGEROUS, OR WHICH OTHERWISE VIOLATE ANY STATE, FEDERAL, OR LOCAL LAW, ORDINANCE CODE, REGULATION RULE, ORDER, OR STANDARD OF AN AGENCY HAVING JURISDICTION. ALL FILL MATERIAL SHALL BE EARTHEN, BE CAPABLE OF COMPACTION IN COMPLIANCE WITH ASTM D1557, AND BE IN COMPLIANCE WITH THE PROJECT-SPECIFIC GEOTECHNICAL RECOMMENDATIONS.

PRIOR TO ANY EXCAVATION ACTIVITIES, THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF UNDERGROUND UTILITIES TO IDENTIFY ANY POTENTIAL CONFLICTS WITH PROPOSED CONSTRUCTION. CONTACT PROJECT ENGINEER IF ANY CONFLICTS ARE IDENTIFIED. EXISTING UTILITIES SHALL BE POTHOLED AT THE LOCATION WHERE NEW CONNECTIONS ARE PROPOSED TO VERIFY INVERTS, MATERIALS, SIZE, AND GENERAL CONFORMANCE WITH THESE PLANS. CONTACT PROJECT ENGINEER IF CONDITIONS ARE DIFFERENT THAN ANTICIPATED.

PRIOR TO ANY CONSTRUCTION ACTIVITIES, VERIFY EXISTING TOPOGRAPHY AND GENERAL SITE FEATURES ARE CONSISTENT WITH THESE PLANS AND IF THERE ARE ANY POTENTIAL CONFLICTS WITH PROPOSED IMPROVEMENTS. CONTACT PROJECT ENGINEER IF ANY CONFLICTS ARE IDENTIFIED.



Know what's **below**.
Call before you dig.

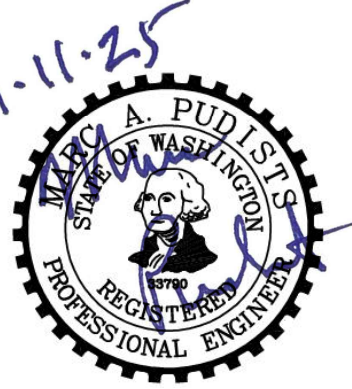


VICINITY MAP

(FEET)

PG #	REF #	SHEET TITLE
1	C1.0	CIVIL COVER
2	SV1.1	TOPOGRAPHIC SURVEY
3	C2.0	TESC AND DEMOLITION PLAN
4	C2.1	TESC DETAILS
5	C3.0	PAVING, DRAINAGE, AND UTILITY PLAN
6	C3.1	STORM PROFILE & COB NOTES
7	C3.2	PAVING, DRAINAGE, AND UTILITY DETAILS

STORM:	CITY OF BELLEVUE EMAIL: UTILITIES@BELLEVUEWA.GOV PHONE: (425) 452-6932
SEWER:	CITY OF BELLEVUE EMAIL: UTILITIES@BELLEVUEWA.GOV PHONE: (425) 452-6932
WATER:	CITY OF BELLEVUE EMAIL: UTILITIES@BELLEVUEWA.GOV PHONE: (425) 452-6932
FIRE:	BELLEVUE FIRE DEPARTMENT PHONE: (425) 452-6892
POWER:	PUGET SOUND ENERGY EMAIL: CUSTOMERCARE@PSE.COM PHONE: 1-888-321-7779
GAS:	PUGET SOUND ENERGY EMAIL: CUSTOMERCARE@PSE.COM PHONE: 1-888-321-7779

[illegible]

PERMIT SET

5020 155TH PL SE
LOKESH JOSHI AND CHANDRA PANDEY
CIVIL COVER
5020 155TH PL SE
BELLEVUE, WA



CHECKED BY: M. PUDISTS
DESIGNED BY: T. BALIAN
DRAWN BY: T. BALIAN

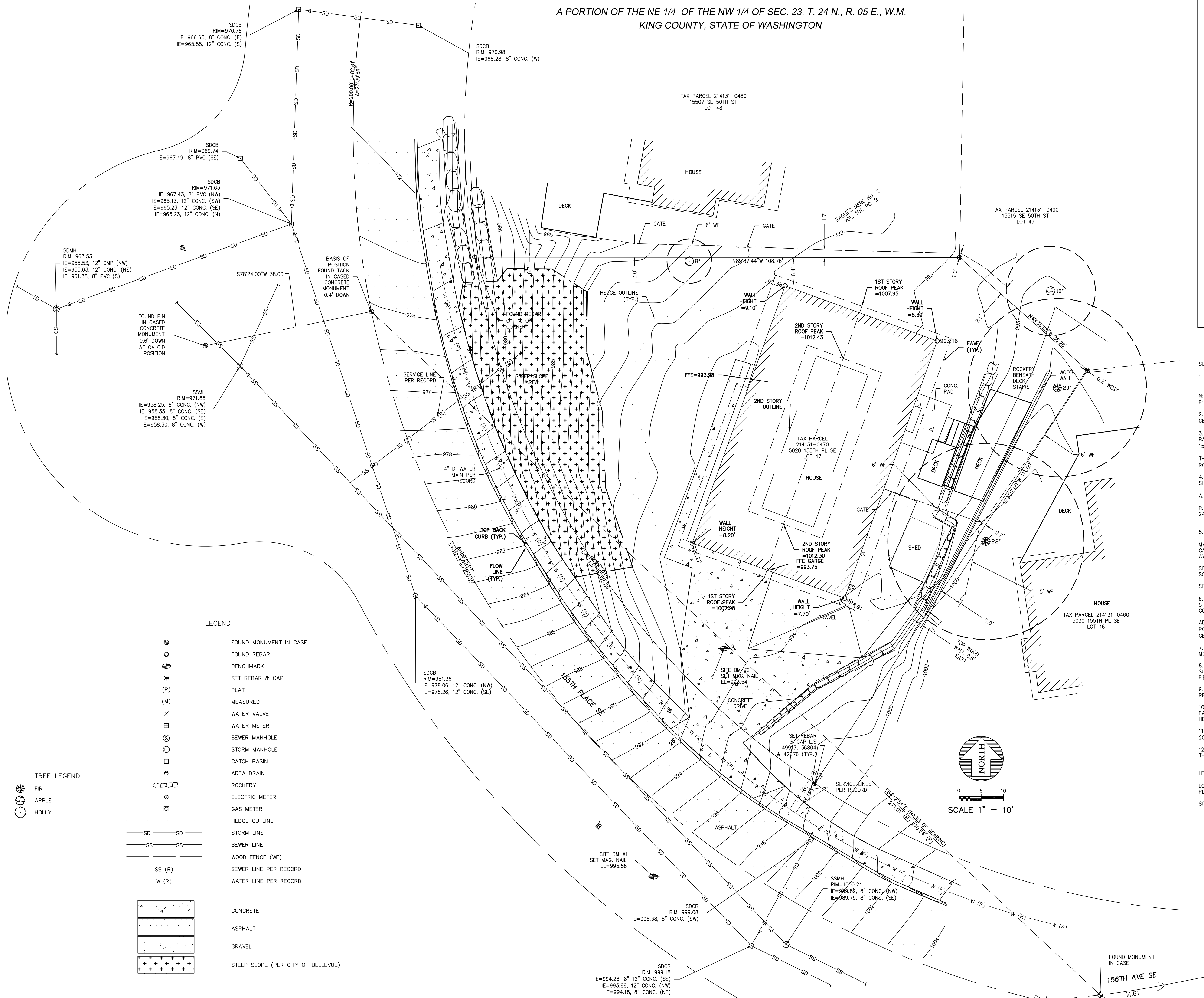
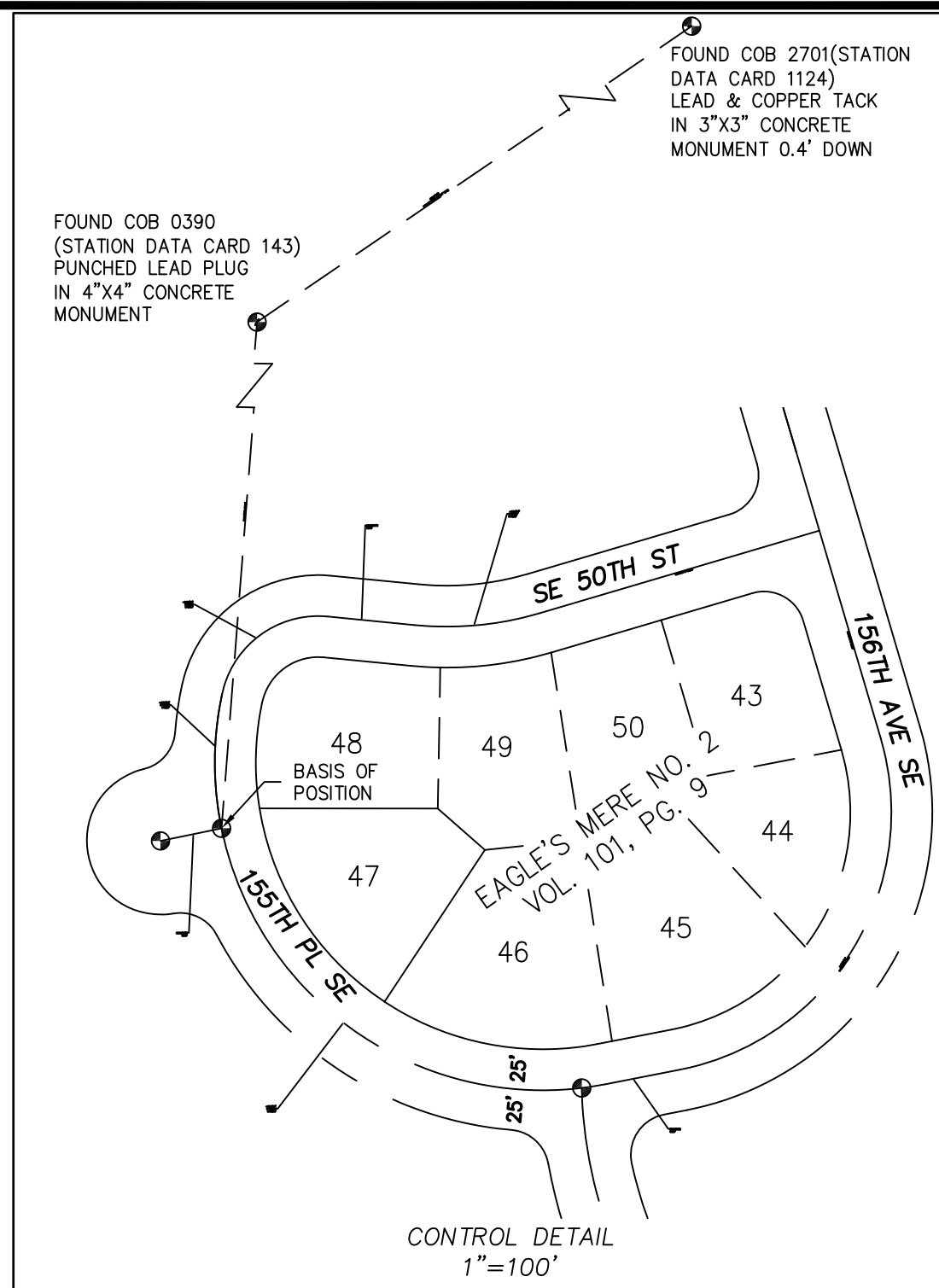
HORIZ. DATUM: NAD83/2011
VERT. DATUM: NAVD88

DATE:	11/11/25
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SHEET NO. **1 OF 7**

REFERENCE NO. **C1.0**

CHANDRA PANDEY

A PORTION OF THE NE 1/4 OF THE NW 1/4 OF SEC. 23, T. 24 N., R. 05 E., W.M.
KING COUNTY, STATE OF WASHINGTON

SURVEY NOTES:

- HORIZONTAL DATUM: CITY OF BELLEVUE, NAD 1983/2011 WASHINGTON NORTH ZONE.
TIED TO CITY OF BELLEVUE DATUM HOLDING C.O.B. SURVEY CONTROL POINT #0390 (GRID N:206795.364, E:1319559.432) AS THE BASIS OF POSITION AND #2701 (GRID N:208054.316, E:1321404.633) AS THE BASIS OF BEARING.
 - BASIS OF POSITION: HELD THE FOUND TACK IN CASED CONCRETE MONUMENT IN CENTERLINE OF 155TH PLACE SOUTHEAST (SEE MAP FOR LOCATION AND DESCRIPTION).
 - BASIS OF BEARING: HELD THE BEARING OF S 54°12'54" E BETWEEN THE ABOVE NOTED BASIS OF POSITION AND THE FOUND MONUMENT IN CASE AT CENTERLINE INTERSECTION OF 155TH PLACE SOUTHEAST AND 156TH AVE SE (SEE MAP FOR LOCATION AND DESCRIPTION).
- THIS SURVEY HOLDS EAGLE'S MERE NO. 2 RECORDED IN VOLUME 101 OF PLATS, PAGES 9-11. A ROTATION OF +0°04'00" WAS APPLIED TO THE BEARINGS TO BE ON THE ABOVE NOTED DATUM.
- THE FOLLOWING INFORMATION WAS ALSO REFERENCED IN PREPARING THE BOUNDARY SHOWN HERE ON:
A. EAGLE'S MERE NO. 2 RECORDED IN VOLUME 101 OF PLATS, PAGES 9-11.
B. KING COUNTY ASSESSOR'S MAP FOR THE NORTHWEST QUARTER OF SECTION 23 TOWNSHIP 24 NORTH, RANGE 5 EAST.

VERTICAL DATUM: NAVD88

MASTER BENCHMARK: CITY OF BELLEVUE BENCHMARK NO. 807.3" PUNCHED BRASS DISK IN CASED CONCRETE MONUMENT AT THE CENTERLINE INTERSECTION OF SE 48TH DRIVE AND 153RD AVE SE. ELEVATION=856.34

SITE BM #1: SET MAG NAIL AND WASHER IN ASPHALT OF SOUTHERLY MARGIN OF 155TH PLACE SOUTHEAST ABOUT 34 FEET NORTHWEST OF A SEWER MANHOLE. ELEVATION=995.58.

SITE BM #2: SET MAG NAIL IN CONCRETE DRIVEWAY OF SUBJECT PROPERTY. ELEVATION=993.54.

ADDITIONAL FIELD WORK WAS PERFORMED USING SPECTRA SP-85 OR TRIMBLE R10 GNSS POSITIONING SYSTEMS, THE WASHINGTON STATE REFERENCE NETWORK, AND/OR THE NATIONAL GEODETIC SURVEY'S ONLINE POSITIONING USER SERVICE (OPUS).

7. THE SUBJECT PROPERTY SHOWN HEREON CONTAINS 9,907 SQUARE FEET OR 0.227 ACRES, MORE OR LESS.

8. UNDERGROUND UTILITIES SHOWN HEREON ARE PER A COMBINATION OF FIELD LOCATED SURFACE OBSERVABLE FEATURES AND RECORDS OF THE APPLICABLE UTILITIES AND SHOULD BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION.

9. MONUMENTS SHOWN AS FOUND AND TOPOGRAPHIC INFORMATION SHOWN HEREON ARE THE RESULT OF A SURVEY BY ENCOMPASS, COMPLETED IN FEBRUARY 2024.

10. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. OTHER EASEMENTS AND ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.

11. THE LEGAL DESCRIPTION SHOWN HEREON IS PER STATUTORY WARRANTY DEED NO. 20240105000304 DATED 01/05/2024.

12. THE PURPOSE OF THIS EXHIBIT IS TO SHOW THE BOUNDARY AND EXISTING CONDITIONS ON THE SUBJECT PROPERTY AND ADJOINING ROADS.

LEGAL DESCRIPTION

LOT 47, EAGLE'S MERE NO. 2, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 101 OF PLATS, PAGE 9, RECORDS OF KING COUNTY, WASHINGTON.

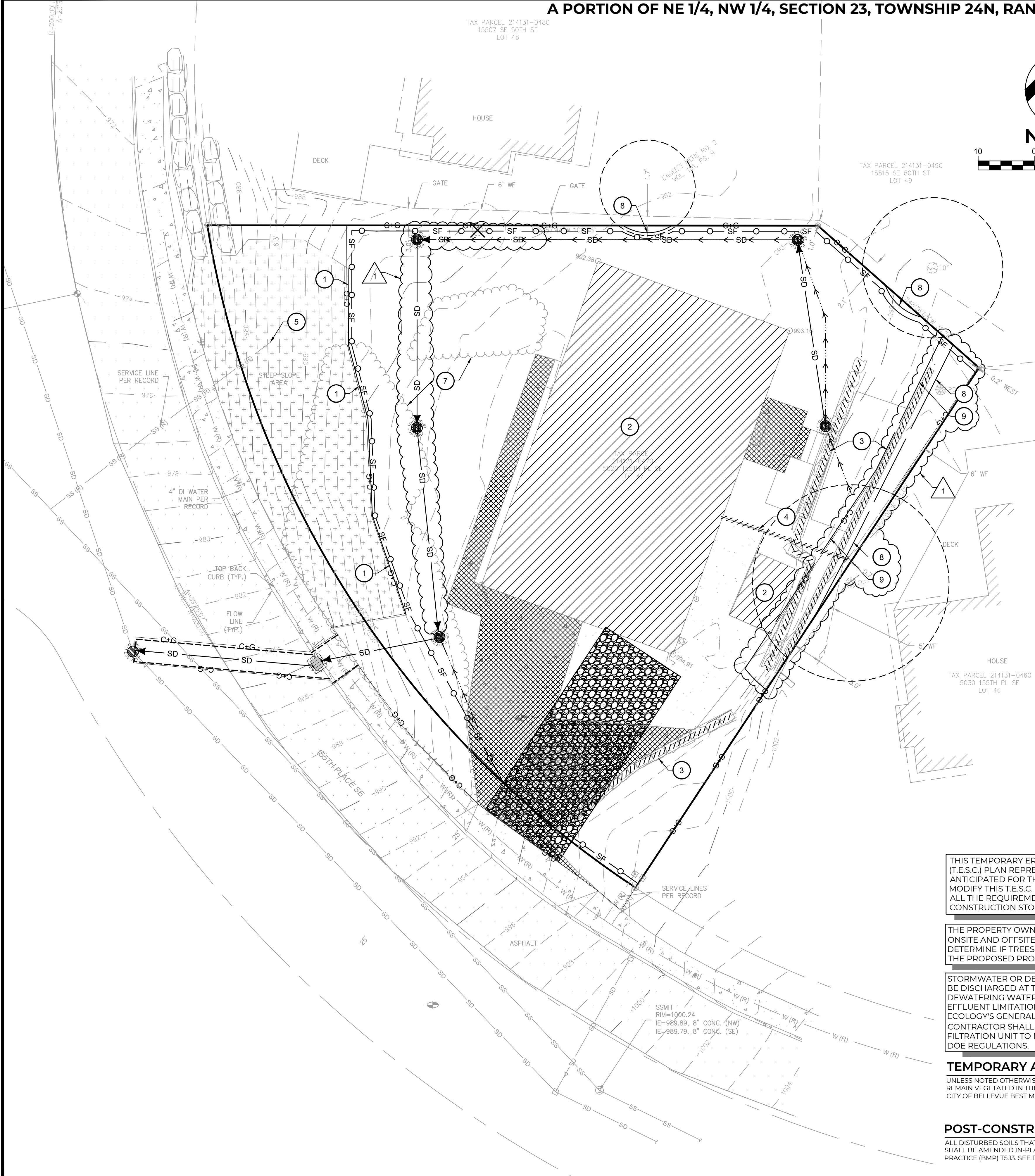
SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

TOPOGRAPHIC SURVEY
FOR
CHANDRA PANDEY

Encompass & Surveying
ENGINEERING & SURVEYING
Western Washington Division
165 NE Juniper Street, Suite 201 • Issaquah, WA 98027 • Phone: (425) 392-0250
Eastern Washington Division
407 Swiftwater Blvd. • Cle Elum, WA 98922 • Phone: (509) 674-7433

JOB NO.	24519
DATE	02/09/24
SCALE	1"=10'
DESIGNED	N/A
DRAWN	JLS
CHECKED	SDM
APPROVED	KMR
SHEET	1 OF 1

A PORTION OF NE 1/4, NW 1/4, SECTION 23, TOWNSHIP 24N, RANGE 5E, W.M.



TESC AND DEMOLITION LEGEND

- PROPERTY LINE
- LIMIT OF CONSTRUCTION
- FULL DEPTH PAVEMENT SAWCUT LINE PER BMP C152
- SILT FENCE PER BMP C233
- TREE PROTECTION FENCING PER CITY OF BELLEVUE BMP T101
- INTERCEPTOR DIKE AND SWALE PER BMP C200
- CONSTRUCTION ENTRANCE PER BMP C105
- PAVEMENT REMOVAL
- STRUCTURE DEMOLITION
- EXISTING TREE TO BE REMOVED
- STORM DRAINAGE INLET PROTECTION PER BMP C220
- EG MAJOR CONTOUR
- EG MINOR CONTOUR

TESC AND DEMOLITION KEYNOTES

- TOP OF STEEP SLOPE. SLOPE ALL TEMPORARY AND PERMANENT GRADES AWAY FROM STEEP SLOPE.
- EXISTING STRUCTURE TO BE REMOVED.
- EXISTING RETAINING WALL TO BE REMOVED.
- EXISTING FENCE TO BE REMOVED.
- POTHOLE TO VERIFY LOCATION AND ELEVATION OF EXISTING SEWER SERVICE FOR EXISTING RESIDENCE. CAP TEMPORARILY EAST OF STEEP SLOPE. RECONNECT EXISTING SEWER SERVICE TO NEW RESIDENCE.
- DECOMMISSION EXISTING WATER SERVICE FROM EXISTING RESIDENCE TO WATER METER. PROTECT AND PRESERVE EXISTING WATER METER TO BE USED FOR NEW RESIDENCE.
- EXISTING HEDGE TO BE REMOVED. DO NOT DISTURB STEEP SLOPE AREA.
- INSTALL PHASE 1 TEMPORARY 6-FOOT HIGH CHAIN LINK TREE PROTECTION FENCING PRIOR TO ANY SITE DEMOLITION. FENCE TO BE INSTALLED PER ARBORIST RECOMMENDATIONS.
- INSTALL PHASE 2 TEMPORARY 6-FOOT HIGH CHAIN LINK TREE PROTECTION FENCING AFTER PROPOSED FOUNDATION/RETAINING WALL HAS BEEN CONSTRUCTED AND AREA HAS BEEN GRADED. FENCE TO BE INSTALLED PER ARBORIST RECOMMENDATIONS.

CITY OF BELLEVUE EROSION CONTROL NOTES

- ALL CLEARING & GRADING CONSTRUCTION MUST BE IN ACCORDANCE WITH CITY OF BELLEVUE (COB) CLEARING & GRADING CODE, CLEARING & GRADING DEVELOPMENT STANDARDS, LAND USE CODE, UNIFORM BUILDING CODE, PERMIT CONDITIONS, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND STANDARDS. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THESE REQUIREMENTS. ANY VARIANCE FROM ADOPTED EROSION CONTROL STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF BELLEVUE DEVELOPMENT SERVICES (DSO) PRIOR TO CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROFESSIONAL CIVIL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO THE COB.
- APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
- A COPY OF THE APPROVED PLANS AND DRAWINGS MUST BE ON-SITE DURING CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER REQUIRED OR RELATED PERMITS PRIOR TO BEGINNING CONSTRUCTION.
- THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
- THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- CLEARING SHALL BE LIMITED TO THE AREAS WITHIN THE APPROVED DISTURBANCE LIMITS. EXPOSED SOILS MUST BE COVERED AT THE END OF EACH WORKING DAY WHEN WORKING FROM OCTOBER 1ST THROUGH APRIL 30TH. FROM MAY 1ST THROUGH SEPTEMBER 30TH, EXPOSED SOILS MUST BE COVERED AT THE END OF EACH CONSTRUCTION WEEK AND ALSO AT THE THREAT OF RAIN.
- AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT.
- THE CONTRACTOR MUST MAINTAIN A SWEEPER ON SITE DURING EARTHWORK AND IMMEDIATELY REMOVE SOIL THAT HAS BEEN TRACKED ONTO PAVED AREAS AS RESULT OF CONSTRUCTION.
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN THE CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CLEARING & GRADING PERMIT. LOCATIONS FOR THE MOBILIZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE CLEARING AND GRADING INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY STOCKPILING.
- THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A MAJOR STORM EVENT.
- FINAL SITE GRADING MUST DIRECT DRAINAGE AWAY FROM ALL BUILDING STRUCTURES AT A MINIMUM 5% SLOPE, PER THE INTERNATIONAL RESIDENTIAL CODE (IRC) R401.3.

ADDITIONAL BMP NOTES

REFER TO CSWPPP FOR ADDITIONAL GUIDANCE FOR STORMWATER POLLUTION PREVENTION REQUIREMENTS AND BEST PRACTICES. EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED WITH TEMPORARY AND PERMANENT SEEDING (BMP C120), MULCHING (BMP C121), OR PLASTIC COVERING (BMP C123). POLLUTANTS SHALL BE CONTROLLED BY IMPLEMENTING CONCRETE HANDLING (BMP C151), SAWCUTTING AND SURFACING POLLUTION PREVENTION (BMP C152), AND MATERIAL DELIVERY, STORAGE CONTAINMENT (BMP C154). CONTRACTOR SHALL KEEP MATERIALS ON HAND (BMP C150) AND MAINTAIN AND REPAIR BMPs IN ACCORDANCE WITH BMP SPECIFICATIONS.

RECOMMENDED CONSTRUCTION SEQUENCE

- MARK CLEARING AND DEMOLITION LIMITS.
- INSTALL INLET PROTECTION AROUND EXISTING STORM DRAIN INLETS.
- INSTALL SILT FENCES, SEDIMENT TRAPS, AND CONSTRUCTION FENCES ON THE SITE. USE PLASTIC SHEETING, MULCH, OR PERMANENT SEEDING TO STABILIZE ALL DISTURBED SOILS.
- INSTALL PERMANENT STORMWATER CONVEYANCE SYSTEM. INSTALL INLET PROTECTION IN STRUCTURES AS THEY ARE INSTALLED.
- BEGIN DEMOLITION.
- GRADE SITE.
- INSTALL UTILITIES, IRRIGATION SLEEVES, CURBS AND GUTTERS.
- PREPARE SITE FOR PAVING.
- PAVE SITE.
- COMPLETE PAVING AND PERMANENTLY STABILIZE THE SITE.
- REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER SITE IS PERMANENTLY STABILIZED.

THIS TEMPORARY EROSION AND SEDIMENT CONTROL (T.E.S.C.) PLAN REPRESENTS A MINIMAL LEVEL OF BMPs ANTICIPATED FOR THIS SITE. THE CONTRACTOR SHALL MODIFY THIS T.E.S.C. PLAN AS NECESSARY TO FULFILL ALL THE REQUIREMENTS OF THE SITE SPECIFIC CONSTRUCTION STORM WATER PERMIT.

THE PROPERTY OWNER SHALL HAVE A LICENSED ARBORIST ASSESS TREES (BOTH ONSITE AND OFFSITE) ALONG THE LIMITS OF CLEARING AND GRADING TO DETERMINE IF TREES BEYOND THE CLEARING LIMITS SHOWN WILL BE AFFECTED BY THE PROPOSED PROJECT AND IF ANY ADDITIONAL TREE REMOVAL IS NECESSARY.

STORMWATER OR DEWATERING WATER FROM THE EXCAVATION SHALL BE DISCHARGED AT THE LOCATION SHOWN. ALL STORMWATER OR DEWATERING WATER DISCHARGED FROM THE SITE MUST MEET THE EFFLUENT LIMITATIONS SET FORTH IN THE DEPARTMENT OF ECOLOGY'S GENERAL STORMWATER PERMIT. IF NECESSARY, CONTRACTOR SHALL PROVIDE A SETTLING TANK/POND OR A FILTRATION UNIT TO MAINTAIN COMPLIANCE WITH WASHINGTON STATE DOE REGULATIONS.

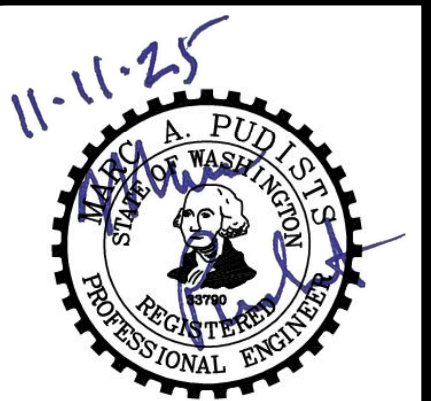
TEMPORARY AND PERMANENT SEEDING

UNLESS NOTED OTHERWISE ON THE LANDSCAPING PLAN, ALL DISTURBED SOILS THAT ARE TO REMAIN VEGETATED IN THE POST-DEVELOPED CONDITION SHALL BE SEED TO COMPLY WITH CITY OF BELLEVUE BEST MANAGEMENT PRACTICE (BMP) C120.

POST-CONSTRUCTION SOIL QUALITY AND DEPTH

ALL DISTURBED SOILS THAT ARE TO REMAIN VEGETATED IN THE POST-DEVELOPED CONDITION SHALL BE AMENDED IN-PLACE TO COMPLY WITH DEPARTMENT OF ECOLOGY BEST MANAGEMENT PRACTICE (BMP) T513. SEE DETAIL 3 ON SHEET C2.1.

NO.	DATE	REVISION DESCRIPTION
1	11/11/25	ADDRESS CITY COMMENTS



PERMIT SET

TESC AND DEMOLITION PLAN

5020 155TH PL SE
LOKESH JOSHI AND CHANDRA PANDEY
5020 155TH PL SE
BELLEVUE, WA



CHECKED BY: M. PUDISTS
DESIGNED BY: T. BALIAN
DRAWN BY: T. BALIAN

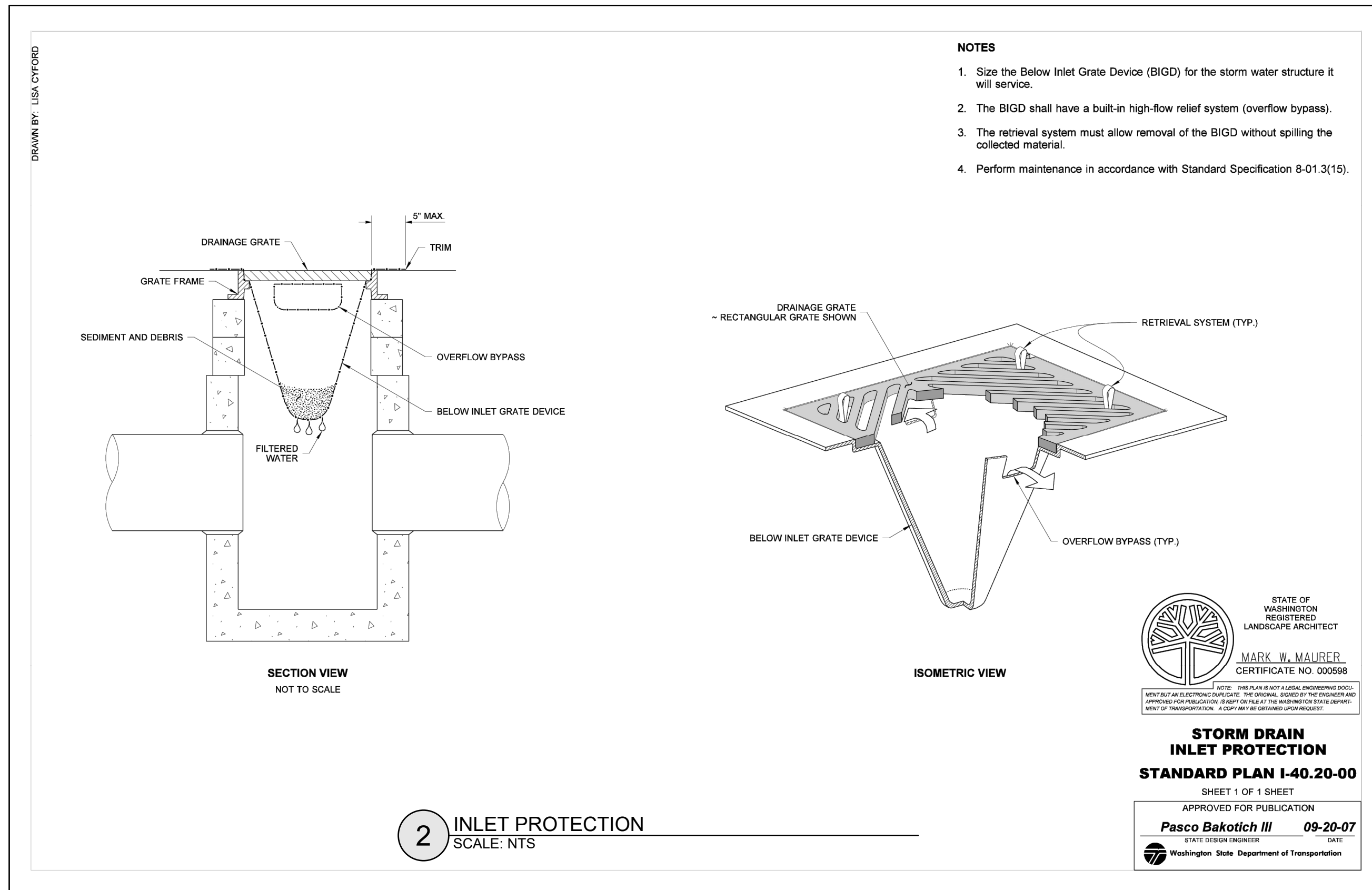
HORIZ. DATUM: NAD83/2011
VERT. DATUM: NAVD88

DATE: 11/11/25

PROJECT NO. PAND01

SHEET NO. 3 of 7

REFERENCE NO. C2.0



CHECKED BY: **M. PUDISTS**
 DESIGNED BY: **T. BALIAN**
 DRAWN BY: **T. BALIAN**

HORZ. DATUM: **NAD83/2011**
 VERT. DATUM: **NAVD88**

DATE: **11/11/25**

PROJECT NO. **PAND01**

SHEET NO. **4 OF 7**

REFERENCE NO. **C2.1**

Plot Date: 11/11/2025 3:23 PM By: Taylor Balian (Momentum Civil)
Save Date: 11/11/2025 2:34 PM By: Taylor Balian File: P:\PPAND01-5020 155th PL SFR\0400CAD\Sheets\GP-PAND01.dwg

A PORTION OF NE 1/4, NW 1/4, SECTION 23, TOWNSHIP 24N, RANGE 5E, W.M.

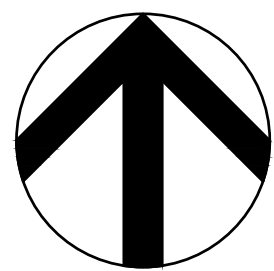
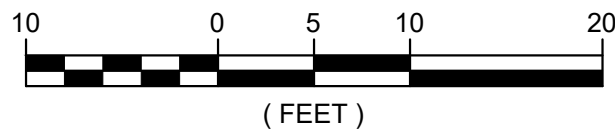
TAX PARCEL 214131-0480
15507 SE 50TH ST
LOT 48

TAX PARCEL 214131-0490
15515 SE 50TH ST
LOT 49

TAX PARCEL 214131-0470
5020 155TH PL SE
LOT 47

TAX PARCEL 214131-0460
5030 155TH PL SE
LOT 46

THE PROPERTY OWNER SHALL HAVE A LICENSED ARBORIST ASSESS TREES (BOTH ONSITE AND OFFSITE) ALONG THE LIMITS OF CLEARING AND GRADING TO DETERMINE IF TREES BEYOND THE CLEARING LIMITS SHOWN WILL BE AFFECTED BY THE PROPOSED PROJECT AND IF ANY ADDITIONAL TREE REMOVAL IS NECESSARY.



CIVIL LEGEND

- BUILDING FOOTPRINT
- PROPERTY BOUNDARY
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PVC STORM DRAINAGE LINE, DIAMETER PER PLAN
- 4" PVC ROOF DRAIN
- 4" PERFORATED PVC WALL DRAIN
- 4" PERFORATED PVC FOUNDATION DRAIN
- WATER SERVICE LINE
- SEWER SERVICE LINE
- GRASS-LINED DRAINAGE SWALE WITH 6" MINIMUM DEPTH, LONGITUDINAL SLOPE PER PLAN.
- SANITARY SEWER CLEANOUT
- STORM DRAINAGE CLEANOUT, TYPE 50 YARD DRAIN, CATCH BASIN TY. 1
- HMA PAVEMENT RESTORATION
- NEW CONCRETE SIDEWALK/PATIO
- NEW CONCRETE DRIVEWAY
- SAND SET PAVERS
- LANDSCAPING
- STEEP SLOPE AREA (DO NOT DISTURB)

GRADING LEGEND

- EXISTING GRADE
- MATCH EXISTING
- FINISH GRADE
- TOP OF WALL
- BOTTOM OF WALL
- FLOWLINE

NOTE: ALL SPOT ELEVATIONS SHOWN ARE EXTERIOR TO STRUCTURE UNLESS OTHERWISE NOTED. NO SPOT ELEVATIONS ON THE CIVIL PLANS ARE INTENDED TO SPECIFY GRADES WITHIN BUILDINGS/STRUCTURES.

CIVIL KEYNOTES

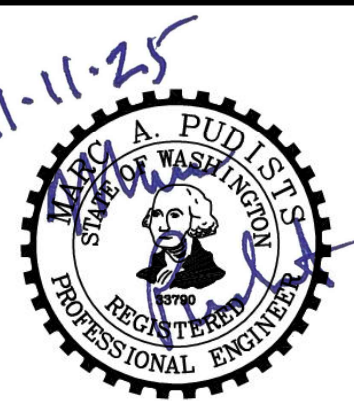
- CONNECT TO EXISTING SEWER SERVICE EAST OF STEEP SLOPE AREA. DO NOT DISTURB STEEP SLOPE AREA. CONTRACTOR TO VERIFY DEPTH AND ALIGNMENT OF EXISTING SEWER SERVICE PRIOR TO CONSTRUCTION. MAINTAIN MINIMUM 6 INCHES CLEAR BETWEEN SEWER SERVICE AND STORM DRAIN. NOTIFY ENGINEER IN CASE OF CONFLICT. SEE STORM PROFILE ON SHEET C3.1.
- CONNECT TO EXISTING 3/4" METER WITH NEW 1" PE SERVICE LINE.
- TOP OF STEEP SLOPE. PROTECT AND PRESERVE STEEP SLOPE AREA.
- CORE DRILL EXISTING CATCH BASIN AND CONNECT NEW PIPE USING WATERTIGHT RUBBER BOOT OR SAND COLLAR.
- CONNECT WALL DRAIN TO FOUNDATION DRAIN.
- INSTALL 4" PERFORATED PVC FOUNDATION DRAIN AROUND ENTIRE FOUNDATION PERIMETER. PIPE INVERTS SHALL BE EQUAL TO BOTTOM OF FOOTING ELEVATION OR LOWER IF NEEDED TO MAINTAIN POSITIVE DRAINAGE TO OUTLET (STEPPING WITH FOUNDATION ELEVATION). CONNECT TO CBS AS SHOWN.
- SEE ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS. CONNECT ALL DOWNSPOUTS TO ROOF DRAIN LINE WITH APPROPRIATE DOWNSPOUT ADAPTERS.

NOTE: CONTRACTOR TO COORDINATE WITH UTILITY SURVEYORS TO RECONNECT NEW RESIDENCE TO EXISTING DRY UTILITIES.

RETAINING WALL NOTES

- ANY RETAINING WALLS OVER 48 INCHES TALL SHALL BE DESIGNED BY A LICENSED STRUCTURAL ENGINEER AND WILL REQUIRE SEPARATE BUILDING PERMITS.
- WALL DESIGNER TO INCORPORATE IBC COMPLIANT PEDESTRIAN GUARDRAIL FALL PROTECTION INTO WALL DESIGN.
- TOP OF WALL ELEVATION LABELS ARE TO FINISHED GRADE AT TOP OF WALL AND DO NOT INCLUDE ANY WALL REVEAL ABOVE FINISHED GRADE.
- BOTTOM OF WALL ELEVATION LABELS ARE TO BOTTOM OF "EXPOSED WALL" AND DO NOT INCLUDE THE EMBEDMENT REQUIREMENTS WHICH WILL BE DETERMINED BY THE WALL STRUCTURAL DESIGNER.

NO.	DATE	REVISION DESCRIPTION	BY	CHK	TAB	MAP
		11/11/25 ADDRESS CITY COMMENTS				



PERMIT SET

5020 155TH PL SE
LOKESH JOSHI AND CHANDRA PANDEY
PAVING, DRAINAGE, AND UTILITY PLAN
5020 155TH PL SE
BELLEVUE, WA



CHECKED BY: M. PUDIS
DESIGNED BY: T. BALIAN
DRAWN BY: T. BALIAN

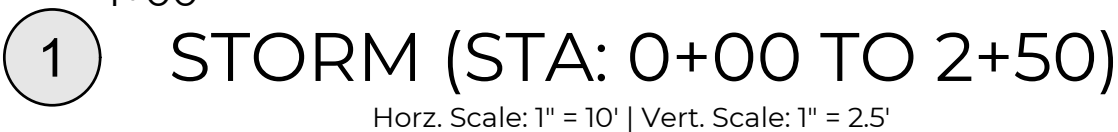
HORIZ. DATUM: NAD83/2011
VERT. DATUM: NAVD88

DATE: 11/11/25

PROJECT NO. PAND01

SHEET NO. 5 of 7

REFERENCE NO. C3.0

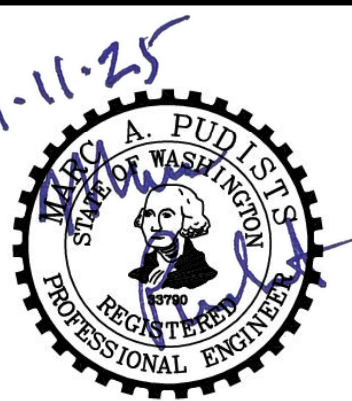


1. Storm pipe shall be PVC conforming to ASTM D-3034 SDR 35 (4" - 15") or ASTM F679 (8" - 27"). Bedding and backfill shall be as shown in the Standard Details.
2. The footing drainage system and the roof downspout system shall not be interconnected and shall separately convey collected flows to the conveyance system or to on-site stormwater facilities.
3. Prior to final inspection and acceptance of storm drainage work, pipes and storm drain structures shall be cleaned and flushed. Any obstructions to flow within the storm drain system, (such as rubble, mortar and wedged debris), shall be removed at the nearest structure. Wash water of any sort shall not be discharged to the storm drain system or surface waters.
4. Ends of each storm drain stub at the property line shall be capped and located with an 8' long 2" x 4" board, embedded to the stub cap and extending at least 3 feet above grade, and marked permanently "STORM". A copper 12 ga. locare wire firmly attached. The stub depth shall be indicated on the marker.
5. All pipes in roadways shall be ductile iron, bolt-locking, vane grates per the Standard Details. Structures in traffic lanes outside of the curb line which do not collect runoff shall be fitted with round, bolt-locking frames and solid covers. Off-street structures which do not collect runoff shall be fitted with bolt-locking solid covers.
6. Vegetation/landscaping in the detention pond, bioretention facility, vegetated roof and/or drainage ditches shall be an integral part of the stormwater management system for the project. Such drainage facilities will not be accepted until plantings are established.
7. All new manholes shall have a minimum inside diameter of 48 inches and shall conform to the Standard Details. All new catch basins shall conform to the Standard Details.
8. Storm stub stations are referenced from nearest downstream manhole/ catch basin.
9. All piping and connections to existing mains shall be done in the presence of the City's Inspector.
10. All public storm drains shall be air tested and have a video inspection performed prior to acceptance (see #17 below). Storm main constructed with flexible pipe shall be deflection tested with a mandrel prior to acceptance.
11. Storm structures shall be installed for acceptance at the same time the storm main is tested.
12. All manholes/ catch basins in unpaved areas shall include a concrete seal around adjustment rings per Standard Details.
13. All storm main extensions within the public right-of-way or in easements must be "staked" by a surveyor licensed in Washington State for "line and grade" and cut sheets provided to the City Inspector prior to construction.
14. Storm drainage mainlines, stubs and fittings shall be constructed using the same pipe material and manufacturer. Connections between stubs and the mainline will be made

- with a tee fitting. Tee fitting shall be from same manufacturer as pipe. Cut-in connections are only allowed when connecting a new stub to an existing mainline.
15. Manholes, catch basins and vaults are considered to be permit-required confined spaces. These spaces shall be in accordance with Chapter 256-800 WAC.
16. Placement of surface appurtenances (MH lids, valve lids, etc.) in the tracks of traffic lanes shall be avoided whenever possible.
17. The Contractor shall perform a video inspection and provide a digital copy of the video inspection for the City's review. The video shall provide a minimum of 480 x 640 resolution and cover the entire length of the applicable pipe. The camera shall be moved through the pipe at a uniform rate [≤ 30 ft/min], stopping when necessary to ensure proper documentation of the pipe condition. The video shall be taken after installation and cleaning to insure that no defects exist. The project will not be accepted until all defects have been repaired.
18. Not used.
19. All concrete structures (vaults, catch basins, manholes, oil/water separators, etc.) shall be vacuum tested.
20. Manholes, catch basins and inlets in easements shall be constructed to provide a stable, level grade for a minimum radius of 2.5 feet around the center of the access opening to accommodate confined space entry equipment.
21. Tops of manholes/catch basins within public right-of-way shall not be adjusted to final grade until after paving.
22. Contractor shall adjust all manhole/catch basin rims to be flush with final finished grades, unless otherwise shown.
23. During construction, Contractor shall install, at all connections to existing downstream manholes/catch basins, screens or plugs to prevent foreign materials from entering existing storm drainage system. Screens or plugs shall remain in place throughout the duration of the construction and shall be removed along with collected debris at the time of final inspection and in the presence of the City's Inspector.
24. Not used.
25. Minimum cover over storm drainage pipe shall be 2 feet, unless otherwise shown.
26. Redirect sheet flow, block drain inlets and/or curb openings in pavement and install flow diversion measures to prevent construction soil laden runoff and debris from entering excavations and finish surfaces for bioretention facilities and permeable pavements.
27. When extended access structures are installed, these areas shall be protected at all times from being over-compacted.

1. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT GUARANTEED. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN EXCAVATOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THIS PLAN. IMMEDIATELY NOTIFY THE RESPONSIBLE PROFESSIONAL ENGINEER IF A CONFLICT EXISTS.
2. CALL 1-800-424-555, OR 811, 72 HOURS BEFORE CONSTRUCTION FOR UTILITY LOCATES.
3. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF FIVE FEET (5') HORIZONTAL SEPARATION BETWEEN ALL WATER AND STORM DRAINAGE LINES AND PROPOSED OR EXISTING UTILITIES PRIOR TO CONSTRUCTION.
4. AVOID CROSSING WATER OR SEWER MAINS AT HIGHLY ACUTE ANGLES. THE SMALLEST ANGLE MEASURE BETWEEN UTILITIES SHOULD BE 45 DEGREES.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT NO EXISTING OR PROPOSED UTILITY LINES OR LINES AND PROPOSED OR EXISTING UTILITIES PRIOR TO CONSTRUCTION.
6. AT POINTS WHERE EXISTING THRUST BLOCKING IS FOUND, MINIMUM CLEARANCE BETWEEN CONCRETE BLOCKING AND OTHER BURIED UTILITY LINES SHALL BE MAINTAINED.
7. WHERE A NEW UTILITY LINE CROSSES BELOW AN EXISTING AC MAIN, THE A PIPE SHALL BE REPLACED WITH DI PIPE TO 3 FEET PAST EACH SIDE OF THE TRENCH AS SHOWN ON STANDARD DETAIL W-6. ALTERNATIVELY, WHERE DIRECTED BY THE UTILITY, THE TRENCH SHALL BE BACKFILLED WITH FLOWABLE FILL TO THE TRENCH FLOWABLE FILL) FROM BOTTOM OF TRENCH TO BOTTOM OF AC MAIN.

1. Surface restoration of existing asphalt pavement shall be as required by the Right-of-Way Use permit.
2. The Contractor shall restore the right-of-way and existing public storm drainage easement(s) after construction to a condition equal or better than condition prior to entry. The Contractor shall furnish a signed release from all affected property owners after restoration has been completed.

[illegible]

5020 155TH PL SE
LOKESH JOSHI AND CHANDRA PANDEY
STORM PROFILE & COB NOTES
5020 155TH PL SE
BELLEVUE, WA



CHECKED BY: M. PUDISTS
DESIGNED BY: T. BALIAN
DRAWN BY: T. BALIAN

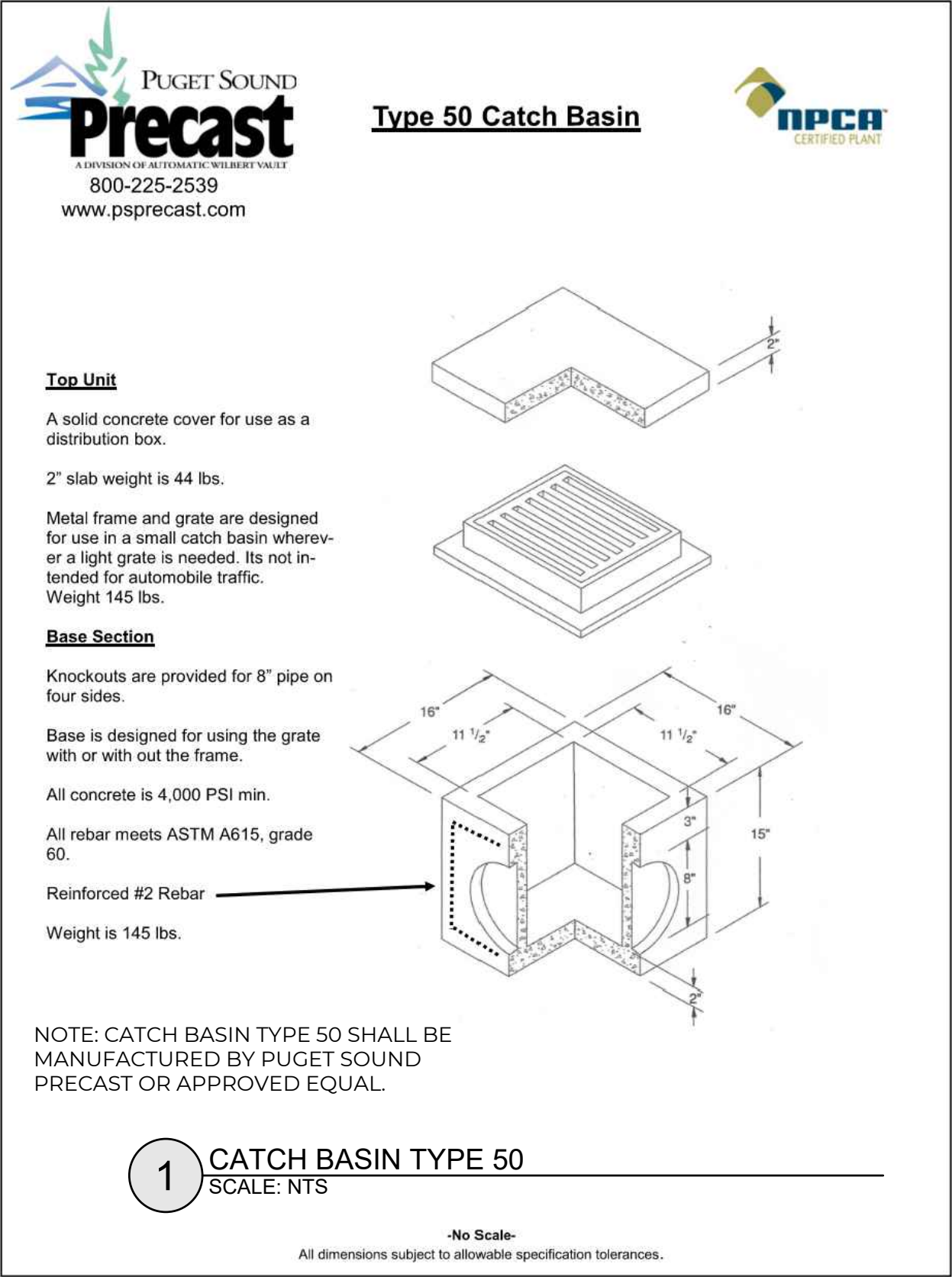
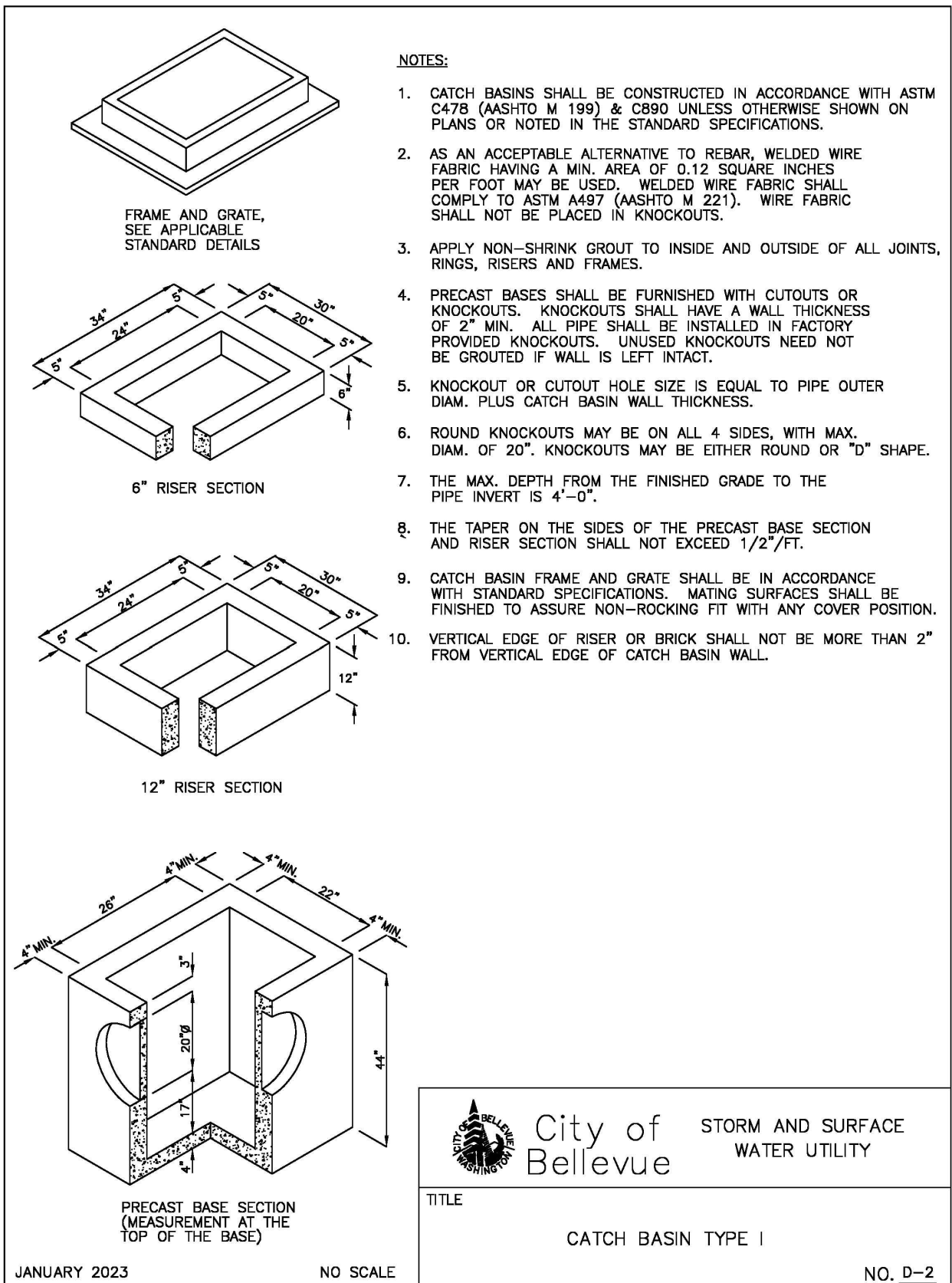
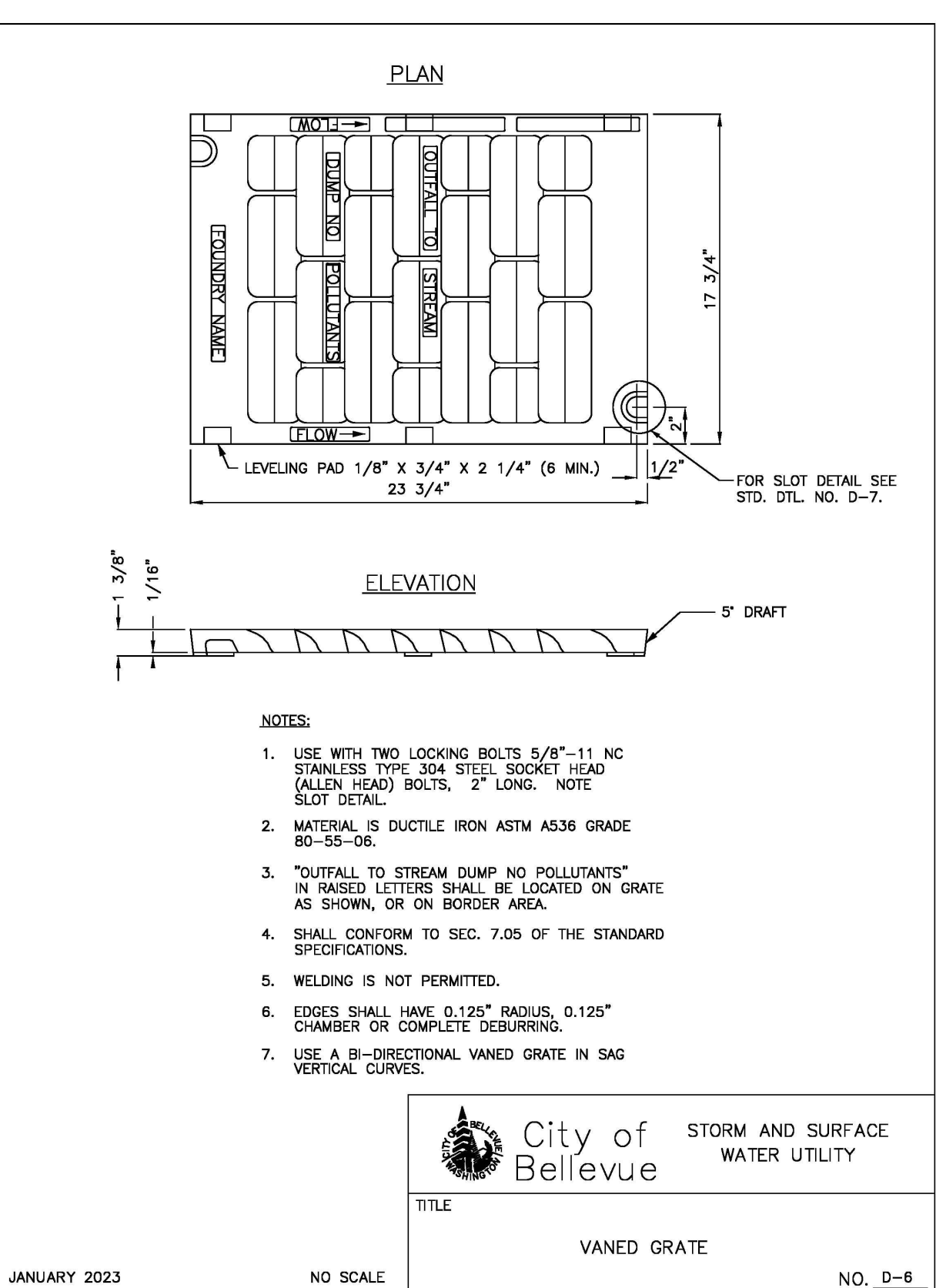
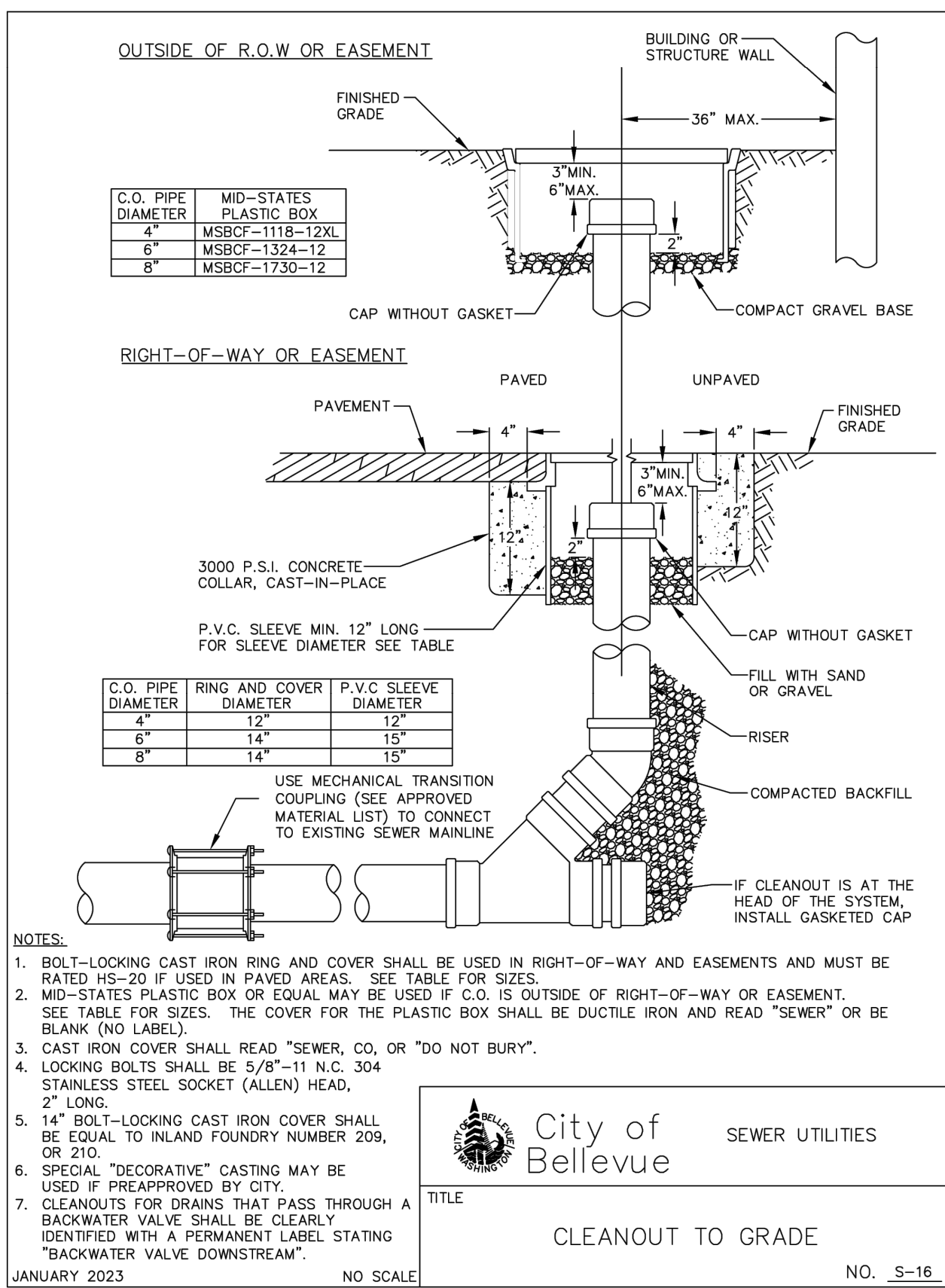
HORZ. DATUM: NAD83/2011
VERT. DATUM: NAVD88

DATE: 11/11/25

PROJECT NO. PAND01

SHEET NO. 6 OF 7

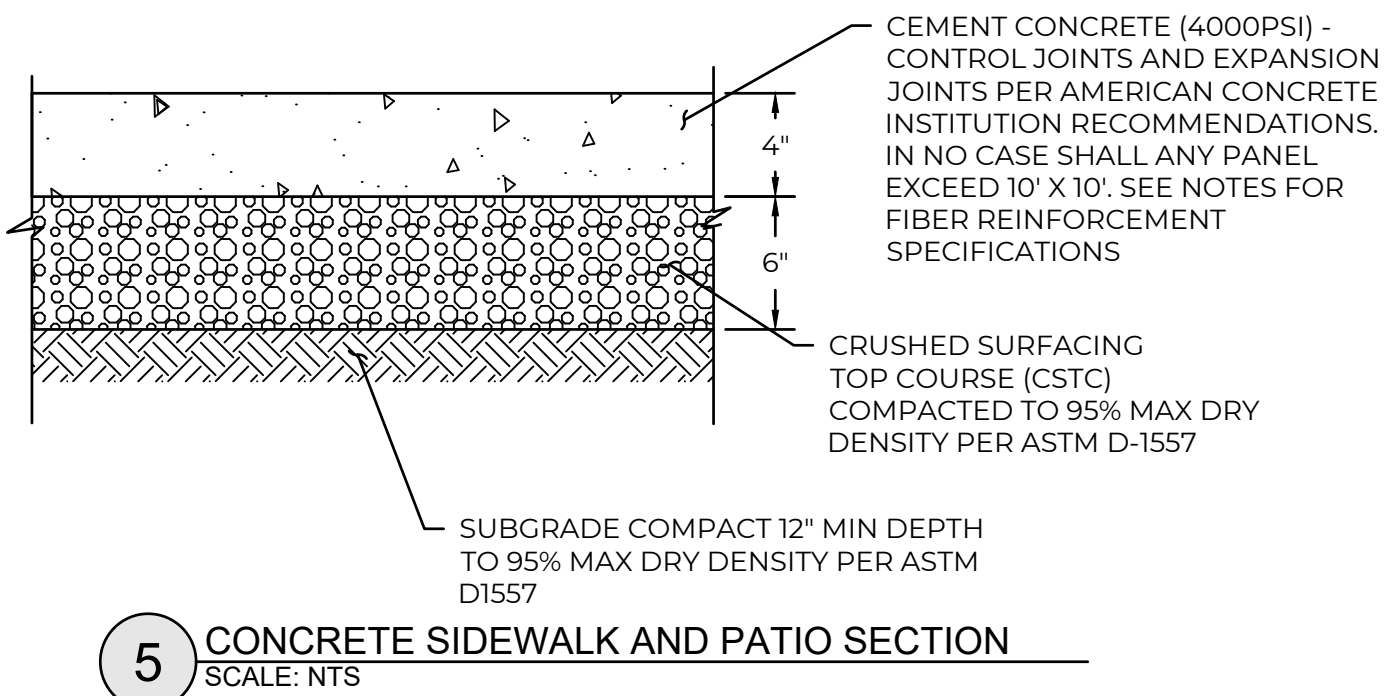
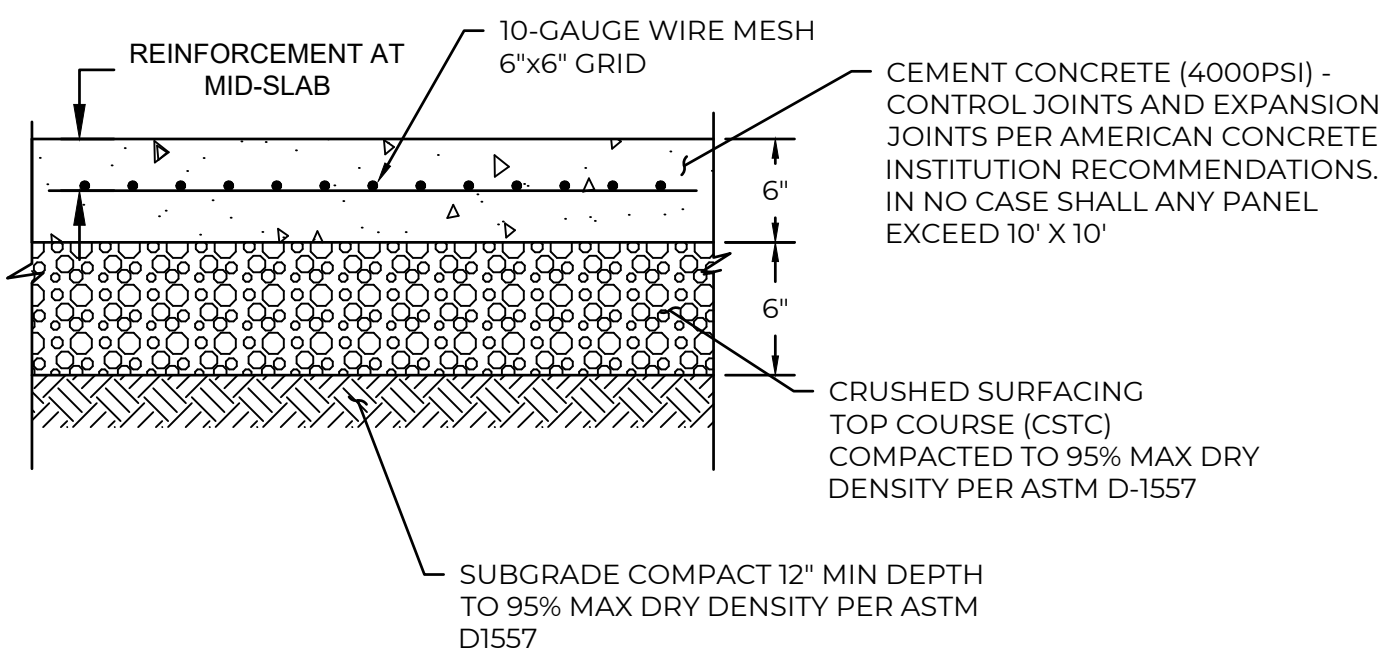
REFERENCE NO. **C3.1**



2 CATCH BASIN TYPE 1
SCALE: NTS

3 VANED GRATE
SCALE: NTS

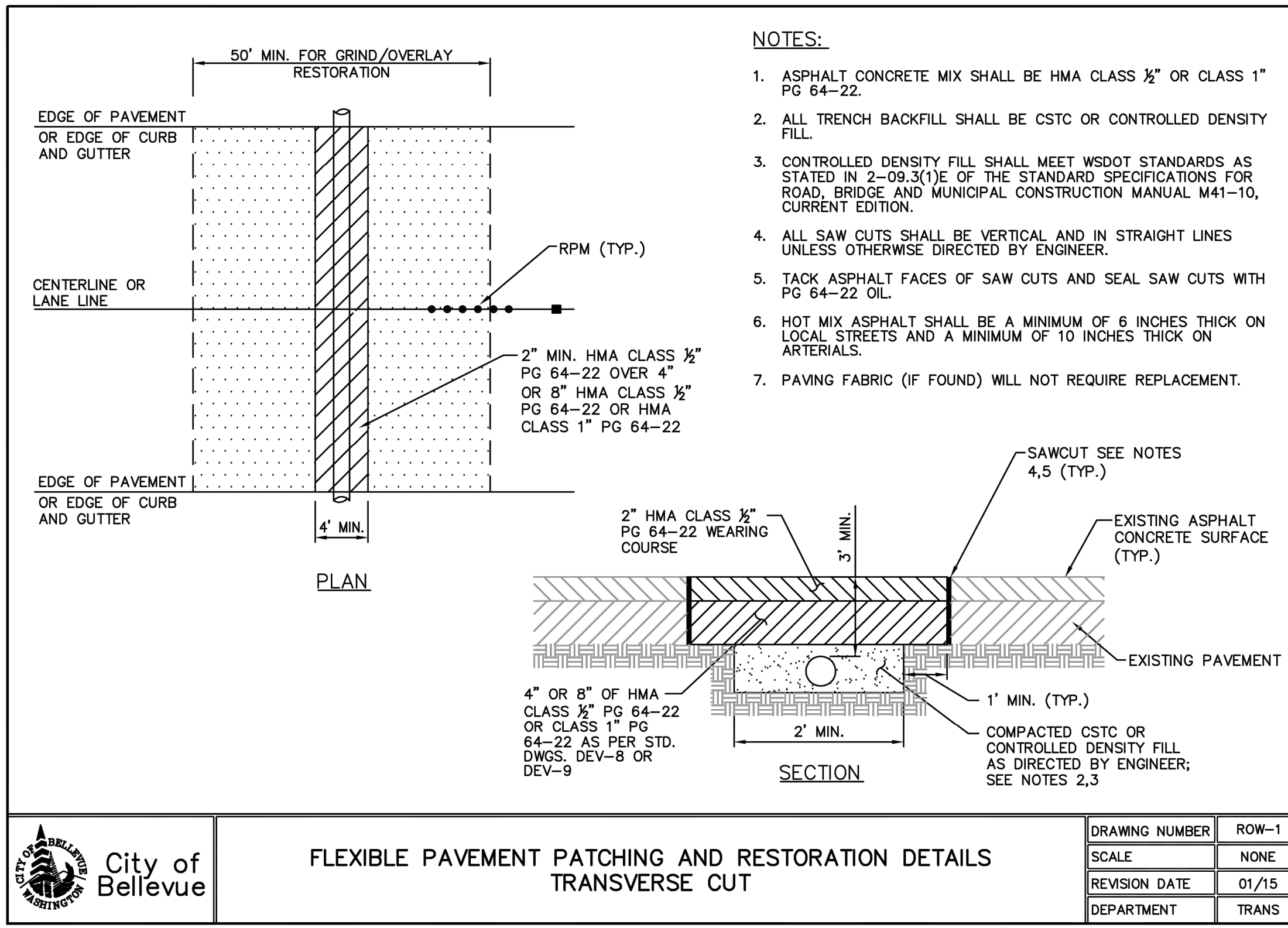
4 CLEANOUT
SCALE: NTS



CONCRETE PAVEMENT NOTES

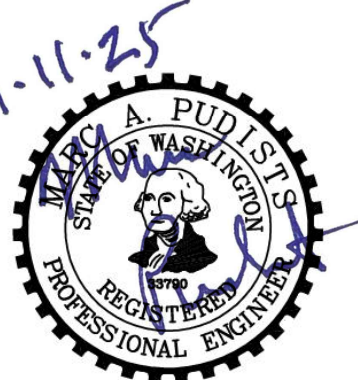
- CONCRETE PAVEMENT CONSTRUCTION SHALL CONFORM TO WSDOT STANDARD SPECIFICATION SECTION 5-05 AND CURRENT AMERICAN CONCRETE INSTITUTE (ACI) REQUIREMENTS EXCEPT AS NOTED HEREIN.
- MINIMUM STRENGTH OF CONCRETE SHALL BE AS FOLLOWS:

TYPE	28-DAY COMPRESSIVE	14-DAY FLEXURAL
CURBS/SIDEWALKS	4,000 PSI	N/A
(GENERAL)		
PAVEMENT	SUBMIT PER 5-05.3 (I)	650 PSI
- MAXIMUM WATER/CEMENT RATED (W/C) SHALL BE 0.55 FOR GENERAL CONCRETE AND 0.44 FOR HEAVY DUTY PAVEMENT. MINIMUM CEMENTITIOUS MATERIAL SHALL BE 564 LBS/CY. USE 1 1/2" MINUS COARSE AGGREGATE FOR CONCRETE SIX INCHES THICK AND GREATER; USE 3/4" MINUS COARSE AGGREGATE FOR THINNER SECTIONS. ALL HEAVY DUTY CONCRETE PAVEMENT SHALL BE FIBER-REINFORCED AND BE AIR-ENTRAINED (5%± 1%).
- UNLESS APPROVED OTHERWISE IN WRITING BY THE ENGINEER, ALL CONCRETE PAVING/SLABS ON GRADE SHALL BE BOUND BY SAWCUT CONTROL JOINTS, CONSTRUCTION JOINTS OR EXPANSION JOINTS. THE MAXIMUM JOINT SPACING IS 12 FEET FOR A 6" SLAB AND 8 FEET FOR A 4" SLAB. THE MAXIMUM RATIO OF LENGTH TO WIDTH ON ANY PANEL SHALL BE LESS THAN 1.5. ALL CONTROL AND EXPANSION JOINT SPACING AND CONFIGURATION SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE GUIDELINES.
- FIBER REINFORCED CONCRETE SHALL CONTAIN 1.5 POUNDS PER CUBIC YARD "FIBERMESH 300" POLYPROPYLENE FIBERS BY PROPEX CONCRETE SYSTEMS, OR APPROVED EQUIVALENT. ADD TO CONCRETE MIX PER THE MANUFACTURER'S INSTRUCTIONS. FIBERS SHALL CONFORM TO ASTM C1116, TYPE II.
- AT DRAINAGE STRUCTURES, MANHOLES, VAULTS, AND OTHER OBSTRUCTIONS WITHIN CONCRETE PAVING/SLABS, AN ISOLATION JOINT WITH PRE-MOLDED JOINT FILLER SHALL BE PLACED PER WSDOT SPECIFICATION SECTION 9-04.1(2).
- JOINT SEALANT SHALL BE DOW CORNING "890-SL" OR APPROVED EQUAL.
- EPOXY SHALL BE SIMPSON "SET-XP" OR APPROVED EQUAL.
- ALL EPOXY BOLTS AND RODS SHALL HAVE ICC APPROVAL FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE. INSTALLATION PER MANUFACTURER'S DIRECTIONS.
- ONE YEAR AFTER PROJECT COMPLETION CONTRACTOR AND OWNER REPRESENTATIVES SHALL INSPECT SLAB FOR CRACKS. ALL CRACKS GREATER THAN 0.06" SHALL BE CLEANED AND REPAIRED WITH EPOXY INJECTION. CURLED EDGES SHALL BE GROUND DOWN. ROCKING SLABS / SETTLEMENT SHALL BE REPAIRED WITH PRESSURE SLAB JACKING.



7 PAVEMENT RESTORATION
SCALE: NTS

NO.	DATE	REVISION DESCRIPTION	BY	CHK	TAB	MAP
1	11/11/23	ADDRESS CITY COMMENTS				



PERMIT SET

LOKESH JOSHI AND CHANDRA PANDEY
PAVING, DRAINAGE, AND UTILITY DETAILS

5020 155TH PL SE

5020 155TH PL SE

BELLEVUE, WA



CHECKED BY: M. PUDISTS
DESIGNED BY: T. BALIAN
DRAWN BY: T. BALIAN

HORIZ. DATUM: NAD83/2011
VERT. DATUM: NAVD88

DATE: 11/11/25

PROJECT NO. PAND01

SHEET NO. 7 of 7

REFERENCE NO. C3.2



MOMENTUM CIVIL
ENGINEERING CONSULTANTS

1145 BROADWAY, SUITE 115
TACOMA, WA 98402

.....
MOMENTUMCIVIL.COM
(253) 319-1504

NEW SINGLE-FAMILY RESIDENCE 5020 155TH PLACE SE

Drainage Report

MC# PAND01
3/20/2025

Drainage Report

3/20/2025

Prepared for: Lokesh Joshi and Chandra Pandey

Address: 5023 155th Pl SE, Bellevue, WA 98006

Email: lokeshjoshi@gmail.com, chandrapandey@gmail.com

Phone: 425-615-3693

Civil Engineer:

Momentum Civil

1145 Broadway, Suite 115

Tacoma, WA 98402

Prepared by: Taylor Balian, P.E.

Email: taylorb@momentumcivil.com

Phone: 406-624-9115

Q/A by: Marc Pudists, P.E.

Email: marcp@momentumcivil.com

Phone: 253-319-1505

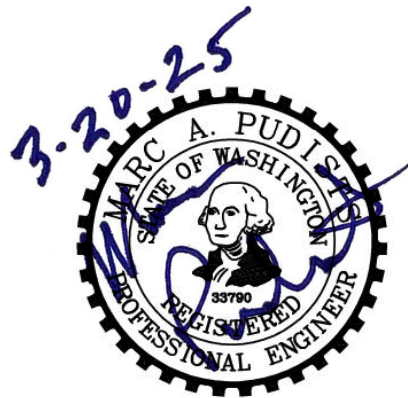


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Section 1 - Project Information

The project proponents, Lokesh Joshi and Chandra Pandey, are applying for permits for the construction of a single-family residence. The project is located on King County parcel number 2141310470 at 5020 155th Place SE in Bellevue, Washington. The parcel has a total lot size of 0.227 acres. Please refer to **Figure 1** on the next page for the project Vicinity Map.

Anticipated Permits

For this project, the following permits are anticipated with the City of Bellevue:

- Critical Area Land Use Permit
- Building Permit for new single-family residence.

Applicable Stormwater Regulations

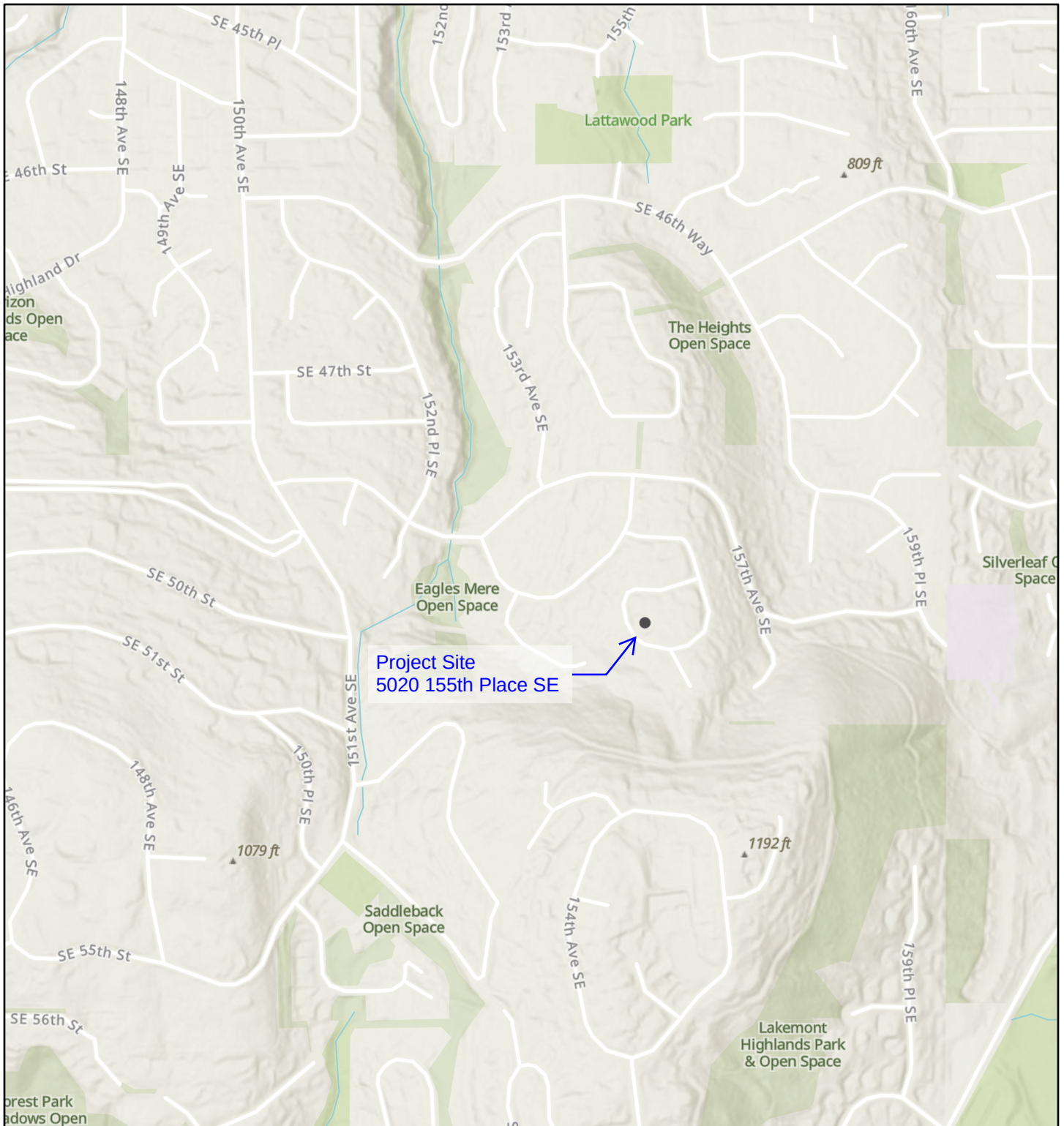
This project will conform to the requirements set forth in the City of Bellevue Storm and Surface Water Engineering Standards (SWES), version 2024.

Since this project is a redevelopment project that will introduce over 5,000 square feet of new and replaced hard surfacing, and since the valuation of the project is over 50% of the valuation of existing site improvements, all Minimum Requirements (#1-9) will be considered.

Stormwater Overview

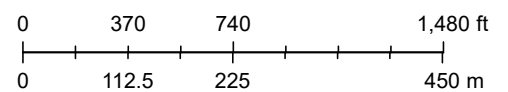
- **Threshold Discharge Area:** The project has a single threshold discharge area (TDA) and is situated within the Vasa Creek drainage basin. Stormwater generated onsite will be discharged via a tightlined connection to a new catch basin in the northeast curb line of 155th Place SE. This new catch basin will connect to an existing catch basin on the opposite side of the street.
- **LID Techniques:** Per the City of Bellevue Public GIS, infiltration is infeasible for this site based on the existing soils. In addition, limited site area and a steep slope on site preclude the use of dispersion techniques. Per the site-specific geotechnical report, "It will be critical to capture and convey as much incoming stormwater away from the adjacent slope as is practicable. On-site infiltration is not recommended."

Figure 1: Vicinity Map



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Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Data Source: City of Bellevue Public GIS

The City of Bellevue does not guarantee that the information on this map is accurate or complete. This data is provided on an "as is" basis and disclaims all warranties.

Section 2 – Existing and Proposed Conditions Summary

Existing Conditions

The parcel is irregular in shape and is bounded by 155th Place SE to the southwest and single-family residences on the adjacent parcels.

The site is located in a hilly area. A steep slope area has been delineated in the northwest corner of the parcel. The site has an existing dwelling that will be demolished to allow for new construction. Please see **Figure 2** for the topographic survey representing the existing conditions.

Soils Properties

According to the City of Bellevue GIS data, the project area is located within the “infeasible for infiltration without additional study” area. Please refer to **Figure 3** for a representation of the infeasible infiltration area.

A site-specific geotechnical evaluation performed by Earth Solutions NW LLC (updated February 19, 2025) is included under Appendix C. Regarding storm water management, the report states “It will be critical to capture and convey as much incoming stormwater away from the adjacent slope as is practicable. On-site infiltration is not recommended.”

Wells and Septic Tanks

No septic systems are present onsite or within the immediate vicinity of the project site.

Floodplain Analysis

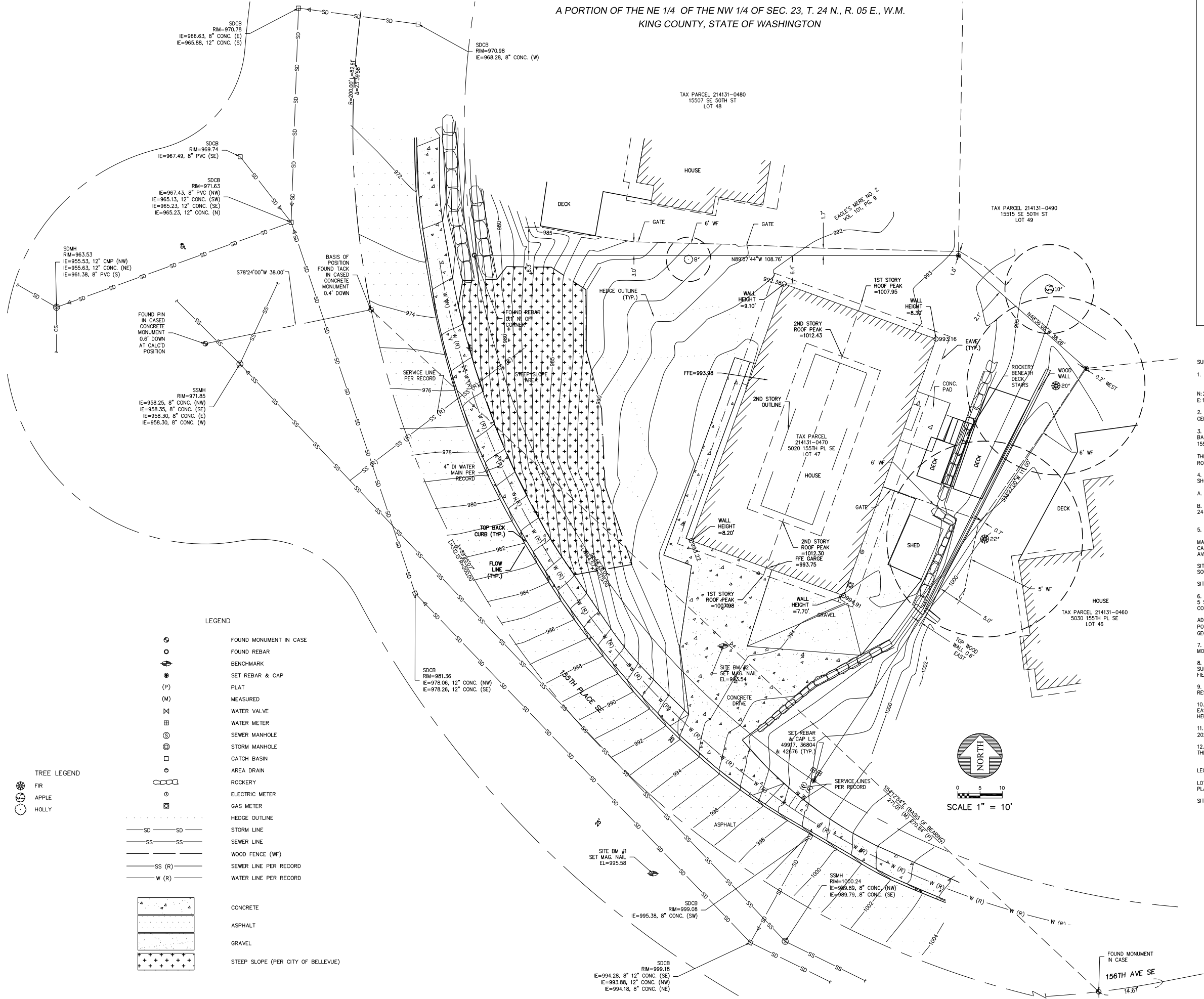
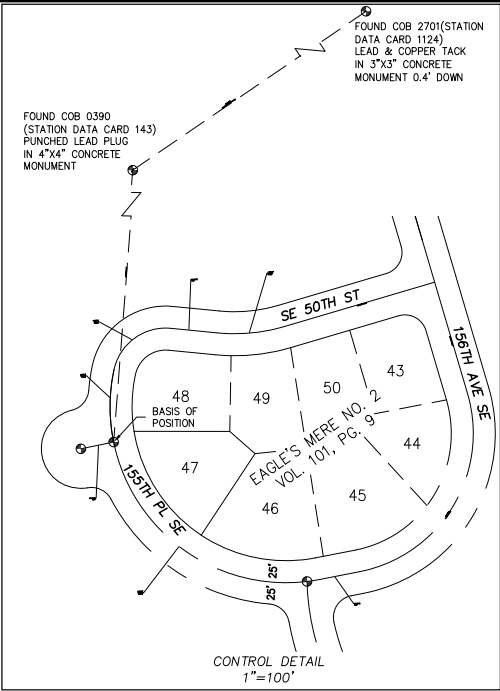
According to FEMA FIRM panel 53033C0667G for King County, Washington, the site is located outside of a mapped floodplain.

Critical Areas

Per the geotechnical evaluation “Based on our field observations and review of the LUC, a steep slope hazard is present along the northwestern side of the site.”

CHANDRA PANDEY

A PORTION OF THE NE 1/4 OF THE NW 1/4 OF SEC. 23, T. 24 N., R. 05 E., W.M.
KING COUNTY, STATE OF WASHINGTON



SURVEY NOTES:

- HORIZONTAL DATUM: CITY OF BELLEVUE, NAD 1983/2011 WASHINGTON NORTH ZONE.
TIED TO CITY OF BELLEVUE DATUM HOLDING C.O.B. SURVEY CONTROL POINT #0390 (GRID N:206795.364, E:1319559.432) AS THE BASIS OF POSITION AND #2701 (GRID N:208054.316, E:1321404.633) AS THE BASIS OF BEARING.
- BASIS OF POSITION: HELD THE FOUND TACK IN CASED CONCRETE MONUMENT IN CENTERLINE OF 155TH PLACE SOUTHEAST (SEE MAP FOR LOCATION AND DESCRIPTION).
- BASIS OF BEARING: HELD THE BEARING OF S 54°12'54" E BETWEEN THE ABOVE NOTED BASIS OF POSITION AND THE FOUND MONUMENT IN CASE AT CENTERLINE INTERSECTION OF 155TH PLACE SOUTHEAST AND 156TH AVE SE (SEE MAP FOR LOCATION AND DESCRIPTION).

THIS SURVEY HOLDS EAGLE'S MERE NO. 2 RECORDED IN VOLUME 101 OF PLATS, PAGES 9-11, A ROTATION OF +0°04'00" WAS APPLIED TO THE BEARINGS TO BE ON THE ABOVE NOTED DATUM.

THE FOLLOWING INFORMATION WAS ALSO REFERENCED IN PREPARING THE BOUNDARY SHOWN HERE ON:

- EAGLE'S MERE NO. 2 RECORDED IN VOLUME 101 OF PLATS, PAGES 9-11.
- KING COUNTY ASSESSOR'S MAP FOR THE NORTHWEST QUARTER OF SECTION 23 TOWNSHIP 24 NORTH, RANGE 5 EAST.

VERTICAL DATUM: NAVD88

MASTER BENCHMARK: CITY OF BELLEVUE BENCHMARK NO. 807 3" PUNCHED BRASS DISK IN CASED CONCRETE MONUMENT AT THE CENTERLINE INTERSECTION OF SE 48TH DRIVE AND 153RD AVE SE. ELEVATION=856.34

SITE BM #1: SET MAG NAIL AND WASHER IN ASPHALT OF SOUTHERLY MARGIN OF 155TH PLACE SOUTHEAST ABOUT 34 FEET NORTHWEST OF A SEWER MANHOLE. ELEVATION=995.58

SITE BM #2: SET MAG NAIL IN CONCRETE DRIVEWAY OF SUBJECT PROPERTY. ELEVATION=993.54

TRaversing AND DATA COLLECTION WERE PERFORMED USING A SPECTRA AND/OR TRIMBLE 5 SECOND TOTAL STATION. ALL FIELD WORK WAS PERFORMED, AND EQUIPMENT MAINTAINED, IN COMPLIANCE WITH WAC 332-130.

ADDITIONAL FIELD WORK WAS PERFORMED USING SPECTRA SP-85 OR TRIMBLE R10 GNSS POSITIONING SYSTEMS, THE WASHINGTON STATE REFERENCE NETWORK, AND/OR THE NATIONAL GEODETIC SURVEY'S ONLINE POSITIONING USER SERVICE (OPUS).

THE SUBJECT PROPERTY SHOWN HEREON CONTAINS 9,907 SQUARE FEET OR 0.227 ACRES, MORE OR LESS.

UNDERGROUND UTILITIES SHOWN HEREON ARE PER A COMBINATION OF FIELD LOCATED SURFACE OBSERVABLE FEATURES AND RECORDS OF THE APPLICABLE UTILITIES AND SHOULD BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION.

MONUMENTS SHOWN AS FOUND AND TOPOGRAPHIC INFORMATION SHOWN HEREON ARE THE RESULT OF A SURVEY BY ENCOMPASS, COMPLETED IN FEBRUARY 2024.

THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. OTHER EASEMENTS AND ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.

THE LEGAL DESCRIPTION SHOWN HEREON IS PER STATUTORY WARRANTY DEED NO. 20240105000304 DATED 01/05/2024.

THE PURPOSE OF THIS EXHIBIT IS TO SHOW THE BOUNDARY AND EXISTING CONDITIONS ON THE SUBJECT PROPERTY AND ADJOINING ROADS.

LEGAL DESCRIPTION

LOT 47, EAGLE'S MERE NO. 2, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 101 OF PLATS, PAGE 9, RECORDS OF KING COUNTY, WASHINGTON.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

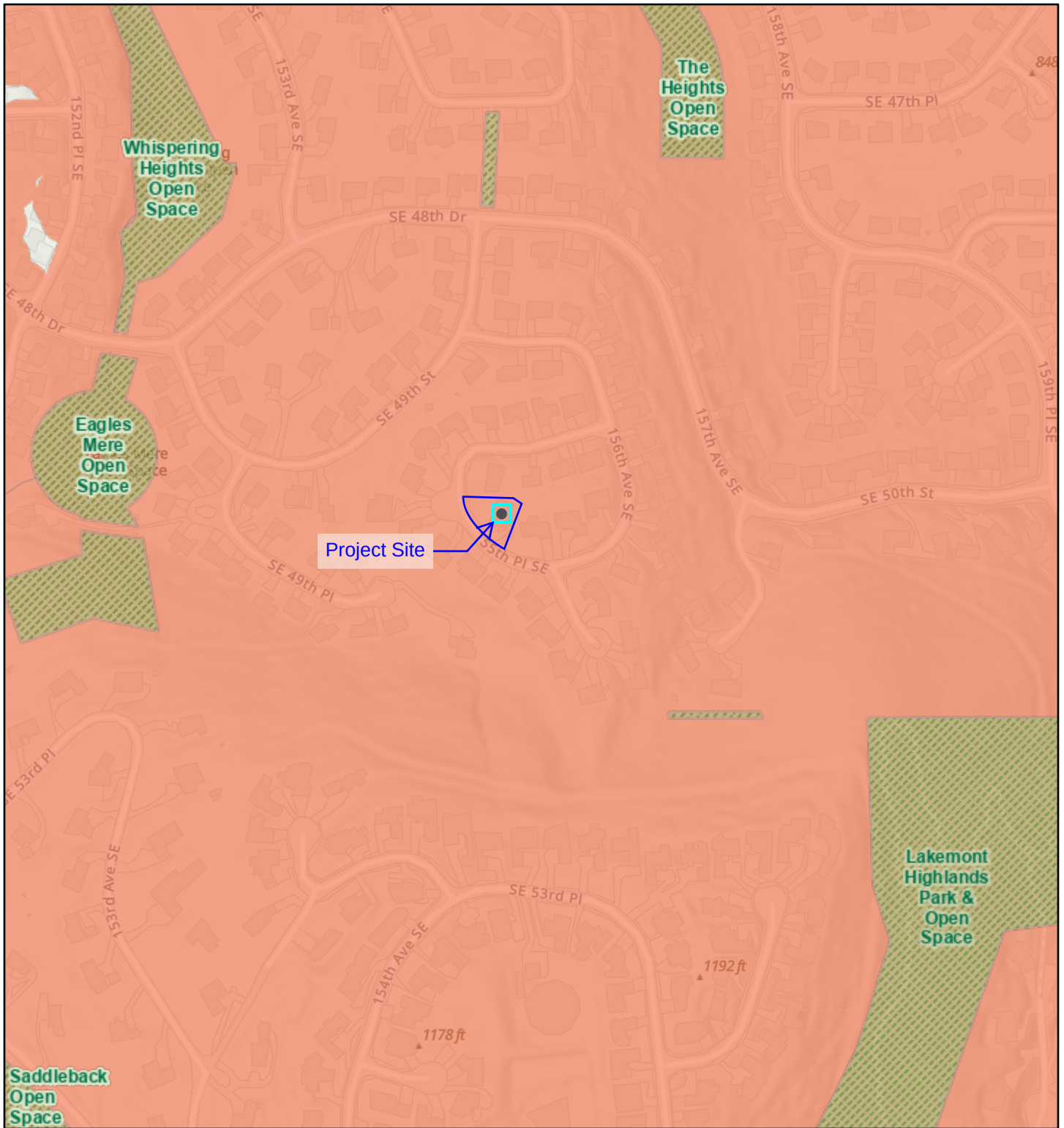
TOPOGRAPHIC SURVEY
FOR
CHANDRA PANDEY

ENCOMPASS
ENGINEERING & SURVEYING
Western Washington Division
165 NE Juniper Street, Suite 201 • Issaquah, WA 98027 • Phone: (425) 392-0250
Eastern Washington Division
407 Swiftwater Blvd. • Cle Elum, WA 98922 • Phone: (509) 674-7433

JOB NO. 24519
DATE 02/09/24
SCALE 1"=10'
DESIGNED N/A
DRAWN JLS
CHECKED SDM
APPROVED KMR

SHEET FIG 2

FIG 3 - Infiltration Infeasibility Map



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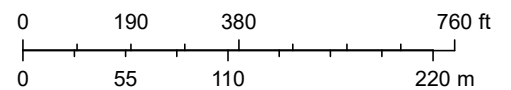
 Parks Open Space

 City Parks

 Infiltration Infeasible Areas

Data Source: City of Bellevue Public GIS

1:6,000

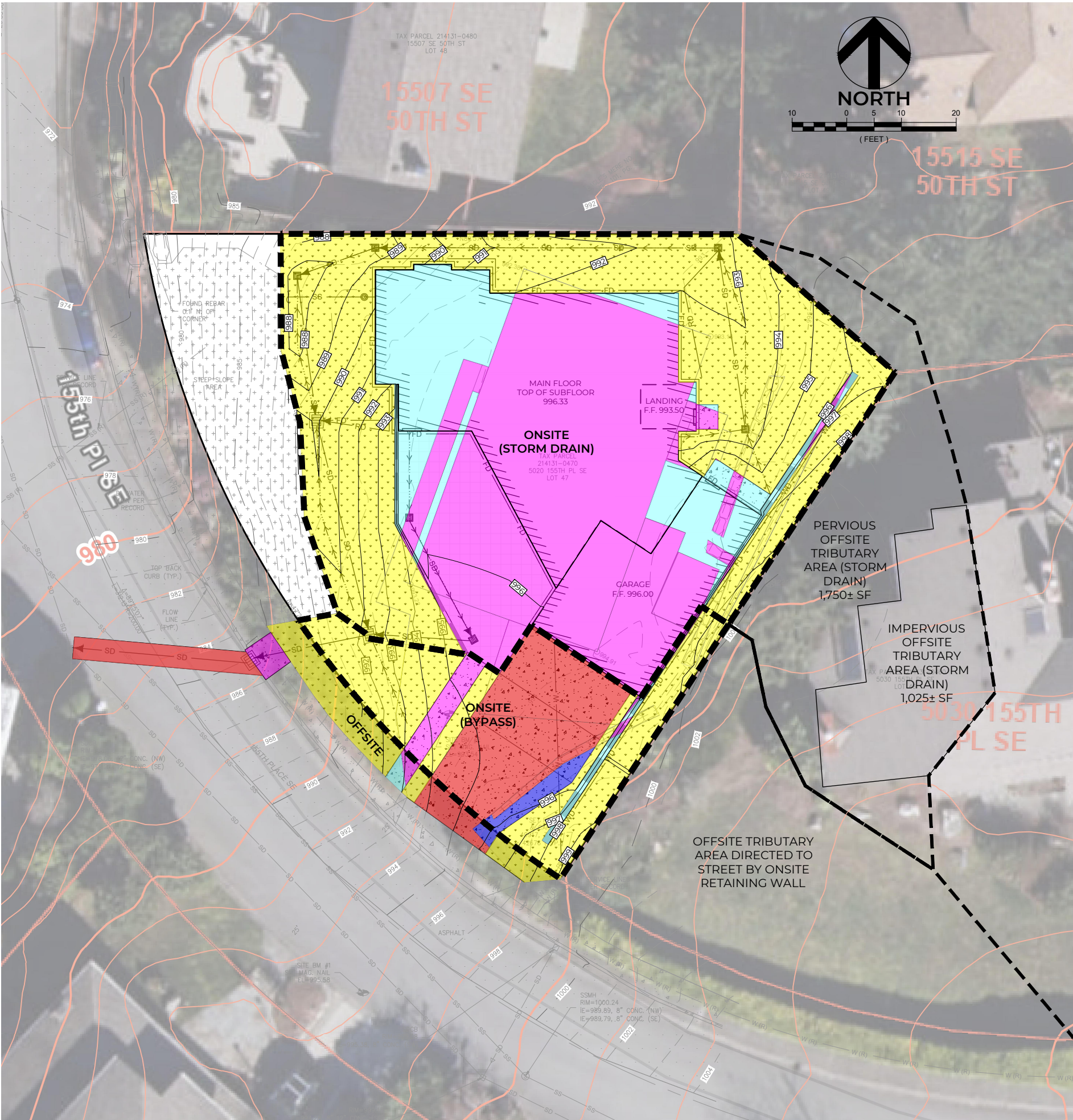


Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community. Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community

Proposed Conditions

In the developed condition, a new single-family residence will be constructed with an approximate footprint of 2,963 square feet. Additional improvements include, but are not limited to: a driveway, patios, retaining walls, landscaping, and utility improvements.

Please see **Figure 4** for a representation of the proposed conditions and surface coverage areas.



PROPOSED SURFACE COVERAGE SUMMARY

SURFACE DESCRIPTION	ONSITE (STORM DRAIN)		ONSITE (BYPASS)		OFFSITE		TOTAL		
	AREA (SQ. FT)	AREA (AC)	AREA (SQ. FT)	AREA (AC)	AREA (SQ. FT)	AREA (AC)	AREA (SQ. FT)	AREA (AC)	
REPLACED PGHS	0 ±	0.00 ±	647 ±	0.01 ±	201 ±	0.00 ±	848 ±	0.02 ±	
NEW PGHS	0 ±	0.00 ±	68 ±	0.00 ±	10 ±	0.00 ±	78 ±	0.00 ±	
REPLACED NON-PGHS	2,886 ±	0.07 ±	104 ±	0.00 ±	48 ±	0.00 ±	3,038 ±	0.07 ±	
NEW NON-PGHS	998 ±	0.02 ±	38 ±	0.00 ±	13 ±	0.00 ±	1,049 ±	0.02 ±	
TOTAL HARD SURFACE	3,884 ±	0.09 ±	857 ±	0.02 ±	272 ±	0.01 ±	5,013 ±	0.12 ±	
REPLACED LANDSCAPING	3,157 ±	0.07 ±	792 ±	0.02 ±	257 ±	0.01 ±	4,206 ±	0.10 ±	
TOTAL DISTURBED AREA	7,041 ±	0.16 ±	1,649 ±	0.04 ±	529 ±	0.01 ±	9,219 ±	0.21 ±	

FG MAJOR CONTOUR	100.0
FG MINOR CONTOUR	101.0
EG MAJOR CONTOUR	100.0
EG MINOR CONTOUR	101.0

NOTE: SOURCE FOR OFFSITE BACKGROUND AERIAL AND CONTOURS IS BELLEVUE MAP VIEWER

PERMIT SET

5020 155TH PL SE
LOKESH JOSHI AND CHANDRA PANDEY
PROPOSED SURFACE COVERAGE MAP
5020 155TH PL SE
BELLEVUE, WA



CHECKED BY: M. PUDISTS
DESIGNED BY: T. BALIAN
DRAWN BY: T. BALIAN
HORZ. DATUM: NAD83/2011
VERT. DATUM: NAVD88
DATE: 3/20/25
PROJECT NO. PAND01
SHEET NO. 7 of 17
REFERENCE NO. FIG 4

Section 3 – Offsite Analysis

Upstream Tributary Sub-basin

The project site receives runoff from a portion of the neighboring property to the southeast. Offsite runoff will join onsite runoff and be directed either to catch basins in the back yard of the proposed residence or to the curb line in 155th Place SE.

Please see **Figure 4** for representation of the upstream tributary area.

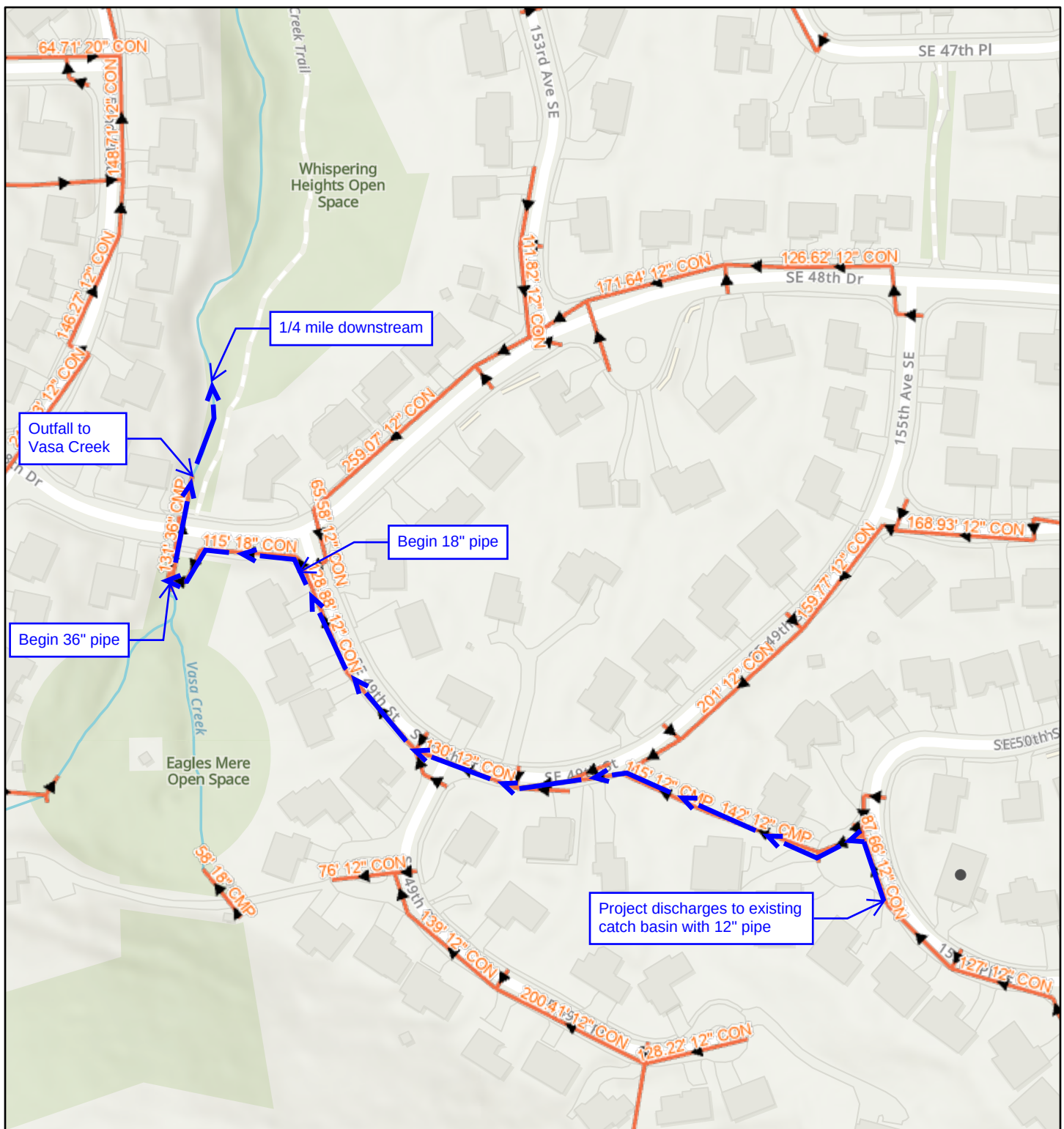
Downstream Analysis

A Level 1 (Qualitative) Offsite Analysis was completed using the guidelines listed under SWES Chapter D4-03.1. The downstream flow path is as follows:

Runoff generated onsite will be discharged via a tightlined connection to a new catch basin in the northeast curb line of 155th Place SE. This new catch basin will connect to an existing catch basin on the opposite side of the street. From there, stormwater will be conveyed north and west within the existing 12-inch pipes for approximately 908 feet; then through existing 18-inch pipes for approximately 195 feet; then through an existing 36" pipe approximately 131 feet to the outfall to Vasa Creek. From there, runoff will be conveyed in Vasa Creek approximately 86 feet to the 1/4-mile downstream point and continue on to Lake Sammamish.

Please see **Figure 5** for the Offsite Analysis Map.

FIGURE 5: OFFSITE ANALYSIS MAP

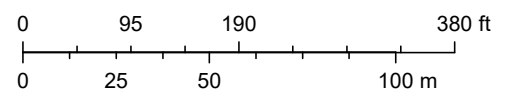


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Storm Gravity Mains

 City of Bellevue

1:3,000



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The City of Bellevue does not guarantee that the information on this map is accurate or complete. This data is provided on an "as is" basis and disclaims all warranties.

Section 4 – Discussion of Minimum Requirements and Site Layout

Stormwater Minimum Requirements Summary

Since this project is a redevelopment project that will introduce over 5,000 square feet of new and replaced hard surfacing, and since the valuation of the project is over 50% of the valuation of existing site improvements, all Minimum Requirements (#1-9) will be considered.

See **Figure 6** for the City of Bellevue flow chart for determining the minimum requirements applicable to this project.

Figure 6: Flow Chart Determining Requirements for Redevelopment
 SURFACE WATER ENGINEERING STANDARDS JANUARY 2024

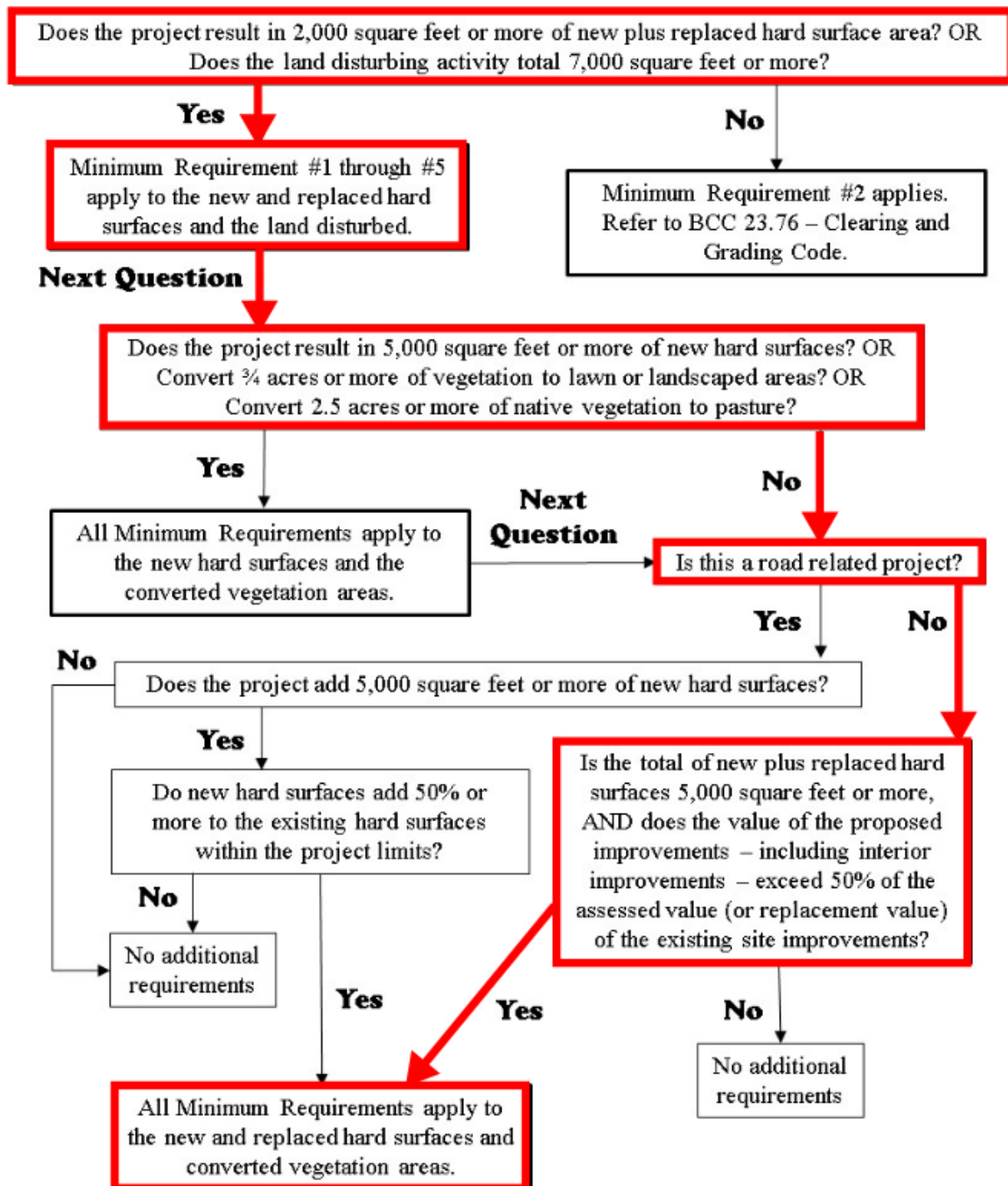


Figure 1.5 – Flow Chart for Determining Minimum Requirements for Redevelopment Projects

Source: Adapted from Figure 2.4.2 of Volume I of the DOE Manual.

MR #1 – Preparation of Stormwater Site Plans

This storm drainage report and the associated civil engineering plans fulfill this requirement.

MR #2 – Construction Stormwater Pollution Prevention Plan (CSWPPP)

A Construction Stormwater Pollution Prevention Plan (CSWPPP) has been prepared for this project and submitted under separate cover. The CSWPPP describes erosion and sediment control Best Management Practices (BMPs) for the project site. BMPs are shown on the Preliminary Site Grading and TESC Plan in **Appendix A**.

MR #3 – Source Control of Pollution

Construction phase Best Management Practices (BMPs) are detailed in the final Construction Drawings. These BMPs represent the minimum expected control measures for the interim construction site conditions. The contractor shall be responsible for adjusting and maintaining these BMPs as required by the site conditions.

Permanent source control BMPs applicable to this site include, but are not limited to:

- S410 BMPs for Illicit Connections to Storm Drains
- S411 BMPs for Landscaping and Lawn/Vegetation Management

MR #4 – Preservation of Natural Drainage Systems and Outfalls

In the existing condition, runoff from the site flows overland to the curb and gutter in 155th Place SE, where it enters the public storm drain.

The natural drainage pattern of the site will be maintained. In the developed condition, runoff from the roof and yard areas will be collected via roof drains and yard drains and conveyed to the existing public storm drain in 155th Place SE. Any runoff not collected onsite will flow overland to the curb and gutter in 155th Place SE, where it will also enter the public storm drain.

See the Preliminary Site Grading and TESC Plan in **Appendix A** for more information on the proposed drainage system.

MR #5 – Onsite Stormwater Management

Per the Flow Chart for Determining LID MR #5 Requirements (see **Figure 7**), the project developer may choose to meet the LID Performance Standard or to use List #2. This project will use List #2. Please refer to Table 1 below for the completed List #2 approach:

Table 1: List Approach #2 Onsite BMPs for Projects Triggering MR #1 through #9

BMP	Feasible?	Limitations on Feasibility
Lawn and Landscaped Areas:		
T5.13: Post Construction Soil Quality and Depth	Y	This will be implemented as noted on the civil plans.
Roofs		
T5.30 Full Dispersion	N	There is not an adequate area for dispersion. In addition, runoff must be conveyed away from the steep slope.
T5.10A: Downspout Full Infiltration Systems	N	Per the geotechnical evaluation, infiltration is infeasible.
Bioretention	N	There is not an adequate area for bioretention. In addition, runoff must be conveyed away from the steep slope.
T5.10B: Downspout Dispersion Systems	N	There is not an adequate area for dispersion. In addition, runoff must be conveyed away from the steep slope.
T5.10C: Perforated Stub-Out Connections	N	Per the geotechnical evaluation, infiltration is infeasible.
Other Hard Surfaces		
T5.30: Full Dispersion	N	There is not an adequate area for dispersion. In addition, runoff must be conveyed away from the steep slope.
T5.15: Permeable Pavement	N	Per the geotechnical evaluation, infiltration is infeasible.
Bioretention	N	There is not an adequate area for bioretention. In addition, runoff must be conveyed away from the steep slope.
T5.12: Sheet Flow Dispersion	N	There is not an adequate area for dispersion. In addition, runoff must be conveyed away from the steep slope.
T5.11: Concentrated Flow Dispersion	N	There is not an adequate area for dispersion. In addition, runoff must be conveyed away from the steep slope.

Figure 7: Flow Chart for Determining MR #5 Requirements

SURFACE WATER ENGINEERING STANDARDS

JANUARY 2024

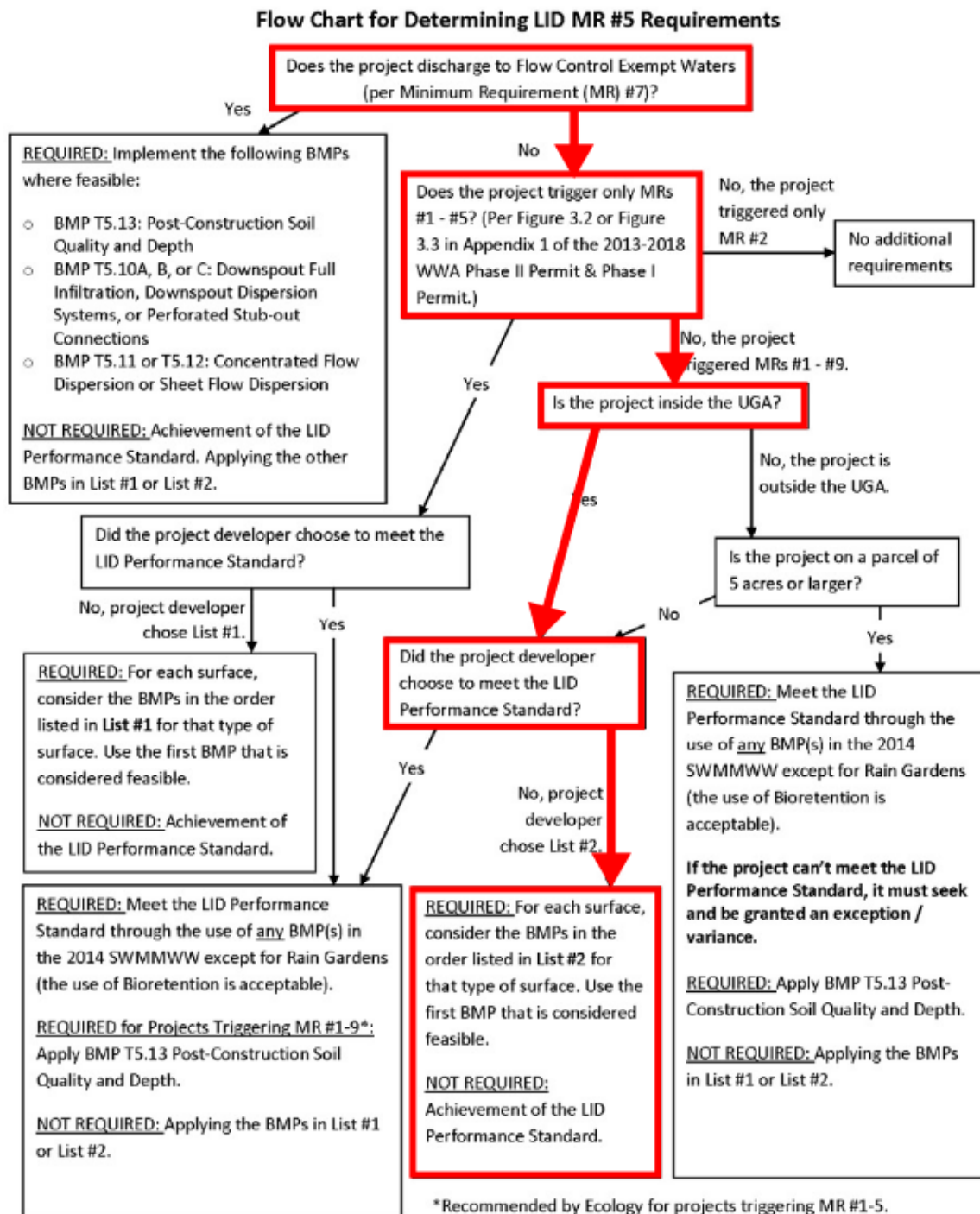


Figure 1.6 – Flow Chart for Determining LID Requirements for Minimum Requirement (MR) #5 – On-site Stormwater Management

Source: From Figure 2.5.1 in Volume I, DOE Manual.

MR #6 – Runoff Treatment

This project will introduce 926 square feet of new and replaced pollution generating impervious surface. This is less than the 5,000 square feet threshold. Therefore, stormwater runoff treatment is not required for this project.

MR #7 – Flow Control

This project has a total effective impervious area of 5,014 square feet. This is less than the 10,000 square feet threshold. Therefore, flow control is not required for this project.

MR #8 – Wetlands Protection

There are no wetlands on or near the project. Runoff from the site enters the public storm drainage system and is routed through manmade conveyance channels to Vasa Creek.

MR #9 – Operation and Maintenance

The Property Owner will be responsible for Operations and Maintenance of the storm system on private property. Because this project is not required to provide flow control BMPs, stormwater treatment BMPs, or onsite stormwater BMPs (except for soil amendment), a stand-alone operation and maintenance manual is not required.

The Property Owner shall inspect the stormwater system yearly for proper operation.

The stormwater drainage system is designed to convey runoff to the City storm system. There should be no signs of concentrated erosion or sedimentation.

The items that will need inspection and/or maintenance include the following:

- Roof gutter and downspouts:
 - o Connected to the storm tightlines.
 - o Signs of erosion at downspout location.
 - o Gutters and downspouts are free of debris and clean.
- Catch basin and yard/inlet drains:
 - o Clean of debris and sedimentation around the structure.
 - o Sediment free inside of structure.
 - o Inlet and outlet pipes are clean and open.
 - o Vegetation is cleaned around the inlet

Section 5 – Permanent Stormwater Control Plan

Onsite Stormwater Conveyance System

Per Section 24.06.070(B)(4) of the City of Bellevue Storm and Surface Water Utility Code, conveyance shall be designed to accommodate runoff from a 100-year, 24-hour storm. The peak 100-year flow (including runoff from the offsite tributary area depicted in **Figure 4**) was calculated using the Santa Barbara Unit Hydrograph (SBUH) method.

Per SWES D3-02.02, the design storm is the 24-hr duration, SCS Type 1 A rainfall distribution resolved to 10-minute intervals. Per SWES Figure 3.3, the project site has a total precipitation of 4.6 inches for the 100-year storm.

Per the geotechnical investigation, “The Web Soil Survey (WSS) resource identifies Beausite gravelly sandy loam on slopes between 15 to 30 percent gradient (Map Unit Symbol: BeD) as the primary soil unit underlying the subject site.” Per the SWMMWW, Beausite is hydrologic soil group B. Therefore, the following curve numbers were used:

- Impervious areas: 98
- Landscaped areas (good condition): 80

Storm and Sanitary Analysis, an Autodesk product, was used to run the analysis. Time of concentration was conservatively assumed to be 5 minutes. The calculated peak runoff for the proposed storm drain is 0.19 cfs. The results are included in **Appendix B**.

Manning’s Equation was used to calculate the available pipe capacity for the proposed storm drain. The most constrained pipe has a diameter of 4-inches and a slope of 1%. Using an ‘n’ value of 0.012 results in a pipe capacity of 0.21 cfs, which is greater than the 100-year peak runoff. The proposed storm drain can accommodate the upstream run-on without surcharging any pipes or structures.

List of Appendices

Appendix A - Civil Engineering Plans.....A-1

Appendix B - Gravity Conveyance Calculations..... B-1

Appendix C - Geotechnical ReportC-1

Appendix A - Civil Engineering Plans

(Submitted Under Separate Cover)

Appendix B - Gravity Conveyance Calculations

VERIFYING 4" PIPE CAPACITY

Project Description

File Name Peak Flow.SPF

Project Options

Flow Units CFS
Elevation Type Elevation
Hydrology Method Santa Barbara UH
Time of Concentration (TOC) Method SCS TR-55
Link Routing Method Hydrodynamic
Enable Overflow Ponding at Nodes YES
Skip Steady State Analysis Time Periods NO

Analysis Options

Start Analysis On 00:00:00 0:00:00
End Analysis On 00:00:00 12:00:00
Start Reporting On 00:00:00 0:00:00
Antecedent Dry Days 0 days
Runoff (Dry Weather) Time Step 0 01:00:00 days hh:mm:ss
Runoff (Wet Weather) Time Step 0 00:05:00 days hh:mm:ss
Reporting Time Step 0 00:05:00 days hh:mm:ss
Routing Time Step 30 seconds

Number of Elements

Qty
Rain Gages 1
Subbasins..... 2
Nodes..... 1
 Junctions 0
 Outfalls 1
 Flow Diversions 0
 Inlets 0
 Storage Nodes 0
Links..... 0
 Channels 0
 Pipes 0
 Pumps 0
 Orifices 0
 Weirs 0
 Outlets 0
Pollutants 0
Land Uses 0

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
49		Time Series	TS-100	Cumulative	inches	Washington	King	100.00	4.60	SCS Type IA 24-hr

Subbasin Summary

SN	Subbasin ID	Area	Impervious Area	Impervious Area Curve Number	Pervious Area Curve Number	Total Rainfall	Total Runoff	Total Runoff Volume	Peak Runoff	Time of Concentration
		(ac)	(%)			(in)	(in)	(ac-in)	(cfs)	(days hh:mm:ss)
1	Offsite	0.06	37.00	98.00	80.00	4.60	3.22	0.20	0.05	0 00:05:00
2	Onsite(StormDrain)	0.16	55.00	98.00	80.00	4.60	3.55	0.57	0.14	0 00:05:00

Total peak runoff from onsite and offsite contributing subbasins flowing to 4" pipe = 0.19 cfs



Required Conveyance Capacity

Area Tributary to 4" storm pipe: 0.22 acres

Peak 100 yr flow = 0.19 cfs

Provided Conveyance Capacity

Flattest pipe is 4" PVC @ 1% slope.

Manning's equation with $n=0.012$

Pipe capacity = 0.21 cfs

Therefore, pipe capacity is greater than peak flow.

Appendix C - Geotechnical Report

October 25, 2024
Updated February 19, 2025
ES-9757.01

Chandra Pandey
5020 – 155th Place Southeast
Bellevue, Washington 98006

**Subject: Geotechnical Evaluation and Critical Areas Assessment
Pandey Residence
5020 – 155th Place Southeast
Bellevue, Washington**

Greetings:

As requested, Earth Solutions NW, LLC (ESNW) has prepared this letter for the subject site. We performed our work in general accordance with the scope of services outlined in our proposal dated July 25, 2024, which was authorized on July 29, 2024. A summary of our subsurface exploration, infiltration testing, laboratory analyses, and recommendations with respect to the proposed project are provided in this letter. This update addresses current site layout and related geologic hazard areas code requirements.

Site and Project Description

The subject site is located along east side of 155th Place Southeast in Bellevue, Washington. The approximate site location is depicted on Plate 1 (Vicinity Map). The site consists of one tax parcel (King County Parcel No. 214131-0470) currently developed with a residence and associated improvements (totaling about 0.23 acres of land area). The existing residence was built around 1977 and has two levels of living space.

The existing topography generally descends toward the west for approximately 20 feet of vertical relief within the property boundaries. A 40-percent-or-greater steep slope is mapped along the western margin of the site. Currently, the site vegetation primarily consists of typical residential landscaping including grass, shrubs and bushes.

We understand the project will include constructing a new single-family residence and associated improvements. Retaining walls may be incorporated into the site design to accommodate grade transitions, where necessary. Based on the referenced floor plan, the main floor elevation for the new residence is proposed at roughly elevation 996 feet. A mezzanine level below the main floor may be established in some areas of the structure, with a low elevation estimated at about 993 feet. The existing structure has a finish floor elevation of about 993 feet per the referenced topographic survey. As part of the development plans, the existing driveway will be reconfigured to the southeastern property line to provide a more direct access route to the new garage.

Subsurface Conditions

An ESNW representative observed, logged, and sampled three test pits on August 13, 2024, advanced at accessible locations within the property boundaries using a mini-trackhoe and operator retained by our firm. The test pits were completed to assess and classify the site soils, to characterize the groundwater conditions within areas proposed for new development, and to complete one small-scale Pilot Infiltration Test. The maximum exploration depth was approximately seven-and-one-half feet below the existing ground surface.

The approximate locations of the exploration sites are illustrated on Plate 2 (Subsurface Exploration Plan). Please refer to the attached exploration logs for a more detailed description of subsurface conditions. Representative samples collected at the exploration locations were analyzed in accordance with Unified Soil Classification System (USCS) and United States Department of Agriculture (USDA) methods and procedures. Laboratory test results are attached to this letter.

Topsoil

Topsoil was encountered within the upper 4 to 8 inches at the test locations. Deeper or shallower pockets of topsoil may be encountered in localized areas of the site. The topsoil was characterized by its dark brown color, the presence of fine organic material, and small root intrusions.

Fill

Fill was encountered at two test pit locations extending to depths of roughly three-and-one-half to four-and-one-half feet bgs. The fill appeared to consist of native materials characterized as silty sand with gravel in a medium dense to dense and moist condition.

Native Soil

Underlying the topsoil and fill, native soils consisting primarily of dense to very dense silty sand with gravel (USCS: SM) and silty gravel with sand (USCS: GM) were observed at the test locations. The native soils were characterized as representative of completely weathered and fractured sandstone bedrock, and glacial till deposits. Laboratory analyses of select soil samples indicate the native soil was chiefly in a moist condition at the time of exploration and contained roughly 22 to 32 percent fines.

Geologic Setting

Geologic mapping of the area identifies Blakely Formation bedrock (Tb) across the site, with Vashon glacial till deposits (Qvt) mapped nearby.

The Blakely Formation bedrock is described as a sedimentary rock consisting of sandstone, siltstone, and conglomerate. The Blakely Formation was deposited in a shallow marine to coastal environment. Glacial till is locally comprised of silt, sand, pebbles, cobbles, and boulders. The till was deposited directly from the glacier as it advanced over the underlying bedrock.

The Web Soil Survey (WSS) resource identifies Beausite gravelly sandy loam on slopes between 15 to 30 percent gradient (Map Unit Symbol: BeD) as the primary soil unit underlying the subject site. The Beausite soils formed in glacial drift deposits over residuum derived from sandstone or conglomerate. The referenced USDA soil survey report characterizes BeD soils with rapid surface water runoff and severe hazard of erosion.

Based on our field observations, native soils on the subject site are generally consistent with the geologic and soil mapping resources outlined in this section.

Groundwater

Natural groundwater was not observed during the August 2024 subsurface exploration. However, groundwater seepage is common and should be expected within site excavations depending on the time of year. In general, groundwater seepage rates and elevations fluctuate depending on many factors, including precipitation duration and intensity, the time of year, and soil conditions. Groundwater seepage flow rates are typically higher during the winter, spring, and early summer months.

Critical Areas Review

The referenced online City map and LUC 20.25H were reviewed to determine the presence of geologic hazard areas on site. Based on our field observations and review of the LUC, a steep slope hazard is present along the northwestern side of the site. It appears that this area and adjacent slopes were modified as part of the adjacent right of way improvements and on-site development activity and is not a natural feature in the current configuration.

LUC 20.25H.055 provides allowed uses and development within critical areas. LUC 20.25H.125 provides performance standards that are required when development is allowed within a critical area.

Steep Slope Hazard Area

Based on review of LUC 20.25H.120, a steep slope is defined as an area containing slopes of 40 percent or more that has a rise of at least 10 feet and exceeds 1,000 square feet in area. Based on the referenced topographic survey, the western side of the site adjacent to the frontage features a slope with a gradient of approximately 44 percent and a rise that ranges up to about 14 feet, with an area of about 1,120 square feet. Accordingly, the slope in the southwestern site area (hereafter referred to as the “slope”) classifies as a steep slope hazard area per the LUC definition.

LUC 20.25H.120.B.2 provides geologic hazard area buffer guidelines. Based on the presence of firm native soil and bedrock on this site, in our opinion, the buffer from the top of slopes inclined at 40 percent or greater, over 10 feet in height, may be reduced to 15 feet. This dimension would meet or exceed the height of the adjacent steep slope hazard area along the northwestern portion of the site. It is important to note that this slope was modified from the natural contours as part of the adjacent roadway construction and is not part of a larger steep slope hazard.

Slope Reconnaissance & LiDAR Review

During both the March and August 2024 fieldwork, ESNW representatives traversed examined the steep slope area looking for signs of potential slope movement and instability. In general, the steep slope area is vegetated with a variety of plant species and appears to have been “armored” with large, angular boulders in an “alpine” style rockery. Given the current state of landscaping on slope, the original land surface in this location has very likely been modified into its current configuration.

Evidence of historical landslide activity or slope movement, such as tree trunk deformation, emergent seepage, tension cracks, reversed slope benches, hummocky terrain, and vegetation patterns, was not observed.

A review of LiDAR data available through Washington’s Department of Natural Resources (DNR) Geologic Information Portal did not reveal obvious signs of historical slope instability.

Slope Stability Analysis

We evaluated slope stability across the subject site with primary focus on areas likely to be influenced by the proposed modifications. Global slope stability analyses were completed using the GeoStudio Slope/W modeling program to reflect existing and proposed geometries in both static and seismic scenarios, including future foundation loading where applicable.

The analyses focused primarily on deep-seated rotational failures and were completed using topographic data available through the online City of Bellevue GIS resource and referenced topographic survey. The cross-section line (A-A’) is depicted on Plate 2 (Subsurface Exploration Plan). Slope stability models and related modeling parameters are attached to this report.

Based on our observations of relatively consistent native soils underlying the observed fills, native soil stratigraphy within the slope complex was modeled as a single uniform soil unit. Soil strength parameters were based on observed conditions and relatively conservative. Groundwater was not included in the stability models, as abundant accumulations of groundwater were not encountered during the subsurface exploration and were not observed as emergent seeps on the adjacent hillslope.

Soil strength parameters utilized in the stability models are outlined in the table below. Soil cohesion values were applied for short-term seismic loading applications, consistent with the guidelines outlined in the Washington State Department of Transportation Geotechnical Design Manual – Chapter 5.10.

Soil Unit	Density or Consistency	Unit Weight (pcf)	Cohesion (psf)	Internal Friction Angle (deg)
Silty Sand	Dense to Very Dense	130	0 (static) 150 (seismic)	36
Structural Fill	Medium Dense to Dense	125	0	32

Our analyses indicate the proposed redevelopment will not increase the risk of slope failure nor will it result in a need for increased buffers on neighboring properties.

Consistent with local standards, our models suggest that the slope complex will maintain factors of safety against catastrophic failure of at least 1.2 in dynamic loading conditions and 1.5 in static conditions. In our evaluation, we determined that the proposed condition will closely replicate the existing condition including structural loads and site drainage regimes.

As noted previously, the steep slope area was partially created (over-steepened) as part of adjacent right of way improvements. In this respect, the feature is not a naturally occurring steep slope and, in our opinion, should be exempt from steep slope hazard regulations.

In our opinion, the proposed development is considered feasible and acceptable from a geotechnical standpoint, and additional landslide hazard/steep slope area mitigation measures are not necessary for this project. The steep slope presents a low potential for instability on the site or adjacent properties. However, the most pertinent recommendations with respect to global slope stability for this site are regarding site drainage. It will be critical to capture and convey as much incoming stormwater away from the adjacent slope as is practicable. On-site infiltration is not recommended. See the *Drainage* and *Infiltration Feasibility* sections below for additional narrative.

Performance Standards

LUC 20.25H.125 addresses performance standards that must be maintained for development within a landslide hazard area, steep slope critical area, or the associated buffers of either hazard. With respect to the proposed single-family residence construction and site critical areas, the standards presented in LUC 20.25H.125 are addressed individually herein.

- A. Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography.*

Based on the referenced site plans, the proposed building foundations and hardscape (patio) areas will be located outside the steep slope buffer. Sheets A1.0/A1.1 of the referenced plans illustrate the improvement outlines. Outside of the building footprint, we anticipate that alterations to the existing topography will be minimized to the extent practicable to either accommodate the new structure or improve the landscaping elements. The preferred plan will include reconfiguring the existing driveway to provide access for the new home. It is noted that this steep slope area is not part of a larger natural slope that would provide some level of function and value; rather, it is isolated in extent.

- B. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation.*

Based on the referenced site plan, the construction of the proposed single-family residence will largely conform to the natural landforms of the site and the surrounding property. ESNW recommends the existing vegetation outside the project limits be retained to the extent feasible in steep slope areas outside the area of disturbance. If revegetation will be considered for the steep slope areas outside the area of disturbance, the plants should be chosen based on ability to provide soil retention and erosion control. In any case, the steep slope hazard area in the northwestern portion of the site is isolated and does not provide any significant functions or values that may benefit from protection.

- C. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties.*

Based on the project scope, construction of the proposed single-family residence will not increase the risk to the surrounding areas, including the existing adjacent properties to the north and south.

- D. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes where graded slopes would result in increased disturbance as compared to use of a retaining wall.*

The slope is comprised of dense glacially consolidated soils and bedrock and is stable in the current configuration and condition. Provided construction techniques conform to local standards, construction of the driveway realignment will not increase the potential for instability.

- E. Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer.*

Impervious surfaces will be relegated to the construction of the proposed residence. Standard building practices will be utilized to direct stormwater generated from the new impervious surfaces away from the critical area and related buffer zone.

- F. Where change in grade outside the building footprint is necessary, the site retention system should be stepped, and regrading should be designed to minimize topographic modification. On slopes in excess of 40 percent, grading for the yard area may be disallowed where inconsistent with this criterion.*

Based on the existing site plan, proposed yard areas will be primarily located outside of the steep slope hazard area. Yard areas located adjacent to the steep slope area will be utilized for general landscape/yard use.

- G. Building foundation walls shall be utilized as retaining walls rather than rockeries or retaining structures built separately and away from the building wherever feasible. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundation.*

The proposed structure will utilize foundation walls as the primary retention system for the proposed residence.

- H. On slopes in excess of 40 percent, use of pole-type construction which conforms to the existing topography is required where feasible. If pole-type construction is not technically feasible, the structure must be tiered to conform to the existing topography and to minimize topographic modification.*

No foundations are proposed for areas of steep slope or associated reduced buffer. ESNW anticipates the residence will utilize a cast-in-place foundation wall in its construction. This configuration will be utilized to conform to the existing topography to the extent feasible.

- I. On slopes in excess of 40 percent, piled deck support structures are required where technically feasible for parking or garages over fill-based construction types.*

No foundations are proposed for areas of steep slope or associated reduced buffer; therefore, piled deck support structures will not be applicable for the proposed construction

- J. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.*

Areas of disturbance will be reduced to the minimum amount feasible for construction of the single-family residence and associated improvements.

Critical Areas Report Development Standards

LUC 20.25H.145 addresses standards that must be maintained for approval of modification within a landslide hazard area, steep slope critical area, or the associated buffers of either hazard. With respect to the proposed construction and site critical areas, the standards set forth within 20.25H.145 are addressed herein.

Modifications to geologic hazard critical areas and critical area buffers shall only be approved if the Director determines that the modification:

- A. Will not increase the threat of the geological hazard to adjacent properties over conditions that would exist if the provisions of this part were not modified.*
- B. Will not adversely impact other critical areas.*
- C. Is designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than would exist if the provisions of this part were not modified.*
- D. Is certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington.*
- E. The applicant provides a geotechnical report prepared by a qualified professional demonstrating that modification of the critical area or critical area buffer will have no adverse impacts on stability of any adjacent slopes, and will not impact stability of any existing structures. Geotechnical reporting standards shall comply with requirements developed by the Director in City of Bellevue Submittal Requirements Sheet 25, Geotechnical Report and Stability Analysis Requirements, now or as hereafter amended;*
- F. Any modification complies with recommendations of the geotechnical support with respect to best management practices, construction techniques or other recommendations; and*
- G. The proposed modification to the critical area or critical area buffer with any associated mitigation does not significantly impact habitat associated with species of local importance, or such habitat that could reasonably be expected to exist during the anticipated life of the development proposal if the area were regulated under this part.*

Based on our understanding of the project, the proposed single-family residence will not increase the geologic hazard threat to adjacent properties and will not adversely impact other critical areas. Based on our field observations and understanding of the local geologic setting, it is our opinion the final design (under anticipated conditions) can be certified as safe. Based on the presence of firm native soil and bedrock on this site, in our opinion, the buffer from the top of slopes inclined at 40 percent or greater and over 10 feet in height may be reduced to 15 feet. This dimension would meet or exceed the height of the adjacent steep slope hazard area along the northwestern portion of the site.

In our opinion, realigning the driveway is acceptable from a geotechnical standpoint and conforms to the intent of applicable Bellevue Land Use Code.

Based on the very limited extent of steep slope areas on this site that were modified as part of adjacent right-of-way improvements, in our opinion, there are no adverse habitat impacts that would result from this project.

Analysis of Proposal

While the new footprint will expand from the existing areas of disturbance, the site layout reflects a thoughtful approach to design and location. The critical area on this site is related to the steep slope mapped along the frontage, and the site layout strives to avoid this area and associated buffer. Based on the site conditions and our understanding of the proposed project, the project complies with applicable code requirements for avoiding geologic hazard areas and providing adequate mitigation. Therefore, standard permanent landscaping will provide an adequate level of mitigation and restoration of adjacent sensitive areas on this site.

In our opinion, given the low functions and values of the steep slope and the stable soil conditions comprising this area, limited grading for landscaping should be allowed, if the owner opts for this approach. ESNW should be consulted to review any grading plans for the steep slope hazard area or associated buffer. In no case, shall modifications within the steep slope or buffer compromise stability in a temporary or permanent condition.

Geotechnical Considerations

In our opinion, the proposed project is feasible from a geotechnical standpoint. The geotechnical recommendations, conclusions, and considerations provided in the following sections are intended to support the proposed construction.

In-Situ Soils

The soils encountered at the test locations are generally sensitive to moisture based on the fines content of the soil and may degrade if exposed to wet weather and construction traffic. Compaction of the soil to the levels necessary for use as structural fill may be difficult during wet weather conditions. Soils encountered during site excavations that are excessively over the optimum moisture content will require aeration or treatment prior to placement and compaction. Conversely, soils that are substantially below the optimum moisture content will require moisture conditioning through the addition of water prior to use as structural fill. An ESNW representative should determine the suitability of in-situ soils for use as structural fill at the time of construction.

Structural Fill

Structural fill is defined as compacted soil placed in foundation, slab-on-grade, roadway, permanent slope, retaining wall, and utility trench backfill areas. Structural fill placed and compacted during site grading activities should meet the following specifications and guidelines:

- | | |
|----------------------------------|--------------------------------|
| • Structural fill material | Granular soils* |
| • Moisture content | At or slightly above optimum** |
| • Relative compaction (minimum) | 95 percent (Modified Proctor) |
| • Loose lift thickness (maximum) | 12 inches |

* *The existing soil may not be suitable for use as structural fill unless the soil is at (or slightly above) the optimum moisture content at the time of placement and compaction.*

** *Soil shall not be placed dry of optimum and should be evaluated by ESNW during construction.*

Excavations and Slopes

Based on the soil conditions observed at the test locations, the following allowable temporary slope inclinations, as a function of horizontal to vertical (H:V) inclination, may be used. The applicable Federal Occupation Safety and Health Administration and Washington Industrial Safety and Health Act soil classifications are also provided:

- | | |
|--|-------------------|
| • Areas exposing groundwater seepage | 1.5H:1V (Type C) |
| • Loose soil | 1.5H:1V (Type C) |
| • Medium dense soil | 1H:1V (Type B) |
| • Dense to very dense, undisturbed native soil | 0.75H:1V (Type A) |

An ESNW representative should observe temporary and permanent slopes to confirm the slope inclinations are suitable for the exposed soil conditions and to provide additional excavation and slope recommendations, as necessary. If the recommended temporary slope inclinations cannot be achieved, temporary shoring may be necessary to support excavations.

Permanent slopes should be planted with vegetation to both enhance stability and minimize erosion and should maintain a gradient of 2H:1V or flatter. The presence of perched groundwater may cause localized sloughing of temporary slopes. An ESNW representative should observe temporary and permanent slopes to confirm the slope inclinations are suitable for the exposed soil conditions and to provide additional excavation and slope recommendations, as necessary. If the recommended temporary slope inclinations cannot be achieved, temporary shoring may be necessary to support excavations.

Foundations

The proposed residential structure can be constructed on conventional continuous and spread footing foundations bearing on competent native soil, compacted native soil, or new structural fill placed directly on competent native soil. Competent native soil suitable for support of foundations will likely be encountered beginning at depths of one to five feet bgs. Compaction of the foundation subgrade areas may be prudent depending on the condition of the native sand soil exposed during construction. ESNW should be retained during construction to perform a foundation subgrade evaluation prior to formwork. Where loose or unsuitable conditions are encountered at foundation subgrade elevations, compaction of the soils to the specifications of structural fill, or overexcavation and replacement with structural fill will be necessary.

Provided the proposed structure will be supported as recommended above, the following parameters can be used for foundation design:

- Allowable soil bearing capacity 2,500 psf
- Passive earth pressure 300 pcf
- Coefficient of friction 0.40

The passive earth pressure value provided above assumes the foundations will be backfilled with structural fill. A factor-of-safety of 1.5 has been applied to the passive earth pressure and coefficient of friction values provided in this section. For short-term wind and seismic loading, a one-third increase in the allowable soil bearing capacity may be assumed.

With structural loading as expected, total settlement in the range of one inch is anticipated, with differential settlement of about one-half inch. The majority of the settlements should occur during construction, as dead loads are applied.

Seismic Design

The 2021 International Building Code (2021 IBC) recognizes ASCE 7-16 (formally known as the Minimum Design Loads for Buildings and Other Structures manual) for seismic design, specifically with respect to earthquake loads. Based on the soil conditions encountered at the test pit locations, the parameters and values provided below are recommended for seismic design per the 2021 IBC.

Parameter	Value
Site Class	C*
Mapped short period spectral response acceleration, S_s (g)	1.373
Mapped 1-second period spectral response acceleration, S_1 (g)	0.476
Short period site coefficient, F_a	1.2
Long period site coefficient, F_v	1.5
Adjusted short period spectral response acceleration, S_{MS} (g)	1.648
Adjusted 1-second period spectral response acceleration, S_{M1} (g)	0.714
Design short period spectral response acceleration, S_{DS} (g)	1.099
Design 1-second period spectral response acceleration, S_{D1} (g)	0.476

* Assumes very dense native soil conditions, encountered to a maximum depth of seven-and-one-half feet bgs during the August 2024 field exploration, remain dense to at least 100 feet bgs. Based on our experience with the project geologic setting across the Puget Sound region, soil conditions are likely consistent with this assumption.

Drainage

Surface grades must be designed to direct water away from the structure. The grade adjacent to the structure should be sloped away from the building at a gradient of at least 2 percent for a horizontal distance of at least 10 feet or as adjacent structures allow. In our opinion, perimeter footing drains should be installed at or below the invert of the building footings unless, clean free-draining sand is exposed at the bottom-of-foundation elevation. This condition should be confirmed by the geotechnical engineer at the client's request. A typical footing drain detail is provided on Plate 4.

Infiltration Feasibility

Based on the results of a small-scale Pilot Infiltration Test (PIT), the native soils on site possess a moderate capacity for infiltration. However, in reviewing the reference infiltration potential map, and in consideration of the on-site steep slope area and severe erosion hazard of the native soils identified by the USDA, infiltration is not recommended for this site and should be considered infeasible from a geotechnical standpoint.

Retaining Walls

Retaining walls must be designed to resist earth pressures and applicable surcharge loads. The following parameters can be used for retaining wall design:

- Active earth pressure (unrestrained condition) 35 pcf
- At-rest earth pressure (restrained condition) 55 pcf
- Traffic surcharge (passenger vehicles) 70 psf (rectangular distribution)
- Passive earth pressure 300 pcf
- Coefficient of friction 0.40
- Seismic surcharge $8H^*$

* Where H equals the retained height.

The passive earth pressure and coefficient of friction values include a safety factor of 1.5. Additional surcharge loading from adjacent foundations, sloped backfill, or other loads should be included in the retaining wall design. Drainage should be provided behind retaining walls such that hydrostatic pressures do not develop. If drainage is not provided, hydrostatic pressures should be included in the wall design.

Retaining walls should be backfilled with free-draining material or sheet drainage that extends along the height of the wall, and a distance of at least 18 inches behind the wall. The upper one foot of the wall backfill can consist of a less permeable soil, if desired. A perforated drain pipe should be placed along the base of the wall, and connected to an approved discharge location. A typical retaining wall drainage detail is provided on Plate 3.

Limitations

This letter report has been prepared for the exclusive use of McCullough Architects and its representatives. The recommendations and conclusions provided in this letter report are professional opinions consistent with the level of care and skill that is typical of other members in the profession currently practicing under similar conditions in this area. A warranty is neither expressed nor implied. If the design assumptions outlined herein either change or are incorrect, ESNW should be contacted to review the recommendations provided in this letter report. ESNW should be contacted to review the final design to confirm that our geotechnical recommendations have been incorporated into the plans.

Additional Services

ESNW should have an opportunity to review the final designs with respect to the geotechnical recommendations provided in this letter. ESNW should also be retained to provide testing and consultation services during additional design and earthwork phases of the project.

We trust this letter report meets your current needs. Should you have any questions, or if additional information is required, please call.

Sincerely,

EARTH SOLUTIONS NW, LLC

Brian C. Snow, L.G.
Senior Project Geologist



Scott S. Riegel

Scott S. Riegel, L.G., L.E.G.
Associate Principal Geologist

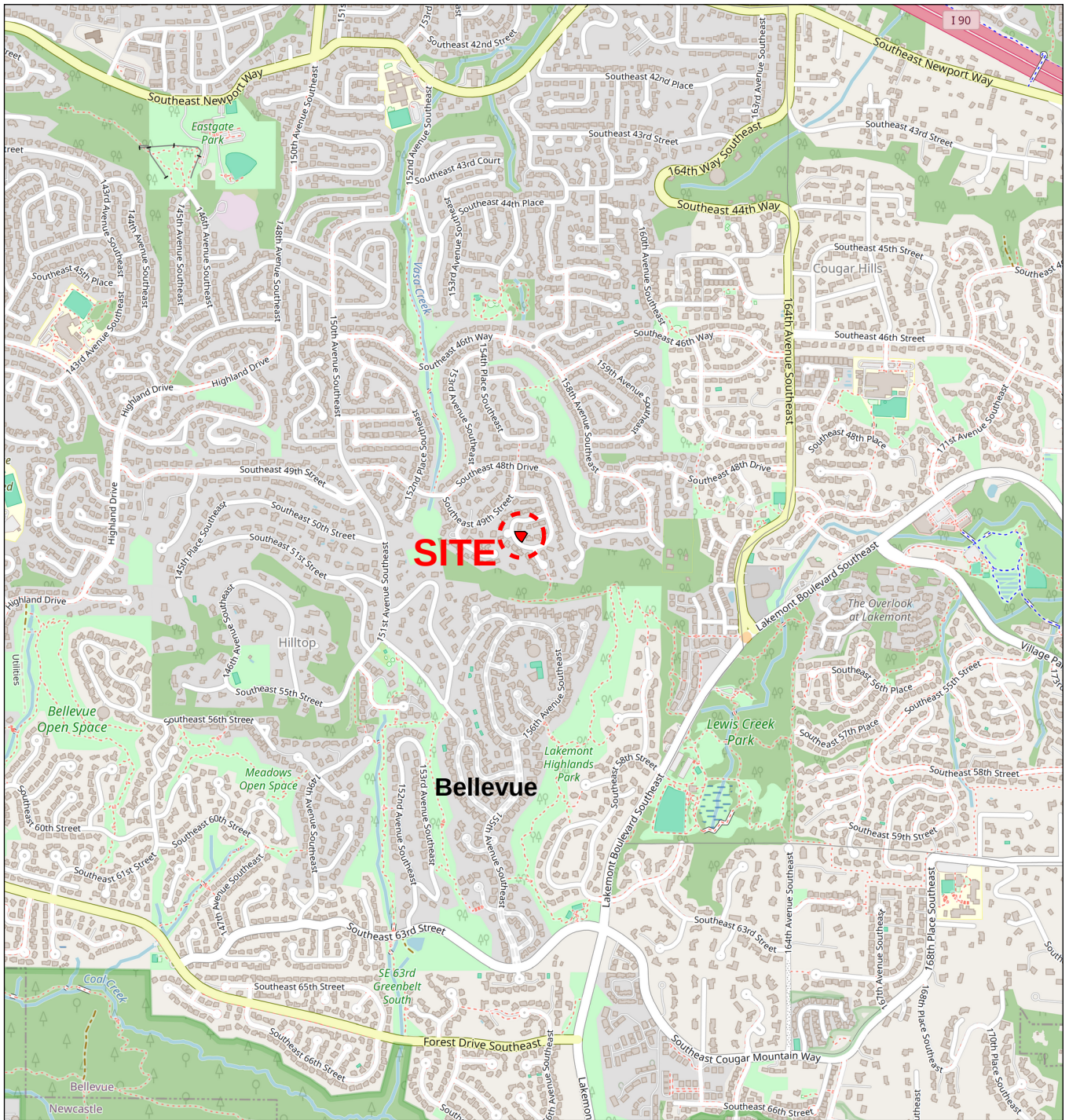
Attachments: Plate 1 – Vicinity Map
Plate 2 – Subsurface Exploration Plan
Plate 3 – Retaining Wall Drainage Detail
Plate 4 – Footing Drain Detail
Subsurface Exploration Logs
Laboratory Test Results
Slope/W Computer Output

cc: Lokesh Joshi

McCullough Architects
Attention: Tracy Brink

References:

- City of Bellevue (City) Critical Hazard Maps: Online “Geologic Hazards” Map
- Geologic Map of King County, compiled by D.B. Booth et al., dated March 2007
- Infiltration Potential Map, prepared by Associated Earth Sciences, Inc. for City of Bellevue, dated 2016
- Part 20.25H of the City of Bellevue Land Use Code (LUC)
- Residential Floor Plan Sheet A1.0, prepared by McCullough Architects, dated January 2, 2025
- Topographic Survey for Chandra Pandey, prepared by Encompass Engineering & Surveying, dated February 9, 2024
- Web Soil Survey, maintained by the Natural Resources Conservation Service under the United States Department of Agriculture



Reference:
King County, Washington
OpenStreetMap.org



NOTE: This plate may contain areas of color. ESNW cannot be responsible for any subsequent misinterpretation of the information resulting from black & white reproductions of this plate.



Earth Solutions NW_{LLC}

Geotechnical Engineering, Construction
Observation/Testing and Environmental Services

Vicinity Map
Pandey Residence
Bellevue, Washington

Drawn MRS

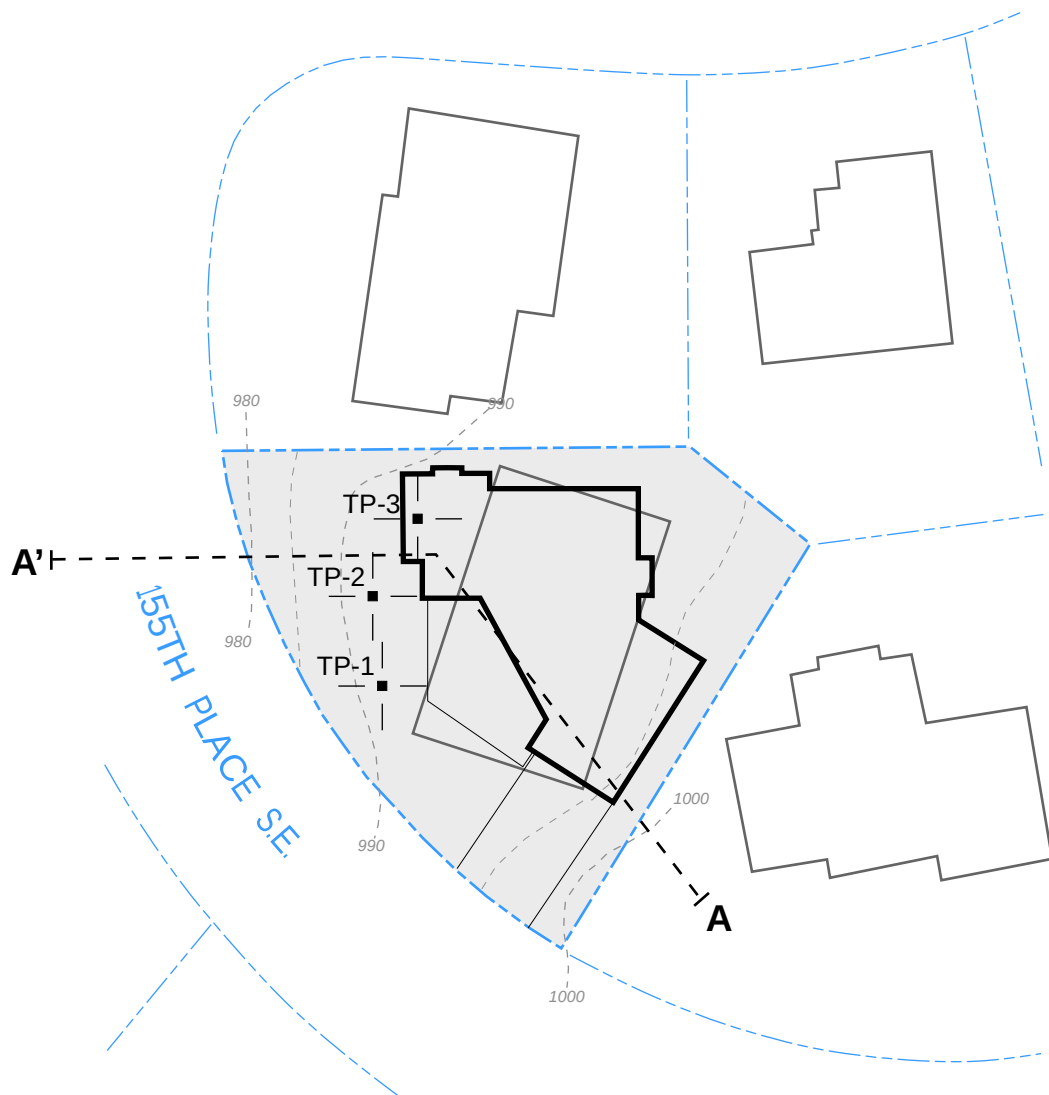
Date 09/30/2024

Proj. No. 9757.01

Checked BCS

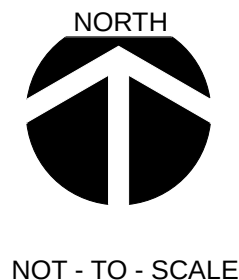
Date Sept. 2024

Plate 1



LEGEND

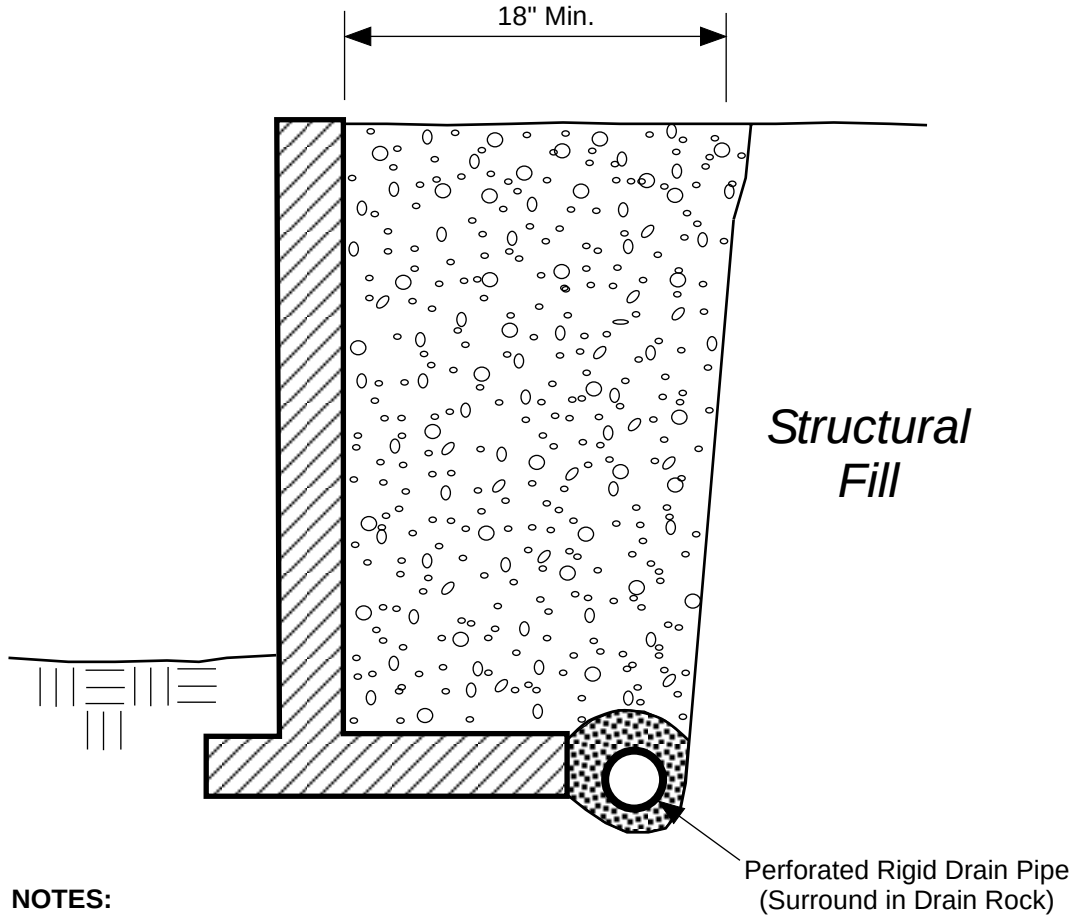
- TP-1 | ■ | Approximate Location of ESNW Test Pit, Proj. No. ES-9757.01, Aug. 2024
- Subject Site
- Existing Building
- ▣ Proposed Building
- — — Cross-Section



NOTE: The graphics shown on this plate are not intended for design purposes or precise scale measurements, but only to illustrate the approximate test locations relative to the approximate locations of existing and / or proposed site features. The information illustrated is largely based on data provided by the client at the time of our study. ESNW cannot be responsible for subsequent design changes or interpretation of the data by others.

NOTE: This plate may contain areas of color. ESNW cannot be responsible for any subsequent misinterpretation of the information resulting from black & white reproductions of this plate.

 Earth Solutions NW_{LLC} Geotechnical Engineering, Construction Observation/Testing and Environmental Services		
Subsurface Exploration Plan Pandey Residence Bellevue, Washington		
Drawn MRS	Date 01/23/2025	Proj. No. 9757.01
Checked BCS	Date Jan. 2025	Plate 2

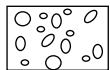


NOTES:

- Free-draining Backfill should consist of soil having less than 5 percent fines. Percent passing No. 4 sieve should be 25 to 75 percent.
- Sheet Drain may be feasible in lieu of Free-draining Backfill, per ESNW recommendations.
- Drain Pipe should consist of perforated, rigid PVC Pipe surrounded with 1-inch Drain Rock.

SCHEMATIC ONLY - NOT TO SCALE
NOT A CONSTRUCTION DRAWING

LEGEND:

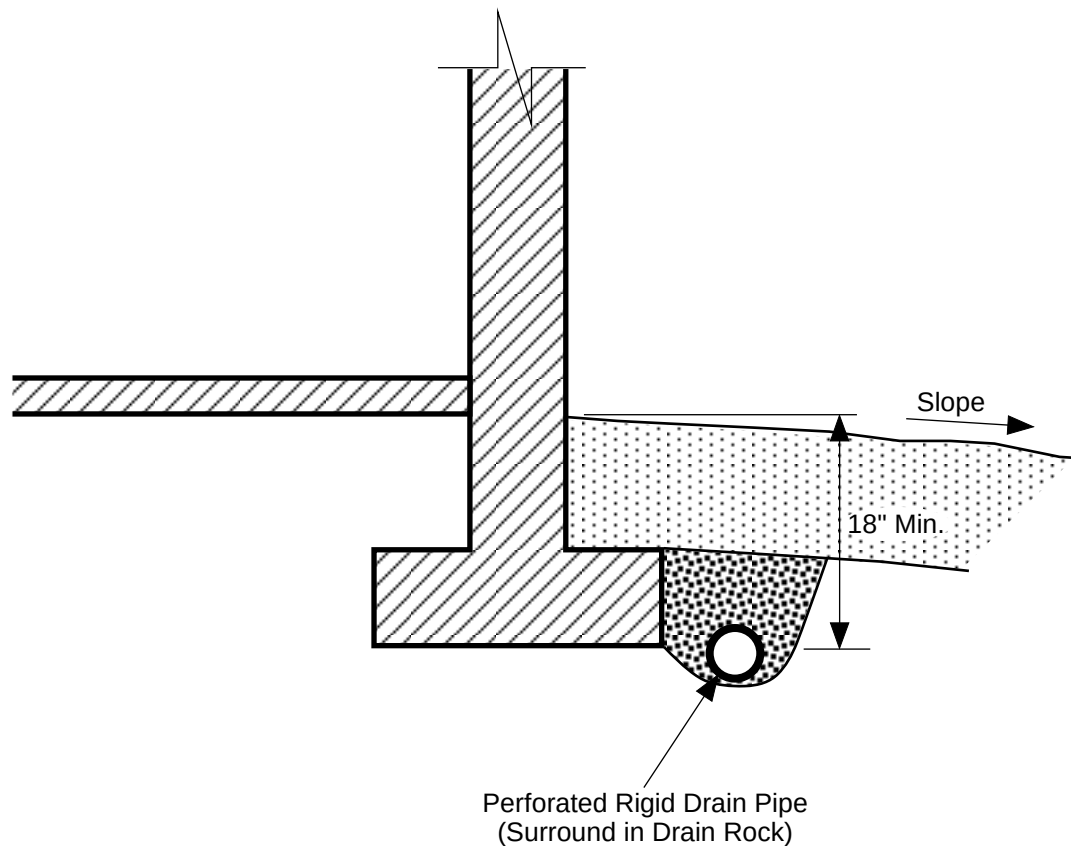


Free-draining Structural Backfill



1-inch Drain Rock

		Earth Solutions NW_{LLC} Geotechnical Engineering, Construction Observation/Testing and Environmental Services	
Retaining Wall Drainage Detail Pandey Residence Bellevue, Washington			
Drawn MRS	Date 09/30/2024	Proj. No.	9757.01
Checked BCS	Date Sept. 2024	Plate	3

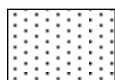


NOTES:

- Do NOT tie roof downspouts to Footing Drain.
- Surface Seal to consist of 12" of less permeable, suitable soil. Slope away from building.

SCHEMATIC ONLY - NOT TO SCALE
NOT A CONSTRUCTION DRAWING

LEGEND:

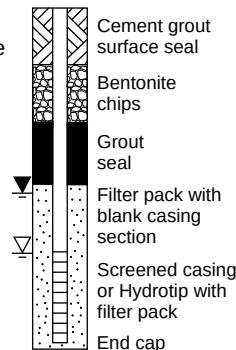
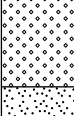
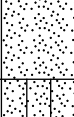
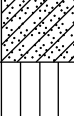
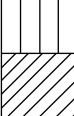
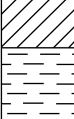
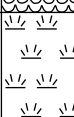
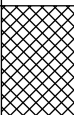
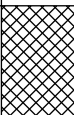


Surface Seal: native soil or other low-permeability material.



1-inch Drain Rock

		Earth Solutions NW_{LLC} Geotechnical Engineering, Construction Observation/Testing and Environmental Services	
Footing Drain Detail Pandey Residence Bellevue, Washington			
Drawn MRS	Date 09/30/2024	Proj. No.	9757.01
Checked BCS	Date Sept. 2024	Plate	4

Coarse-Grained Soils - More Than 50% Retained on No. 200 Sieve	Gravels - More Than 50% of Coarse Fraction Retained on No. 4 Sieve		GW	Well-graded gravel with or without sand, little to no fines	Moisture Content Dry - Absence of moisture, dusty, dry to the touch Damp - Perceptible moisture, likely below optimum MC Moist - Damp but no visible water, likely at/near optimum MC Wet - Water visible but not free draining, likely above optimum MC Saturated/Water Bearing - Visible free water, typically below groundwater table	Symbols 											
			GP	Poorly graded gravel with or without sand, little to no fines													
			GM	Silty gravel with or without sand													
			GC	Clayey gravel with or without sand													
	Sands - 50% or More of Coarse Fraction Passes No. 4 Sieve		SW	Well-graded sand with or without gravel, little to no fines													
			SP	Poorly graded sand with or without gravel, little to no fines													
Fine-Grained Soils - 50% or More Passes No. 200 Sieve	Sands - 50% or More of Coarse Fraction Passes No. 4 Sieve		SM	Silty sand with or without gravel	Terms Describing Relative Density and Consistency Coarse-Grained Soils: <u>Density</u> Very Loose < 4 Loose 4 to 9 Medium Dense 10 to 29 Dense 30 to 49 Very Dense ≥ 50 Fine-Grained Soils: <u>Consistency</u> Very Soft < 2 Soft 2 to 3 Medium Stiff 4 to 7 Stiff 8 to 14 Very Stiff 15 to 29 Hard ≥ 30	<u>Test Symbols & Units</u> Fines = Fines Content (%) MC = Moisture Content (%) DD = Dry Density (pcf) Str = Shear Strength (tsf) PID = Photoionization Detector (ppm) OC = Organic Content (%) CEC = Cation Exchange Capacity (meq/100 g) LL = Liquid Limit (%) PL = Plastic Limit (%) PI = Plasticity Index (%)											
			SC	Clayey sand with or without gravel													
	Silt and Clays Liquid Limit Less Than 50		ML	Silt with or without sand or gravel; sandy or gravelly silt													
			CL	Clay of low to medium plasticity; lean clay with or without sand or gravel; sandy or gravelly lean clay													
			OL	Organic clay or silt of low plasticity													
			MH	Elastic silt with or without sand or gravel; sandy or gravelly elastic silt													
	Silt and Clays Liquid Limit 50 or More		CH	Clay of high plasticity; fat clay with or without sand or gravel; sandy or gravelly fat clay													
			OH	Organic clay or silt of medium to high plasticity													
	Highly Organic Soils		PT	Peat, muck, and other highly organic soils			<table><tr><th>Percentage by Weight (Approx.)</th><th>Modifier</th></tr><tr><td>< 5</td><td>Trace (sand, silt, clay, gravel)</td></tr><tr><td>5 to 14</td><td>Slightly (sandy, silty, clayey, gravelly)</td></tr><tr><td>15 to 29</td><td>Sandy, silty, clayey, gravelly</td></tr><tr><td>≥ 30</td><td>Very (sandy, silty, clayey, gravelly)</td></tr></table>	Percentage by Weight (Approx.)	Modifier	< 5	Trace (sand, silt, clay, gravel)	5 to 14	Slightly (sandy, silty, clayey, gravelly)	15 to 29	Sandy, silty, clayey, gravelly	≥ 30	Very (sandy, silty, clayey, gravelly)
	Percentage by Weight (Approx.)	Modifier															
< 5	Trace (sand, silt, clay, gravel)																
5 to 14	Slightly (sandy, silty, clayey, gravelly)																
15 to 29	Sandy, silty, clayey, gravelly																
≥ 30	Very (sandy, silty, clayey, gravelly)																
Fill		FILL	Made Ground	Classifications of soils in this geotechnical report and as shown on the exploration logs are based on visual field and/or laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates, and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual and/or laboratory classification methods of ASTM D2487 and D2488 were used as an identification guide for the Unified Soil Classification System.													





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Redmond, WA 98052
Office (425) 449-4704 | esnw.com
Branch Office: Pasco, WA

TEST PIT NUMBER TP-1

PAGE 1 OF 1

PROJECT NUMBER	ES-9757.01	PROJECT NAME	Pandey Residence
DATE STARTED	8/13/24	COMPLETED	8/13/24
EXCAVATION CONTRACTOR	NW Excavating	LATITUDE	47.55752
LOGGED BY	BCS	CHECKED BY	SSR
NOTES			
SURFACE CONDITIONS	Dead lawn grass	GROUND ELEVATION	
		LONGITUDE	-122.13281
		GROUND WATER LEVEL:	
		AT TIME OF EXCAVATION	
		AFTER EXCAVATION	

DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0					
			TPSL		0.6 Dark brown TOPSOIL
	 GB	MC = 6.7			Tan silty SAND with gravel, very dense, moist
2.5			SM		-probed 1"
	 GB	MC = 7.0 Fines = 24.2	GM		3.5 Tan silty GRAVEL with sand, very dense, moist
					4.0 [USDA Classification: very gravelly silt LOAM]
5.0	 GB	MC = 8.8			Tan silty SAND with gravel, very dense, moist
			SM		
	 GB	MC = 10.8 Fines = 31.1			7.0 [USDA Classification: very gravelly sandy LOAM]

Test pit terminated at 7.0 feet below existing grade. No groundwater encountered during excavation. No caving observed.

LIMITATIONS: Ground elevation (if listed) is approximate; the test location was not surveyed. Coordinates are approximate and based on the WGS84 datum. Do not rely on this test log as a standalone document. Refer to the text of the geotechnical report for a complete understanding of subsurface conditions.



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TEST PIT NUMBER TP-3

PAGE 1 OF 1

PROJECT NUMBER	ES-9757.01	PROJECT NAME	Pandey Residence
DATE STARTED	8/13/24	COMPLETED	8/13/24
EXCAVATION CONTRACTOR	NW Excavating	LATITUDE	47.55763
LOGGED BY	BCS	CHECKED BY	SSR
NOTES			
SURFACE CONDITIONS	Dead lawn grass	GROUND WATER LEVEL:	
		AT TIME OF EXCAVATION	
		AFTER EXCAVATION	

DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0					
2.5			SM		Tan and gray silty SAND with gravel, medium dense, moist (Fill)
	GB	MC = 11.4			-probed 12"
3.5			TPSL		Dark brown Relic TOPSOIL
5.0	GB	MC = 14.6 Fines = 30.5			Tan silty SAND with gravel, dense, moist
	GB	MC = 23.9	SM		-infiltration test [USDA Classification: very gravelly silt LOAM]
7.5	GB	MC = 16.2 Fines = 22.3			-light to moderate iron oxide staining and mottling, becomes wet
					-light perched groundwater seepage after infiltration test -becomes gray, very dense, weakly cemented [USDA Classification: very gravelly sandy LOAM]

Test pit terminated at 7.5 feet below existing grade. Groundwater seepage encountered at 7.0 feet during excavation. No caving observed.

LIMITATIONS: Ground elevation (if listed) is approximate; the test location was not surveyed. Coordinates are approximate and based on the WGS84 datum. Do not rely on this test log as a standalone document. Refer to the text of the geotechnical report for a complete understanding of subsurface conditions.

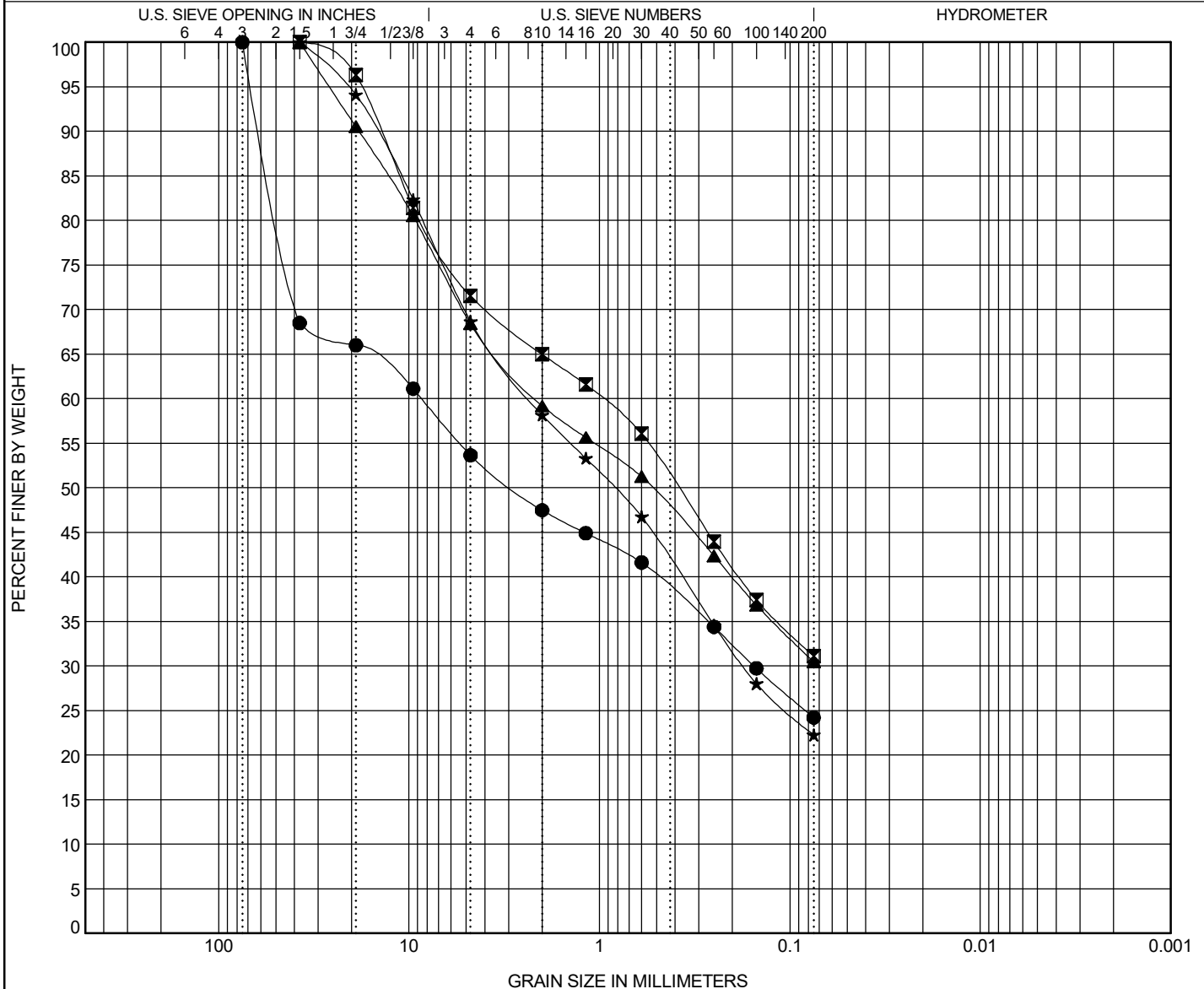


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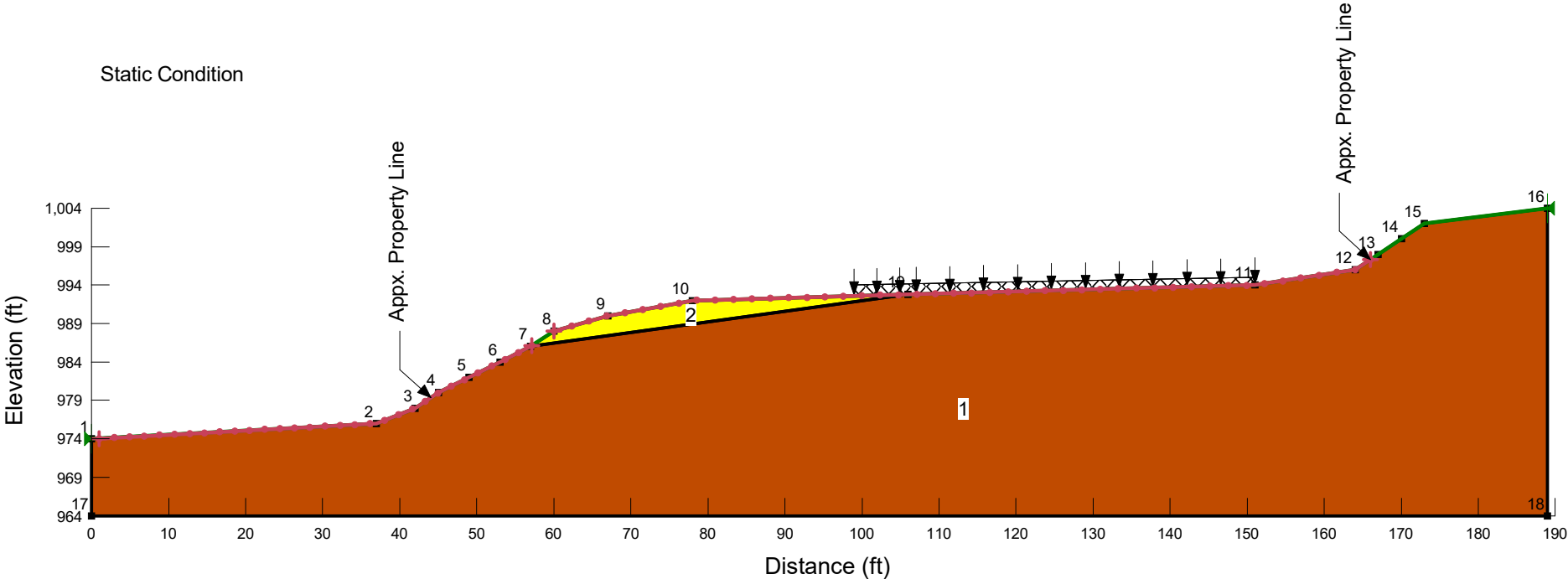
GRAIN SIZE DISTRIBUTION

PROJECT NUMBER ES-9757.01

PROJECT NAME Pandey Residence



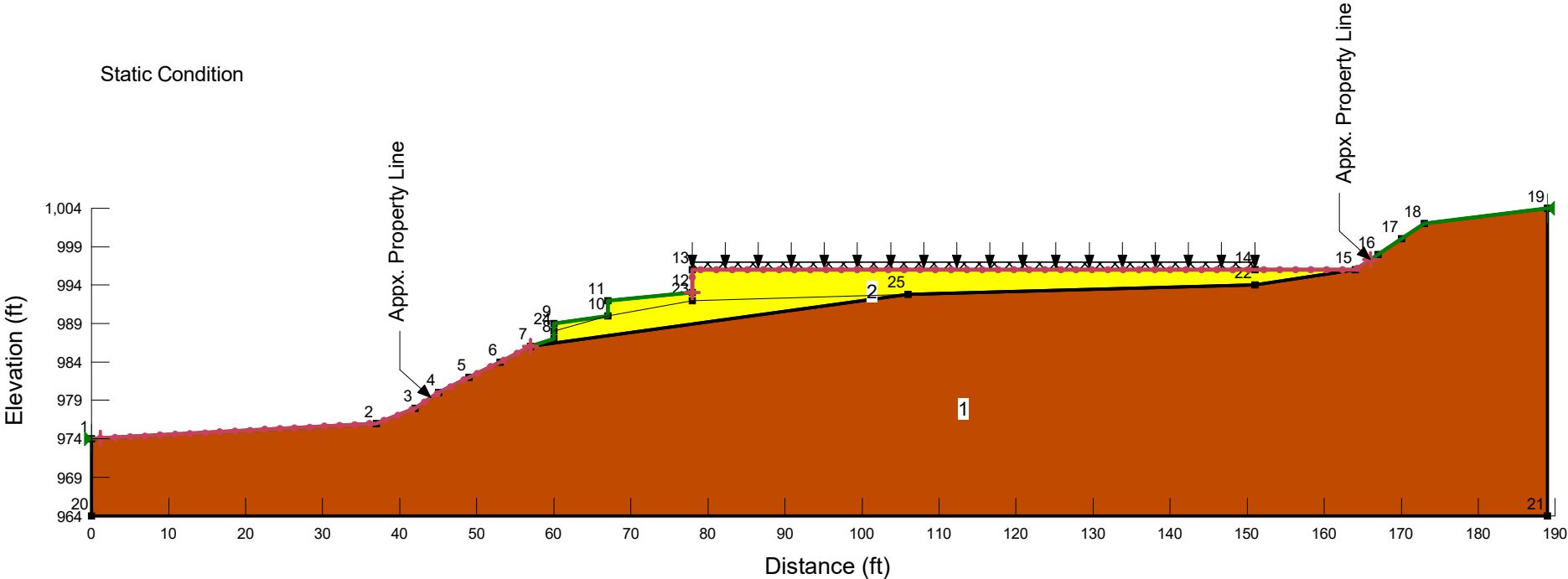
Static Condition



Pandey Residence (ES-9757.01)
Existing Geometry

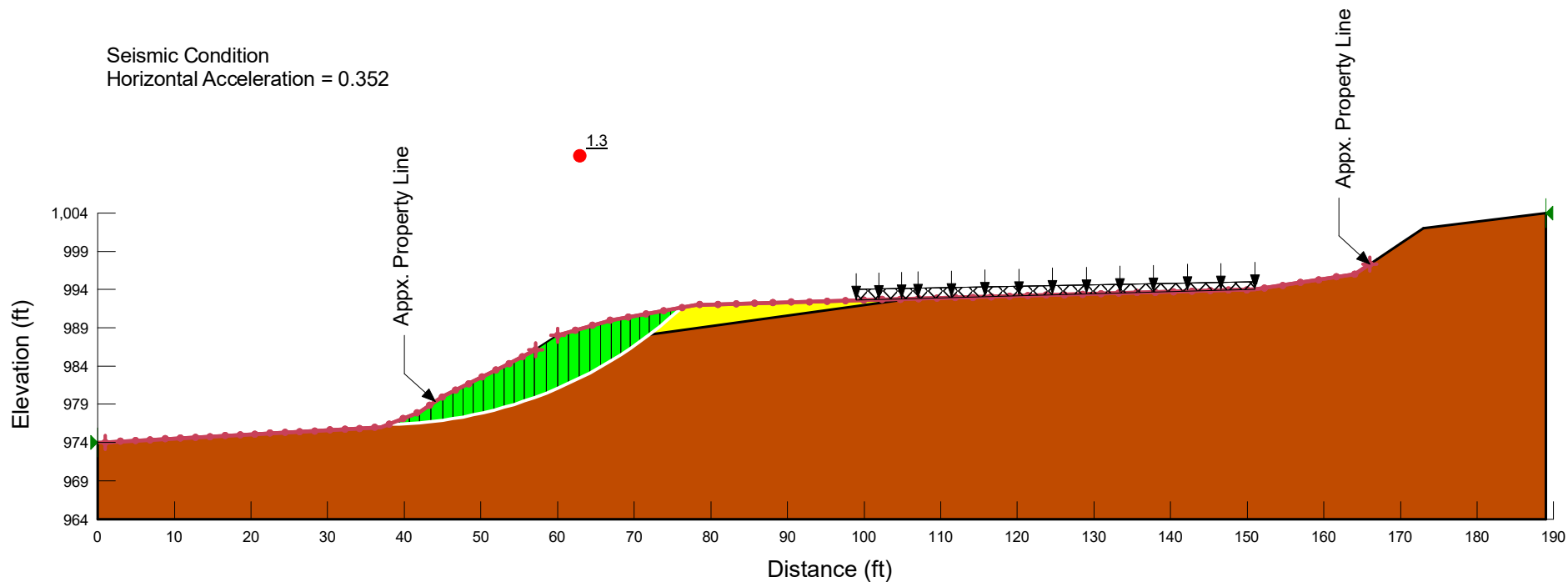
Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)
■	Dense to Very Dense Silty Sand	130	0	36
■	Structural Fill	125	0	32

Static Condition



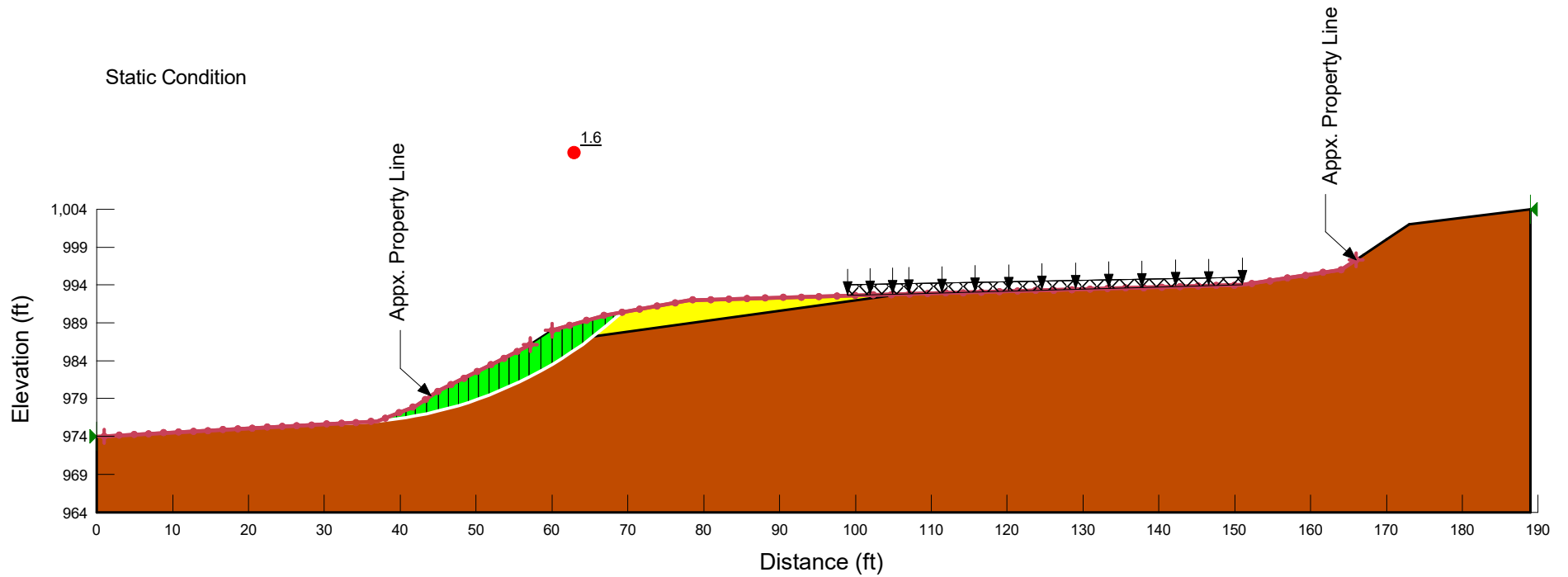
Pandey Residence (ES-9757.01)
Proposed Geometry

Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)
<div></div>	Dense to Very Dense Silty Sand	130	0	36
<div></div>	Structural Fill	125	0	32



Pandey Residence (ES-9757.01)
Existing Geometry

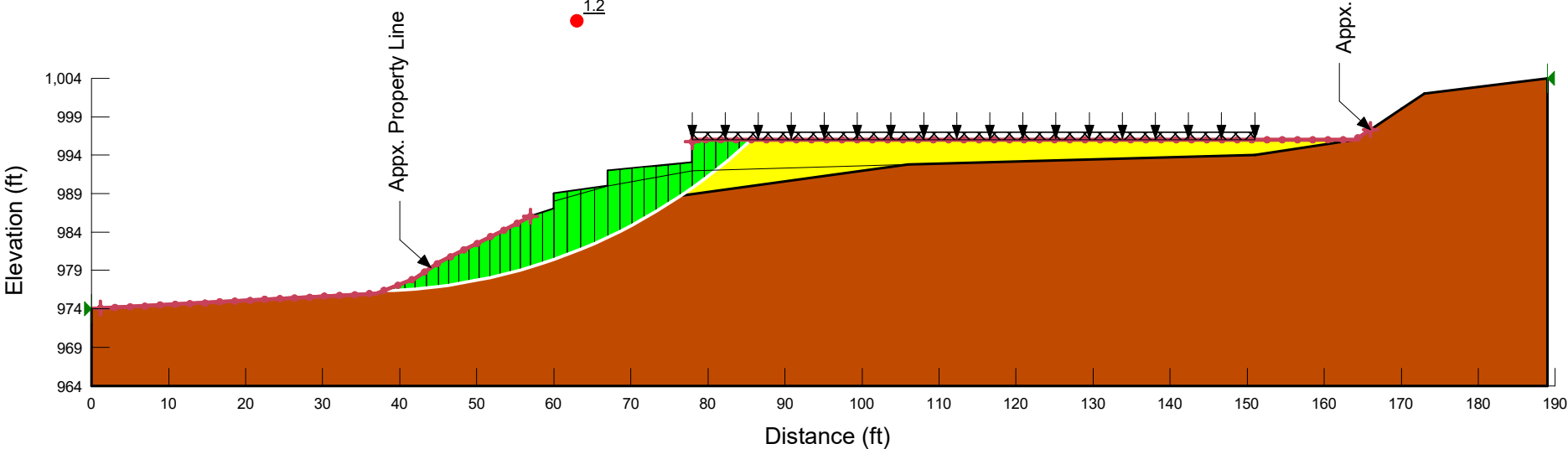
Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)
■	Dense to Very Dense Silty Sand (Seismic)	130	150	36
■	Structural Fill	125	0	32



Pandey Residence (ES-9757.01)
Existing Geometry

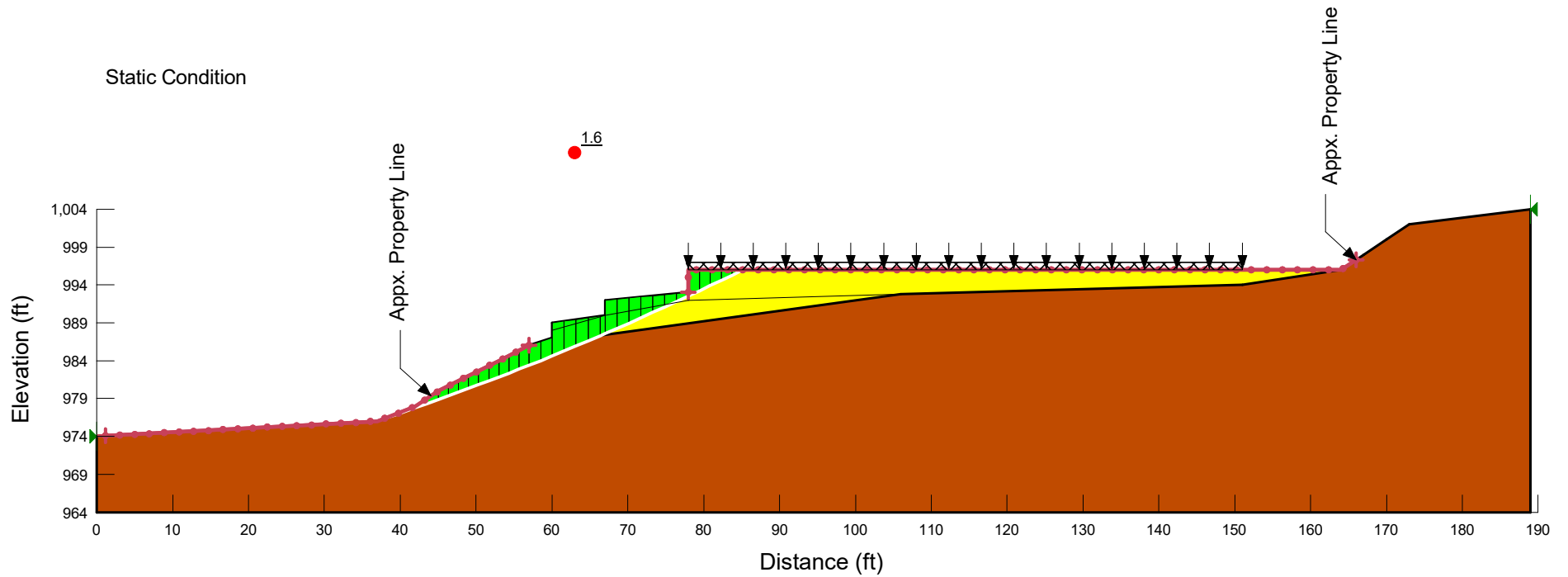
Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)
■	Dense to Very Dense Silty Sand	130	0	36
■	Structural Fill	125	0	32

Seismic Condition
Horizontal Acceleration = 0.352



Pandey Residence (ES-9757.01)
Proposed Geometry

Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)
<div></div>	Dense to Very Dense Silty Sand (Seismic)	130	150	36
<div></div>	Structural Fill	125	0	32



Pandey Residence (ES-9757.01)
Proposed Geometry

Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)
■	Dense to Very Dense Silty Sand	130	0	36
■	Structural Fill	125	0	32

November 19, 2025
ES-9757.03

Chandra Pandey
5020 – 155th Place Southeast
Bellevue, Washington 98006

**Subject: Response to Review Comments
Pandey Residence
5020 – 155th Place Southeast
Bellevue, Washington**

Dear Chandra:

As requested, Earth Solutions NW, LLC (ESNW) has prepared this response letter for the subject site. The review comment is provided followed by ESNW response.

Review Comment

Please provide a written narrative demonstrating why grading and utility line placement is necessary within the 15-ft top of slope buffer. If no other feasible utility placement exists, please clearly explain why the utility line placement is not feasible in other on-site locations.

ESNW Response

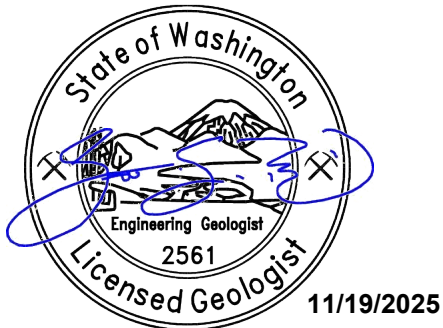
Based on review of the current plans, a yard drain is planned for the northeastern corner of the site. To make gravity flow, the drain must convey across the northern property line, turn south along the top of the steep slope hazard area and make connection with the existing storm drain in the adjacent right-of-way. The referenced plans indicate the storm drain alignment has been revised to move as far as possible from the steep slope area while maintaining a minimum five-foot setback from the residence.

In our opinion, the proposed storm drainage alignment will not result in increased potential instability of the adjacent steep slope hazard area and represents a best-effort approach to balance site designs with code requirements.

We trust this letter meets your current needs. Should you have any questions, or if additional information is required, please call.

Sincerely,

EARTH SOLUTIONS NW, LLC



Scott S. Riegel

Scott S. Riegel, L.G., L.E.G.
Associate Principal Geologist

cc: Lokesh Joshi

Reference:

- Civil Plans, prepared by Momentum Civil, dated November 11, 2025



May 27, 2025

AOA-7749

Chandra Pandey
chandrapandey@gmail.com

**SUBJECT: Critical Areas Report for Pandey Residence (Revised)
5020 – 155th Pl. SE, Parcel 214131-0470, Bellevue, WA**

Dear Chandra:

We have updated this report to address the comments presented in the May 23, 2025 request for information letter from the City of Bellevue.

On April 2, 2025 AOA conducted a habitat assessment on the subject property to review the proposed top of steep slope buffer modification associated with the construction of a new single-family replacement residence. The property is currently entirely developed with a single-family residence and associated yard. As part of the project the existing residence will be removed and replaced with a new residence in the same general location.

1.0 EXISTING CRITICAL AREAS AND PROPOSED PROJECT

A steep slope is located in the western portion of the site and the required 50-foot top of slope buffer extends through most of the existing residence. According to the geotechnical consultant, a 15-foot buffer from the top of the slope is sufficient and recommended as part of the current proposed residence.

2.0 WILDLIFE HABITAT ASSESSMENT

Prior to conducting the field investigations, the Washington State Department of Fish and Wildlife's Priority Habitats and Species (PHS) database was reviewed. No priority habitats or species were identified on or immediately adjacent to the site as part of this mapping (**Attachment A**).

The project site consists of one 9,904 s.f. tax parcel that is entirely developed with a single-family residence and associated yard. No significant intact native plant communities are located on the site and no snags, downed logs, or other habitat features were observed on or adjacent to the site. In addition, no raptors or raptor nests were identified during the field investigation.

Surrounding land use consists entirely of single-family residential.

Wildlife Species of Local Importance

Twenty-three (23) species have been designated by the City of Bellevue as species of local importance (**LUC 20.25H.150**). The potential of site utilization by each species is briefly described below:

- Bald eagle (*Haliaeetus leucocephalus*): site not located within Bald Eagle Buffer Management Zone per PHS data. No significant perching opportunity on or immediately adjacent site. Primary Association: no.
- Peregrine falcon (*Falco peregrinus*): associated with coastal cliffs and shorelines, but also use large buildings in city center. Use of project site unlikely. Primary Association: no.
- Common Loon (*Gavia immer*): no presence - highly aquatic species associated with large water bodies. Primary Association: no.
- Pileated woodpecker (*Dryocopus pileatus*): Pileated woodpeckers generally inhabit mature and old-growth forests, and second-growth forests with large snags and fallen trees. The range of the species encompasses all of the forested areas of the state. Although typically found in larger forested tracts, they are known to occur in suburban habitats as well. Their key breeding habitat need is the presence of large snags or decaying live trees for nesting, as this species generally excavates a new nest cavity each year. The breeding and nesting periods of the pileated woodpecker extends from late March to early July. No significant foraging potential in vicinity of the site and the lack of large snags limits the nesting potential of this species. Primary Association: no.
- Vaux's swift (*Chaetura vauxi*): Vaux's swifts are strongly associated with old growth and mature forests throughout the state and are highly dependent on large hollow trees and snags for breeding and roosting. No significant potential for foraging and unlikely nesting on the site due to lack of large snags. Primary Association: no.
- Merlin (*Falco columbarius*): unlikely presence – generally require coastal or high elevation forests. Primary Association: no.
- Purple martin (*Progne subis*): unlikely presence – generally require cavities near or over water for nesting. Primary Association: no.
- Western grebe (*Aechmophorus occidentalis*): no presence – highly aquatic species associated with large water bodies. Primary Association: no.
- Great blue heron (*Ardea herodias*): unlikely presence – typically forage in larger wetlands or pasture which do not occur on-site. No roosts observed on or adjacent site. Primary Association: no.

- Osprey (*Pandion haliaetus*): unlikely presence - perch availability not adjacent large water body. Primary Association: no.
- Green heron (*Butorides striatus*): unlikely presence – not near large wetland or waterbody. Primary Association: no.
- Red-tailed hawk (*Buteo jamaicensis*): no significant perching potential and no nests observed. Primary Association: no.
- Western big-eared bat (*Plecotus townsendii*): unlikely presence. No known nearby hibernacula or caves so not considered a habitat of primary association. Primary Association: no.
- Keen's myotis (*Myotis keenii*): unlikely presence. Generally associated with larger coniferous forests so not considered a habitat of primary association. Primary Association: no.
- Long-legged myotis (*Myotis volans*): unlikely presence. Generally associated with larger coniferous forests so not considered a habitat of primary association. Primary Association: no.
- Long-eared myotis (*Myotis evotis*): unlikely presence. Generally associated with larger coniferous forests so not considered a habitat of primary association. Primary Association: no.
- Oregon spotted frog (*Rana pretiosa*): no presence - believed to be extirpated from nearly all of western Washington and no ponding on the site. Primary Association: no.
- Western toad (*Bufo boreas*): presence possible but no likely breeding potential and not considered habitat of primary association. Primary Association: no.
- Western pond turtle (*Clemmys marmorata*): no presence - no habitat on site and no known nearby populations. Primary Association: no.
- Chinook (*Oncorhynchus tshawytscha*): no presence – no streams that support Chinook on or adjacent to the site. Primary Association: no.
- Bull trout (*Salvelinus confluentus*): no presence – no streams that support bull trout on or adjacent to the site. Primary Association: no.
- Coho salmon (*Oncorhynchus kisutch*): no presence – no streams that support Coho on or adjacent to site. Primary Association: no.
- River lamprey (*Lampetra ayresii*): no presence – no streams that support river lamprey on or adjacent to the site. Primary Association: no.

None of the 23 species of local importance appear to have a primary association with habitat on or adjacent to the project site. The proposed project consists of the construction of a new replacement single-family residence in the general location of the existing residence. There are no anticipated significant impacts to any species of local importance from the proposed project.

3.0 PROPOSED TOP OF SLOPE BUFFER MODIFICATION

The proposed project consists of the removal of the existing residence and the construction of a new larger residence in the central portion of the site.

Due to the standard 50-foot buffer encumbrance it is not possible to avoid the modification. The area in the vicinity of the proposed residence currently consists entirely of the existing residence and yard that does not provide a significant habitat function. Per the geotechnical engineer, a 15-foot buffer from the top of slope is recommended. In addition, the geotechnical engineer has recommended that all stormwater be routed away from the slope.

3.1 Slope Structure Setback Modification

Any proposals to modify a critical area buffer must meet the criteria of **LUC 20.25H.255.A** and **LUC25H.255.B**

A. General.

Except for the proposals described in subsection B of this section, the Director may approve, or approve with modifications, the proposed modification where the applicant demonstrates:

- 1. The modifications and performance standards included in the proposal lead to levels of protection of critical area functions and values at least as protective as application of the regulations and standards of this code;*

We have prepared an enhancement plan (**Figures 1 through 7**) for degraded habitat on the site. Enhancement will occur through the removal of invasive plant species and re-planting with a variety of native plant species. Implementation of this plan will increase critical area functions over current conditions.

- 2. Adequate resources to ensure completion of any required mitigation and monitoring efforts;*

Installation of the habitat enhancement plan should be a condition of any permit requirement by the City of Bellevue and the project will be maintained and monitored for a period of 5 years.

- 3. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and*

The proposed work should not be detrimental to any off-site critical area functions.

4. *The resulting development is compatible with other uses and development in the same land use district.*

The residential project is compatible with adjacent land uses and is in line with the land use district.

B. Decision Criteria – Proposals to Reduce Regulated Critical Area Buffer.

The Director may approve, or approve with modifications, a proposal to reduce the regulated critical area buffer on a site where the applicant demonstrates:

1. *The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in overall critical area or critical area buffer functions;*

We have prepared an enhancement plan (**Figures 1 through 7**) for degraded habitat on the site. Enhancement will occur through the removal of invasive plant species and re-planting with a variety of native plant species. Implementation of this plan will increase critical area functions over current conditions by increasing the plant species and structural diversity on and adjacent to the slope.

2. *The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in the most important critical area or critical area buffer functions to the ecosystem in which they exist;*

The steep slope and buffer on the site currently function as minor general habitat associated with the open space on the property and not as a specific habitat for a species of local importance. Increasing the habitat quality through invasive removal and re-planting will increase the habitat quality over current conditions.

3. *The proposal includes a net gain in stormwater quality function by the critical area buffer or by elements of the development proposal outside of the reduced regulated critical area buffer;*

A stormwater plan has been designed by the drainage engineer to meet all City of Bellevue requirements for stormwater control. In addition, plantings on and adjacent to the slope should also increase filtration.

4. *Adequate resources to ensure completion of any required restoration, mitigation and monitoring efforts;*

Installation of the habitat enhancement plan should be a condition of any permit requirement by the City of Bellevue and the project will be maintained and monitored for a period of 5 years.

5. *The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and*

There will be no impacts to off-site areas.

6. *The resulting development is compatible with other uses and development in the same land use district. (Ord. 5680, 6-26-06, § 3)*

The proposed residential project is compatible with all other adjacent residential uses.

3.2 Decision Criteria per LUC 20.30P.140

The Director may approve or approve with modifications an application for a Critical Areas Land Use Permit if:

- A. *The proposal obtains all other permits required by the Land Use Code; and*

It is our understanding that all permits required by the Land Use Code will be obtained.

- B. *The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer; and*

The project will need to utilize all of the best available construction, design, and development techniques to ensure the least possible impact on the critical area.

All plantings within the enhancement area will consist of native species and will be installed and maintained only by a qualified landscape contractor familiar with work in sensitive environments.

- C. *The proposal incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable; and*

All of the applicable performance standards in LUC 20.25H would be implemented to the maximum extent possible.

- D. *The proposal will be served by adequate public facilities including streets, fire protection, and utilities; and*

It is our understanding that the proposal will be served by adequate public facilities including streets, fire protection, and utilities.

E The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan; and

A critical area enhancement plan has been prepared for a degraded portion of the site.

F The proposal complies with other applicable requirements of this code.

It is our understanding that all other applicable requirements of the Land Use Code will be met.

4.0 FUNCTIONAL ASSESSMENT

Per LUC 20.25H.250.B.5, the City of Bellevue requires an *analysis of the level of protection of critical area functions and values provided by the regulations or standards of this code, compared with the level of protection provided by the proposal. The analysis shall include:*

- a. A discussion of the functions and values currently provided by the critical area and critical area buffer on the site and their relative importance to the ecosystem in which they exist;*

Critical areas in the vicinity of the site include a steep slope. The steep slope requires a standard 50-foot buffer from the top of the slope. This steep slope buffer currently extends through most of the existing residence and does not provide a significant functional benefit to the slope.

The primary habitat function of the steep slope buffer on this site is as a component of the overall habitat on and adjacent to the property and not as specific habitat for an individual species of local importance. The slope stability functions of the slope and buffer have been assessed by the geotechnical engineer.

- b. A discussion of the functions and values likely to be provided by the critical area and critical area structure setback on the site through application of the regulations and standards of this Code over the anticipated life of the proposed development; and*

The slope stability functions of the slope and buffer have been assessed by the geotechnical engineer and these functions should continue following the proposed project.

- c. A discussion of the functions and values likely to be provided by the critical area and critical area structure setback on the site through the modifications and performance standards included in the proposal over the anticipated life of the proposed development;*

Enhancement of degraded areas on the site will increase the habitat value of the property by increasing the plant species and structural diversity within the enhanced area. The proposed plantings will increase the quality of the preserved habitat. Without implementation of the proposed planting plan, the degraded areas will likely continue to become established with invasive species.

LUC 20.25H.250.C.4

Proposals to obtain reductions in regulated critical area buffers below the buffers required by this part shall include the following information in addition to the minimum critical area report contents described in subsection B of this section. The restoration proposed to improve existing function included in the proposal must be separate from any impact mitigation proposal:

- a. The specific restoration actions proposed and the specific regulated buffer dimensions proposed.*

Restoration will include the removal of invasive species and re-planting with a variety of native plant species. It is our understanding that the proposed project meets all of the geotechnical recommendations for the buffer reduction.

- b. The functions that will be enhanced by the restoration actions, addressing at minimum habitat, hydrology, water quality and (where applicable) stream process functions.*

The enhancement plan has been designed to increase the habitat and filtration functions on the site.

- c. Functions that will be provided outside of the reduced regulated buffer dimension proposed by the project, if any (for example, stormwater quality and quantity controls or low impact development features).*

Since the project has been designed to meet all of the drainage requirements of the City of Bellevue, the enhancement plan is focused on increasing the habitat quality over existing conditions.

- d. The relative importance of the enhanced functions to the ecosystem in which they exist.*

The primary habitat function of the steep slope buffer on this site is as a component of the overall habitat on and adjacent to the property and not as specific habitat for an individual species of local importance. The slope stability functions of the slope and buffer have been assessed by the geotechnical engineer.

- e. A description of the net gain in functions by the restoration actions in the reduced regulated buffer area and the proposal, compared to the functions*

that would be preserved under standard buffer provisions of the CAO without restoration.

Enhancement of degraded areas on the site will increase the habitat value of the property by increasing the plant species and structural diversity within the enhanced area. The proposed plantings will increase the quality of the preserved habitat. Without implementation of the proposed planting plan, the degraded areas will likely continue to become established with invasive species.

5.0 MONITORING PROGRAM

We have prepared a mitigation plan (**Figures 1 through 7**) for the required slope buffer modification on the site. Mitigation will consist of enhancing with native plantings a degraded area on the property. The mitigation has been designed to increase the habitat quality of the area by increasing the plant species and structural diversity over current conditions.

5.1 Goal, Objectives, and Performance Standards for Enhancement Areas

The primary goal of the enhancement plan is to increase the habitat and protective functions of the degraded area on the site over current conditions. To meet this goal, the following objectives and performance standards have been incorporated into the design of the plan:

Objective A: Increase the structural and plant species diversity within the enhancement area.

Performance Standard: *There will be 100% survival of all woody planted species throughout the enhancement area at the end of the first year of planting. Following Year 1, success will be based on an 85% survival rate of all planted tree and shrub species or equivalent replacement of a combination of planted and re-colonized native species. Areal coverage of plantings or native re-colonized species will be at least 15% at Year 1, 20% at Year 2, 30% at Year 3, and 60% at Year 5.*

Objective B: Limit the amount of invasive and exotic species within the enhancement area.

Performance Standard: *After construction and following every monitoring event for a period of at least five years, exotic and invasive plant species will be maintained at levels below 10% total cover in all planted areas.*

5.2 Construction Management

Prior to commencement of any work in the enhancement area, the clearing limits will be staked and any existing vegetation to be saved will be clearly marked. A pre-construction meeting will be held at the site to review and discuss all aspects of the project with the landscape contractor and the owner.

A consultant will supervise plan implementation during construction to ensure that objectives and specifications of the enhancement plan are met. Any necessary significant modifications to the design that occur as a result of unforeseen site

conditions will be jointly approved by the City of Bellevue and the consultant prior to their implementation.

5.3 Monitoring Methodology

As required, the monitoring program will be conducted for a period of five years with annual reports submitted to the City of Bellevue. Permanent vegetation sampling plots will be established to monitor the general appearance, health, mortality, colonization rates, percent cover, percent survival, volunteer plant species, and invasive weeds.

Photo-points will be established from which photographs will be taken throughout the monitoring period. These photographs will document general appearance and progress in plant community establishment in the enhancement area. Review of the photos over time will provide a visual representation of the success of the plan.

5.4 Maintenance Plan

Maintenance will be conducted on a routine, year-round basis. Additional maintenance needs will be identified and addressed following a twice-yearly consultant maintenance review. Contingency measures and remedial action on the site shall be implemented on an as-needed basis at the direction of the consultant or the owner.

Routine removal and control of non-native and other invasive plants shall be performed by manual means whenever possible. Weed removal includes hand grubbing all roots and exporting off-site. Undesirable and weedy exotic plant species shall be maintained at levels below 10% total cover within any given stratum at any time during the five-year monitoring period.

5.5 Contingency Plan

All dead plants will be replaced with the same species or an approved substitute species that meets the goal of the enhancement plan. Plant material shall meet the same specifications as originally installed material. Replanting will not occur until after the reason for failure has been identified (e.g., moisture regime, poor plant stock, disease, shade/sun conditions, wildlife damage, etc.). Replanting shall be completed under the direction of the consultant, City of Bellevue, or the owner.

5.6 As-Built Plan

Following completion of construction activities, an as-built plan for the enhancement area will be provided to the City of Bellevue. The plan will identify and describe any changes in relation to the original approved plan.

5.7 Financial Guarantee

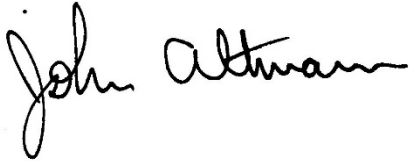
A financial guarantee will be posted to ensure that the mitigation and monitoring program is fully implemented.

Chandra Pandey
May 27, 2025
Page 11 of 11

If you have any questions regarding the critical areas report, please give me a call.

Sincerely,

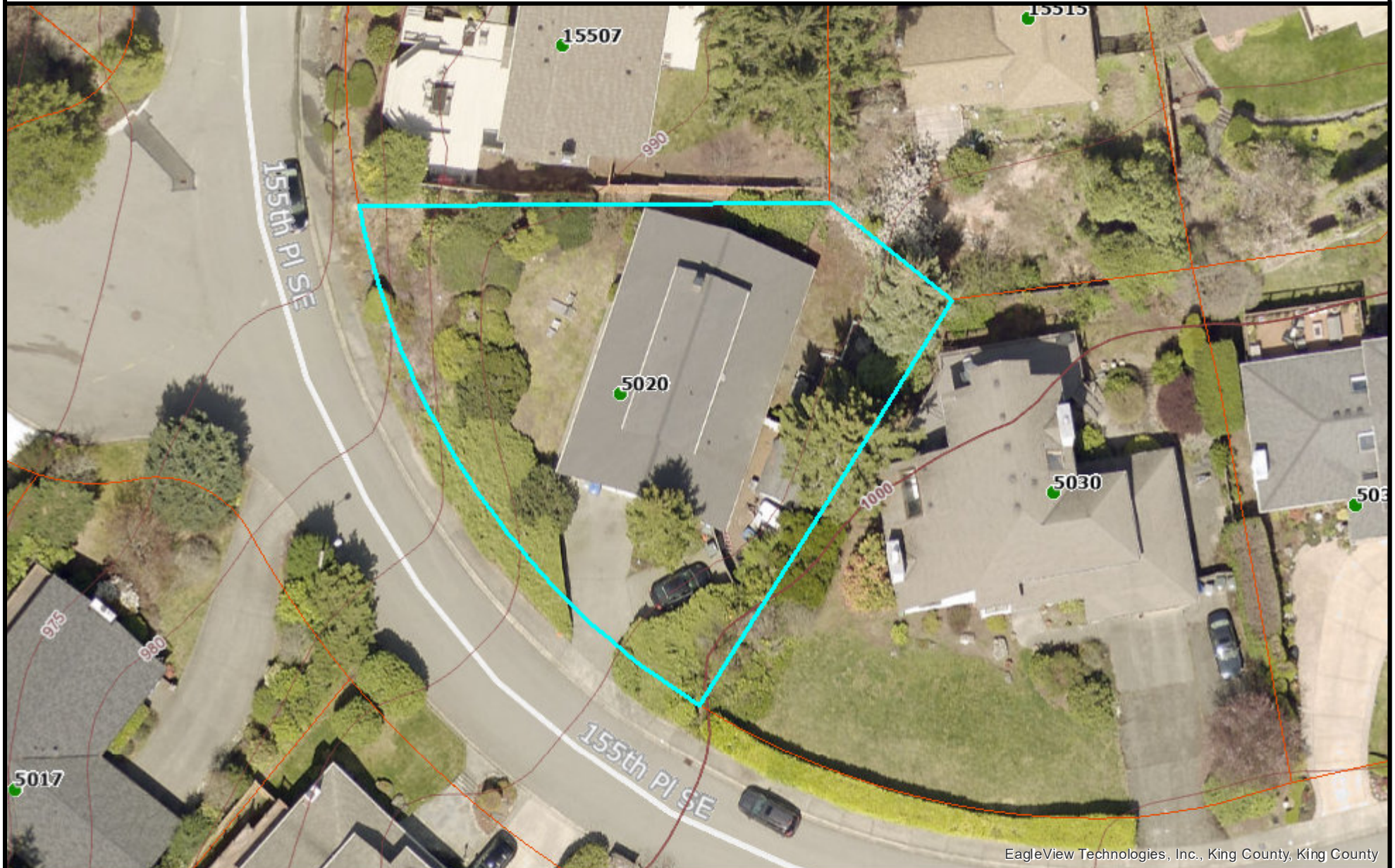
ALTMANN OLIVER ASSOCIATES, LLC

A handwritten signature in black ink that reads "John Altmann". The signature is written in a cursive, flowing style.

John Altmann
Ecologist

Attachments

King County iMap



The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

Date: 5/12/2025

Notes:



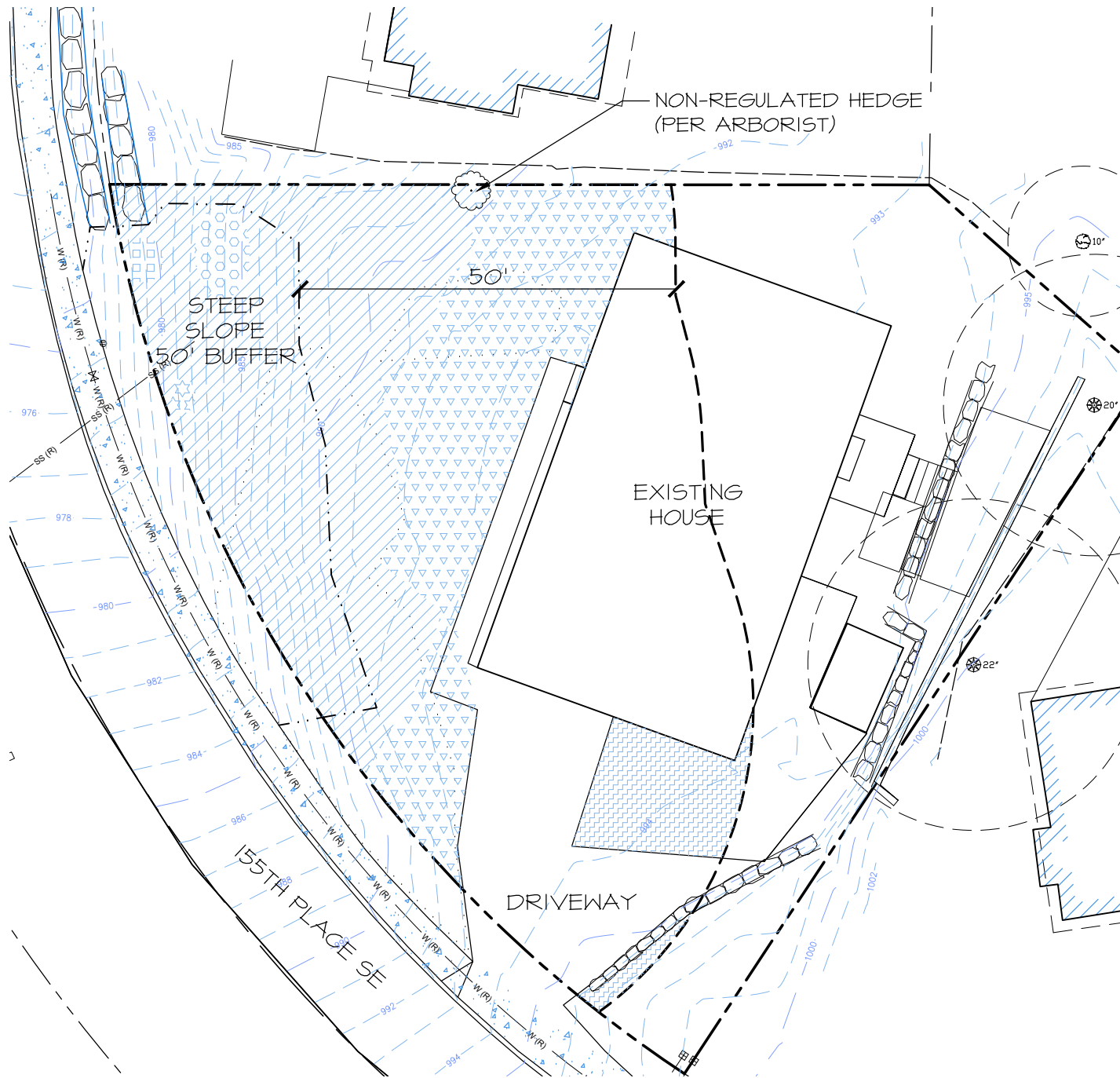
King County



Report Date: 05/12/2025, Parcel ID: [2141310470](#)

The Priority Habitats and Species (PHS) datasets do not contain information for your project area. This does not mean that species and habitats do not occur in your project area. PHS data, points, lines and polygons are mapped only when occurrences of these species or habitats have been observed in the field. Unfortunately, we have not been able to comprehensively survey all sections in the state and therefore, it is important to note that priority species and habitats may occur in areas not currently known to the Department.

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive



EXISTING CONDITIONS PLAN

SCALE - 1:20

TREE INVENTORY PER ARBORIST REPORT

TREE #	TREE NAME	DBH	TYPE	KEEP OR REMOVE	NOTES
I	BLUE SPRUCE	17	SIGNIFICANT	KEEP	-
A	SITKA SPRUCE	~24	LANDMARK	KEEP	OFF-SITE - DBH APPROX.
B	CHERRY	~9	SIGNIFICANT	KEEP	OFF-SITE - DBH APPROX.
C	JAPANESE MAPLE	~8	SIGNIFICANT	KEEP	OFF-SITE - DBH APPROX.

PLAN LEGEND

- PROPERTY LINE
- TOE/TOP OF SLOPE
- 50' STEEP SLOPE BUFFER

EXISTING VEGETATION LEGEND

- 10% ORNAMENTAL SHRUBS, 30% OPEN WITH ROCKERY
- 80% TALL OREGON GRAPE, 20% ORNAMENTAL SHRUBS
- 100% CHERRY LAUREL
- 100% SWORD FERN
- 100% OPEN / LAWN
- 100% ORNAMENTALS

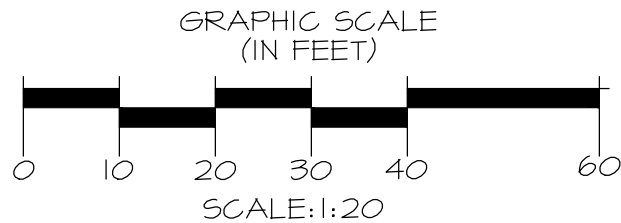
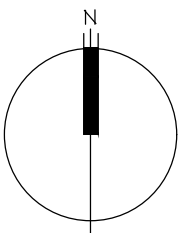
BELLEVUE TREE CREDIT CALCULATION

LOT SF*	MIN. REQUIRED CREDITS**	PRE-DEVELOPMENT ON-SITE CREDITS	CREDITS PROPOSED FOR REMOVAL	CREDITS RETAINED	REQUIRED SUPPLEMENTAL TREE CREDITS
3,740 SF	8	6	0	6	2

* LOT SIZE (9,907 SF) - CRITICAL AREA (6,167 SF) = 3,740 SF

** (R-3.5 - ONE DWELLING = 2.0) - (3,740 SF/ 1000) X 2 = 7.5 -> 8 CREDITS REQUIRED ON-SITE

TWO TOTAL 6' TALL CONIFER TREES REQUIRED FOR TREE REPLACEMENTS - REFER TO FIG-4 / PLANTING PLAN FOR TREE REPLACEMENT PLACEMENT



NOTES

- BASE INFORMATION PROVIDED BY ENCOMPASS ENGINEERING & SURVEYING 165 NE JUNIPER STREET, SUITE 201 ISSAQUAH WA, 98027 - 425.392.0250
- SITE PLAN PROVIDED BY MOMENTUM CIVIL 1145 BROADWAY, SUITE 115 TACOMA, WA 98402 - 425.319.1504
- ARBORIST REPORT PROVIDED BY TREE FROG LLC. PO BOX 307 DUVALL, WA - 205.310.8254

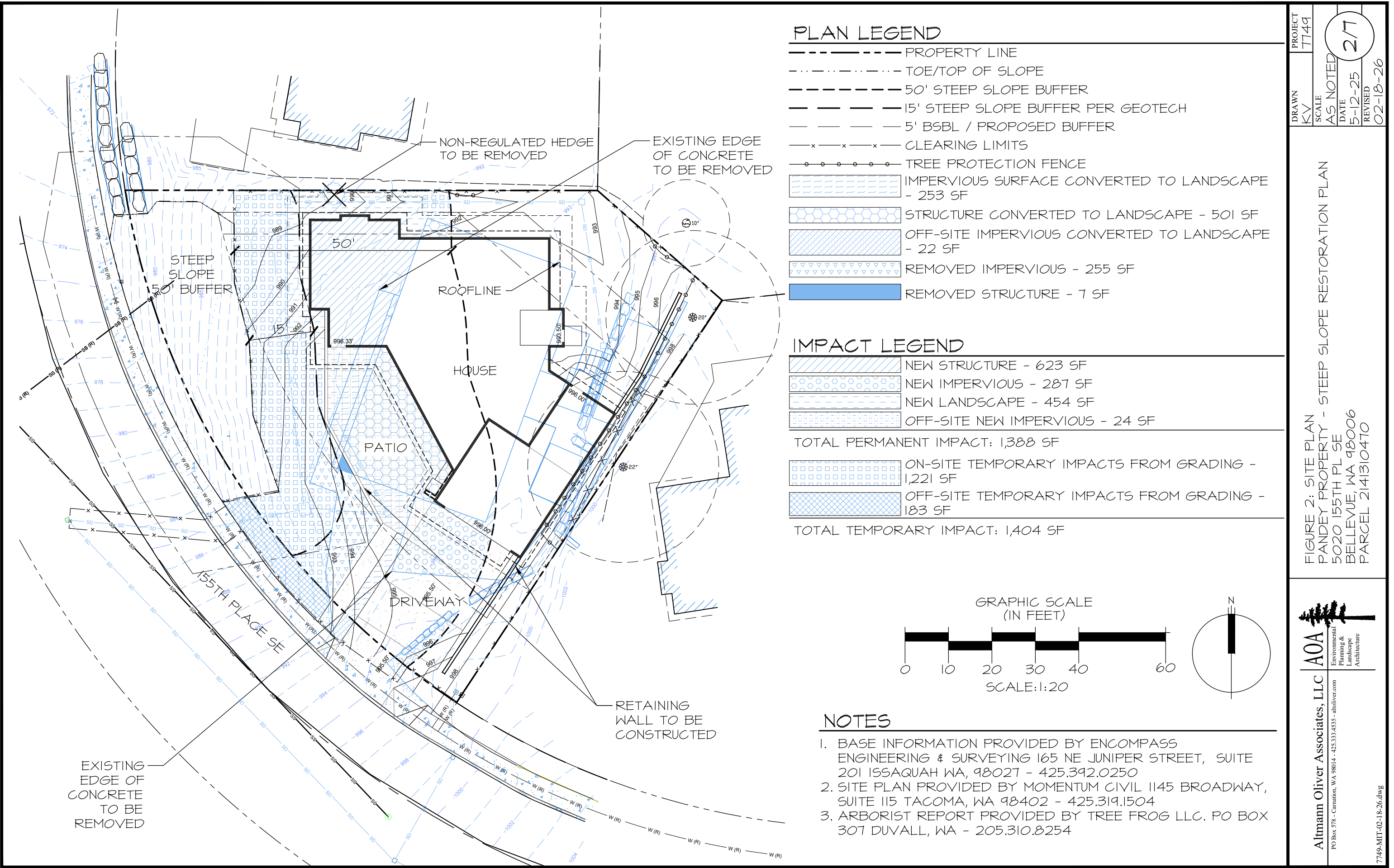
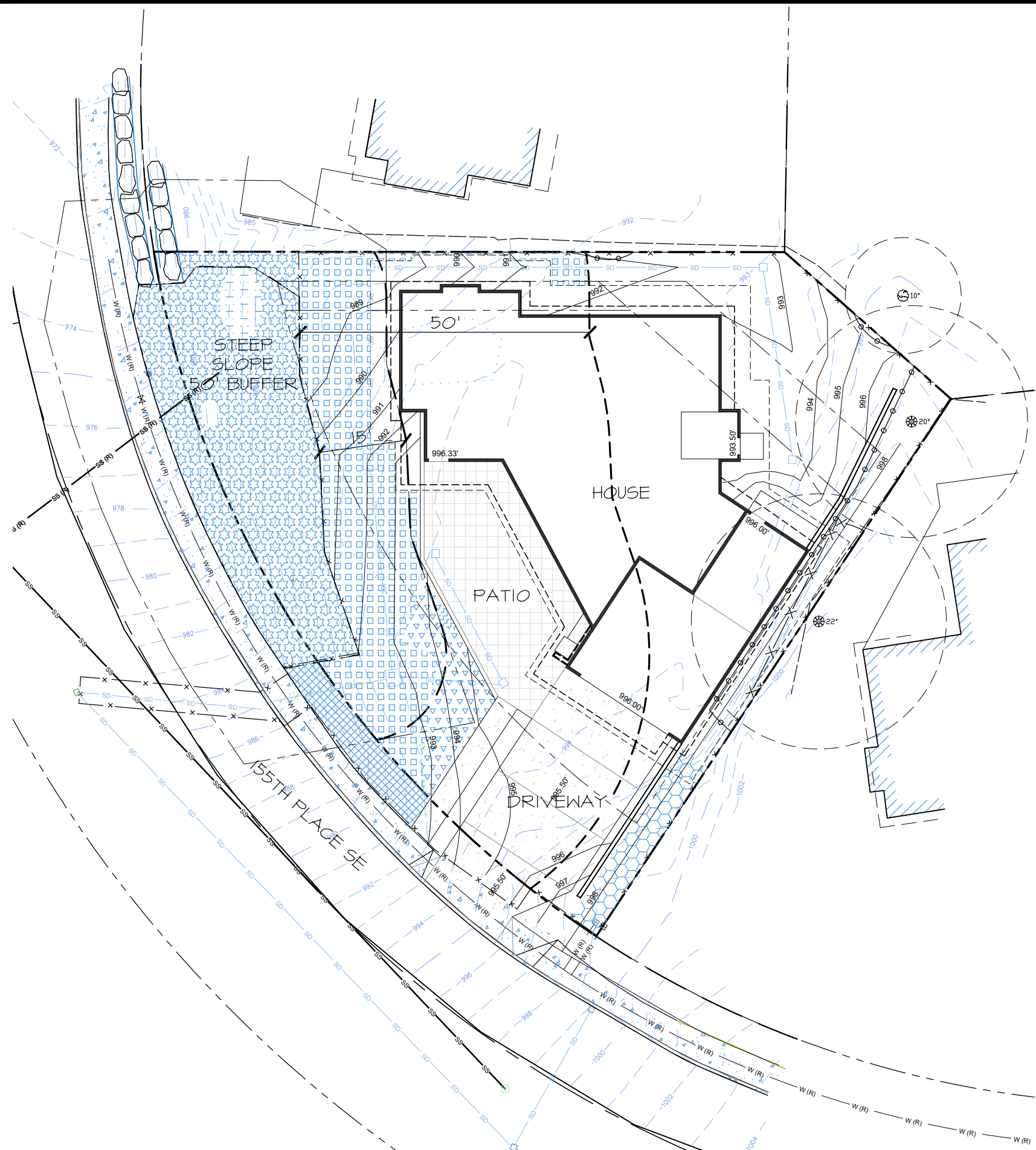


FIGURE 2: SITE PLAN
PANDEY PROPERTY - STEEP SLOPE RESTORATION PLAN
5020 155TH PL SE
BELLEVUE, WA 98006
PARCEL 2141310470



Almann Oliver Associates, LLC
Environmental
Planning &
Landscape
Architecture
PO Box 578 - Carnation, WA 98014 - 425.333.4535 - allover.com

PROJECT	7749
DRAWN	KV
SCALE	AS NOTED
DATE	5-12-25
REVISION	02-18-26



PLAN LEGEND

- PROPERTY LINE
- - - - - TOE/TOP OF SLOPE
- 50' STEEP SLOPE BUFFER
- 15' STEEP SLOPE BUFFER PER GEOTECH
- 5' BSBL / PROPOSED BUFFER
- x-x-x- CLEARING LIMITS

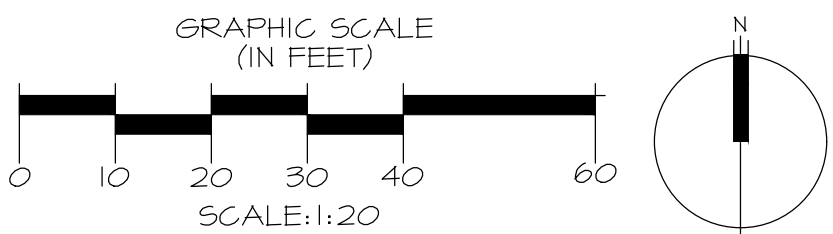
MITIGATION LEGEND

- [Hatched pattern] TREE REPLACEMENT AREA - 6 TOTAL TREE CREDITS REQUIRED - 7 NEW 6' TALL B&B MINIMUM TREES REQUIRED TOTAL
- [Star pattern] STEEP SLOPE ENHANCEMENT - REMOVE INVAVIES AND ORNAMENTALS AND PLANT AT 100% PLANTING DENSITY - 1,499 SF
- [Dotted pattern] STEEP SLOPE ENHANCEMENT - REMOVE ORNAMENTALS AND PLANT AT 100% PLANTING DENSITY - 72 SF
- [Triangle pattern] STEEP SLOPE BUFFER ENHANCEMENT - IMPERVIOUS TO BE REMOVED AND RESTORED - 255 SF
- [Cross-hatch pattern] STEEP SLOPE BUFFER ENHANCEMENT STRUCTURE TO BE REMOVED AND RESTORED - 7 SF

TOTAL MITIGATION FOR PERMANENT IMPACTS: 1,833 SF

- [Square pattern] STEEP SLOPE BUFFER ENHANCEMENT ON-SITE TEMPORARY IMPACTS TO BE RESTORED - 1,221 SF
- [Cross-hatch pattern] STEEP SLOPE BUFFER ENHANCEMENT OFF-SITE TEMPORARY IMPACTS TO BE RESTORED - 183 SF

TOTAL RESTORATION FOR TEMPORARY IMPACTS: 1,404 SF



NOTES

1. BASE INFORMATION PROVIDED BY ENCOMPASS ENGINEERING & SURVEYING 165 NE JUNIPER STREET, SUITE 201 ISSAQUAH WA, 98027 - 425.392.0250
2. SITE PLAN PROVIDED BY MOMENTUM CIVIL 1145 BROADWAY, SUITE 115 TACOMA, WA 98402 - 425.319.1504
3. ARBORIST REPORT PROVIDED BY TREE FROG LLC. PO BOX 307 DUVALL, WA - 205.310.8254

PROJECT
7749

DRAWN
KV

SCALE
AS NOTED

DATE
5-12-25

REVISED
02-18-26

3/8

FIGURE 3: MITIGATION PLAN
PANDEY PROPERTY - STEEP SLOPE RESTORATION PLAN
5020 155TH PL SE
BELLEVUE, WA 98006
PARCEL 2141310470

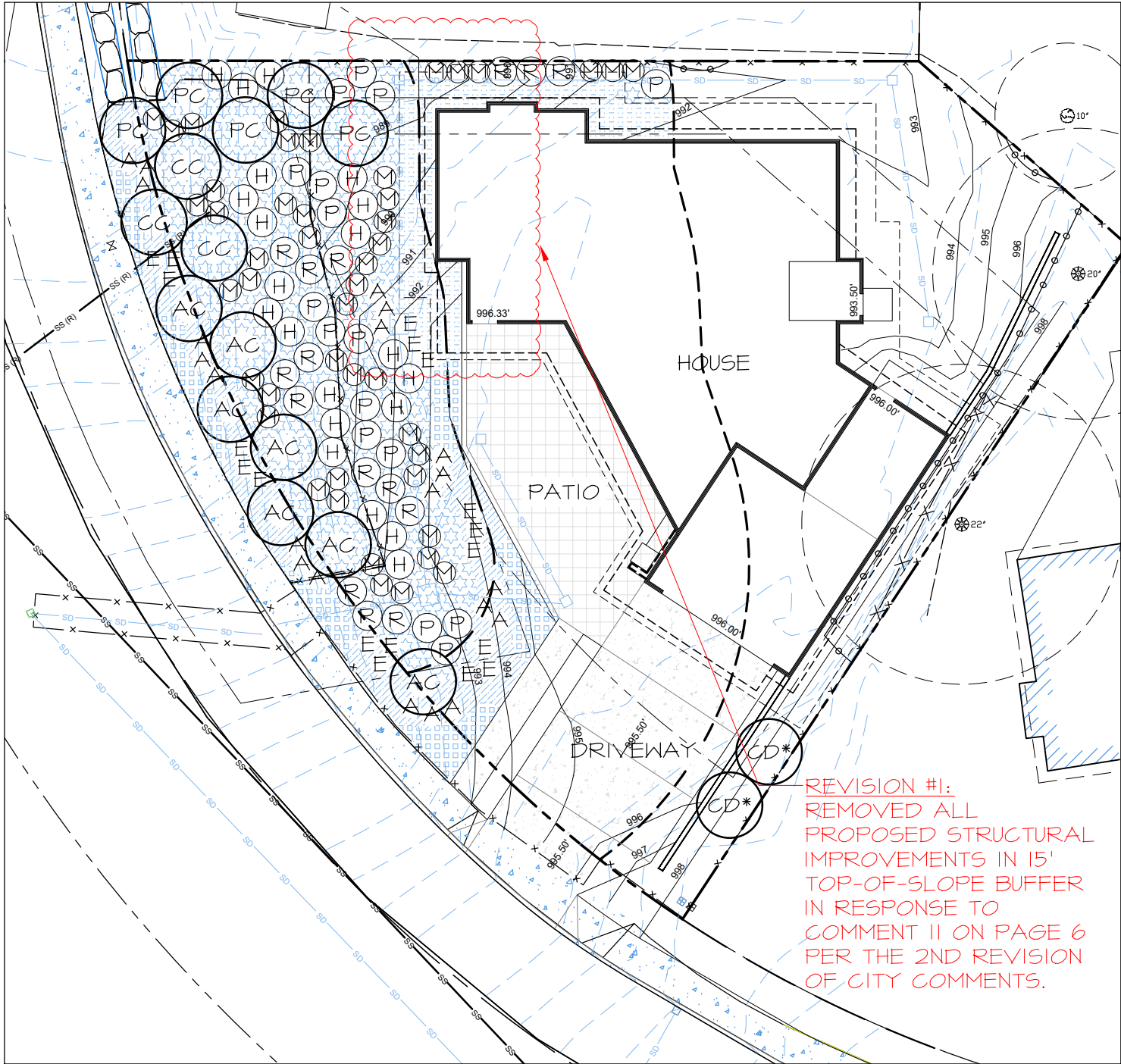
Almann Oliver Associates, LLC

AOA

Environmental
Planning &
Landscape
Architecture

PO Box 578 - Carnation, WA 98014 - 425.333.4535 - allover.com

7749-MIT-02-18-26.dwg



PLANTING PLAN
SCALE - 1:20

PLANT SCHEDULE

TREES

KEY	SCIENTIFIC NAME	COMMON NAME	DENSITY	QTY.	SIZE (MIN.)	NOTES
CC	CORYLUS CORNUTA	BEAKED HAZELNUT	9' O.C.	3	2 GAL.	MULTI-STEM (3 MIN.)
CD*	CALOCEDRUS DECURRENS	INCENSE CEDAR	9' O.C.	2	6' TALL + B&B	SINGLE TRUNK
PC	PINUS CONTORTA	SHORE PINE	9' O.C.	5	2 GAL.	SINGLE TRUNK

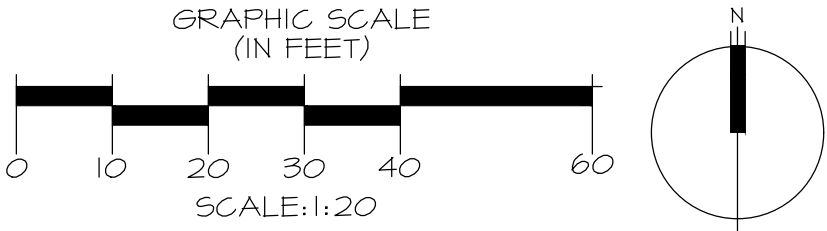
*FULFILLS REQUIRED TREE REPLACEMENT CREDITS

SHRUBS

KEY	SCIENTIFIC NAME	COMMON NAME	DENSITY	QTY.	SIZE (MIN.)	NOTES
AC	ACER CIRCINATUM	VINE MAPLE	9' O.C.	7	2 GAL.	MULTI-STEM (3 MIN.)
H	HOLODISCUS DISCOLOR	OCEANSPRAY	4.5' O.C.	21	1 GAL.	MULTI-STEM (3 MIN.)
M	MAHONIA AQUIFOLIUM 'COMPACTA'	COMPACT OREGON-GRAPE	4.5' O.C.	46	1 GAL.	FULL & BUSHY
P	PHILADELPHUS LEWISII	MOCK ORANGE	4.5' O.C.	16	1 GAL.	FULL & BUSHY
R	RIBES SANGUINEUM	RED CURRANT	4.5' O.C.	15	1 GAL.	MULTI-STEM (3 MIN.)

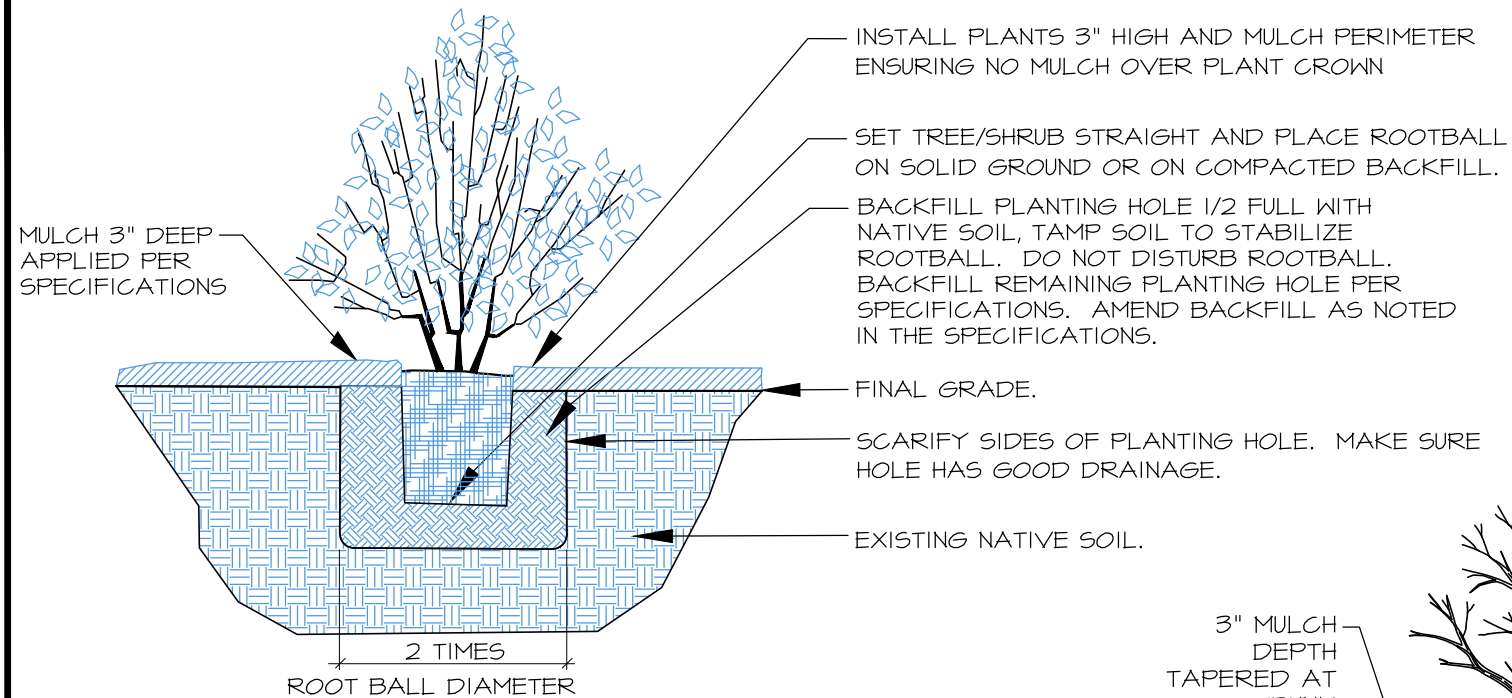
GROUNDCOVER / PERENNIALS

KEY	SCIENTIFIC NAME	COMMON NAME	DENSITY	QTY.	SIZE (MIN.)	NOTES
A	ANAPHALIS MARGARITACEA	PEARLY EVERLASTING	3' O.C.	21	1 GAL.	FULL & BUSHY
	ARMERIA MARITIMA	PINK SEATHRIFT	2' O.C.	100	1 GAL.	FULL & BUSHY
E	ERIOPHYLLUM LANATUM	OREGON SUNSHINE	3' O.C.	18	1 GAL.	FULL & BUSHY
	FESTUCA IDAHOENSIS	IDAHO FESCUE	3' O.C.	32	1 GAL.	FULL & BUSHY
	FRAGARIA CHILOENSIS	COASTAL STRAWBERRY	2' O.C.	460	1 GAL.	FULL & BUSHY
		100 % MULCH - NO PLANTING				



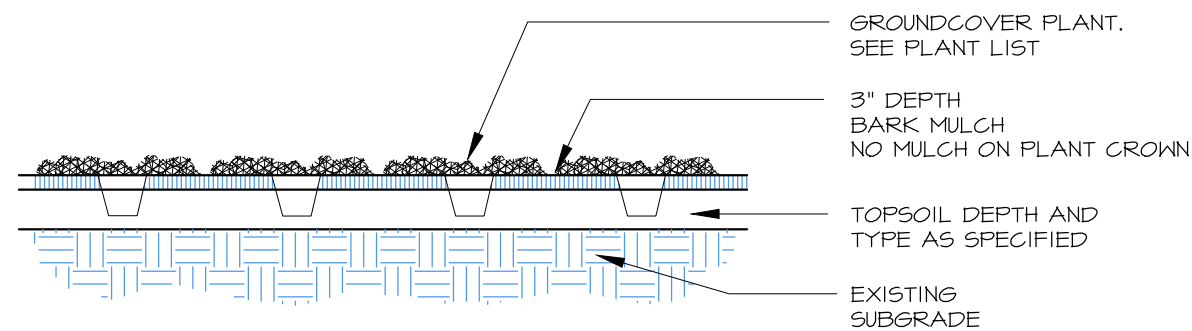
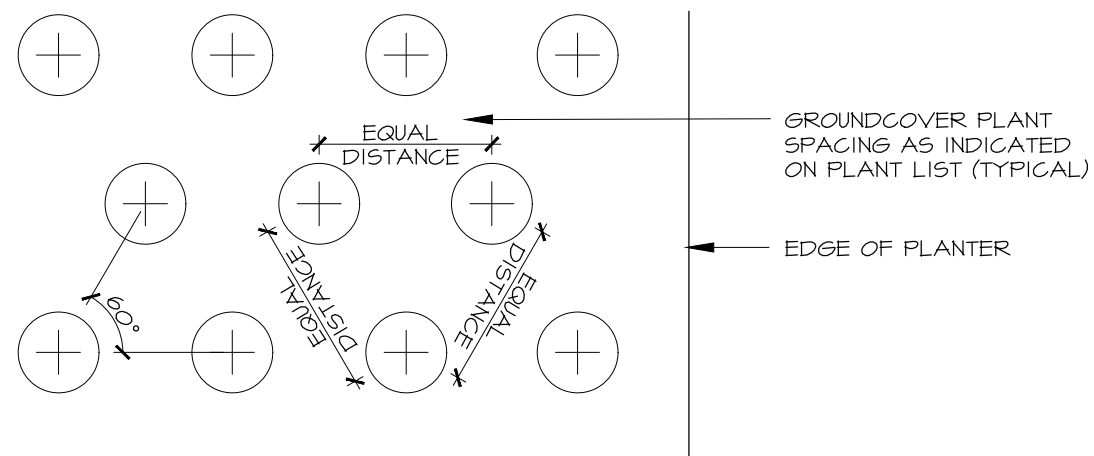
NOTES

1. BASE INFORMATION PROVIDED BY ENCOMPASS ENGINEERING & SURVEYING 165 NE JUNIPER STREET, SUITE 201 ISSAQUAH WA, 98027 - 425.392.0250
2. SITE PLAN PROVIDED BY MOMENTUM CIVIL 1145 BROADWAY, SUITE 115 TACOMA, WA 98402 - 425.319.1504
3. ARBORIST REPORT PROVIDED BY TREE FROG LLC. PO BOX 307 DUVALL, WA - 205.310.8254



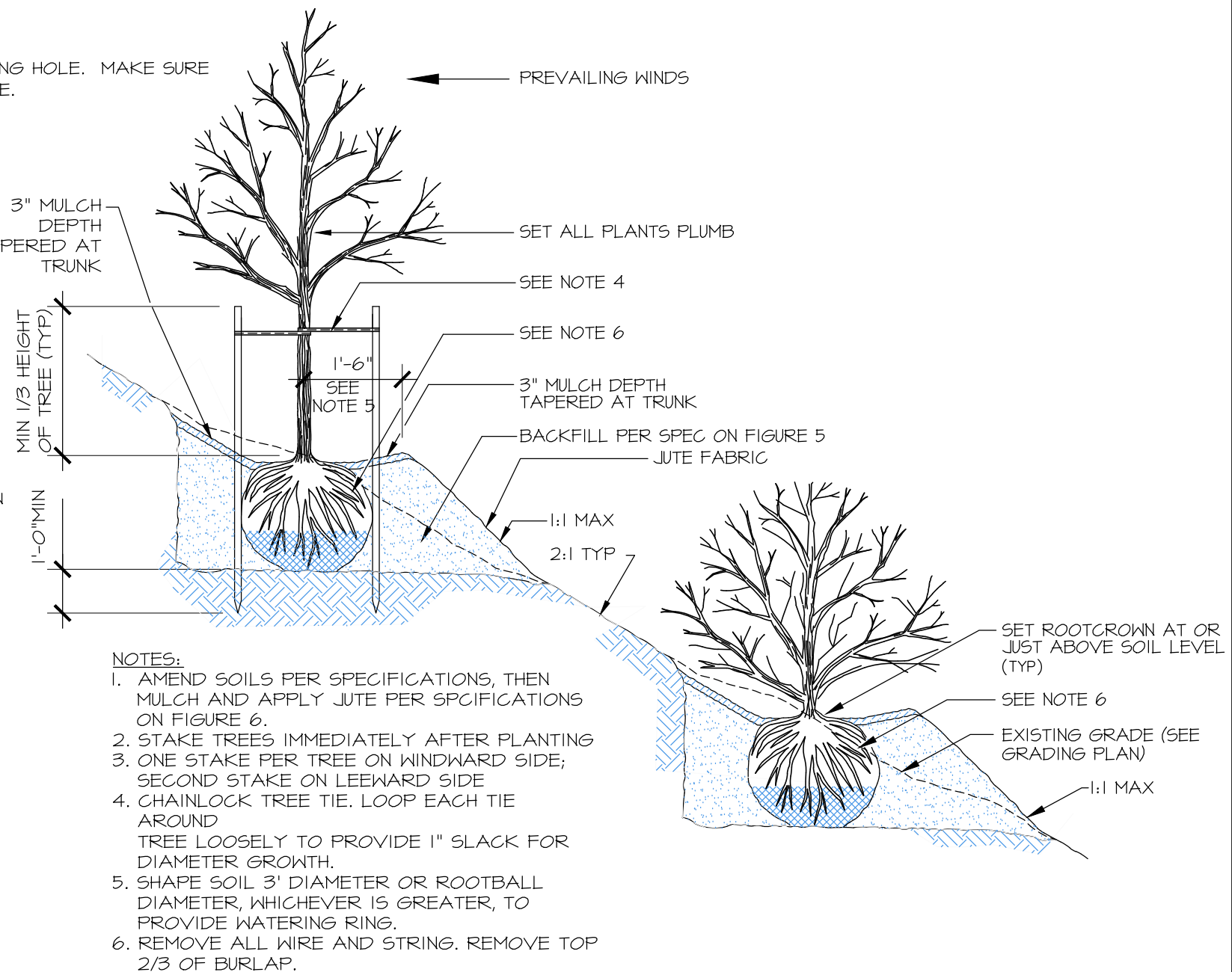
1 CONTAINER TREE/SHRUB PLANTING (TYP.)

SCALE: NT5



2 GROUNDCOVER PLANTING

SCALE: NT5



3 PLANTING ON A SLOPE

SCALE: NT5

FIGURE 5: PLANT SCHEDULE & DETAILS
PANDEY PROPERTY - STEEP SLOPE RESTORATION PLAN
5020 155TH PL SE
BELLEVUE, WA 98006
PARCEL 2141310470



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PROJECT	7749
DRAWN	KV
SCALE	AS NOTED
DATE	5-12-25
REVISION	02-18-26
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SPECIFICATIONS

1.

THIS PLAN PERTAINS TO PLANTING PORTION OF THE SITE WORK ONLY.
2.

WORK TO BE COMPLETED PER THE CONDITIONS OF THE CITY OF BELLEVUE PERMITS.
3.

WHEN IT IS AVAILABLE, CONTACT INFORMATION SHALL BE PROVIDED TO THE CITY OF BELLEVUE THAT INCLUDES NAMES, ADDRESSES AND PHONE NUMBERS OF PERSONS/FIRMS THAT WILL BE RESPONSIBLE FOR INSTALLING REQUIRED PLANTS AND PERFORMING REQUIRED MAINTENANCE.
4.

EROSION CONTROL SHALL BE INSTALLED PER CIVIL PLANS.
5.

ALL WORK SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR REGISTERED IN THE STATE OF WASHINGTON. CONTRACTOR MUST BE EXPERIENCED IN MITIGATION AND RESTORATION WORK. THE CONTRACTOR SHALL PROVIDE THAT THERE IS ONE PERSON ON THE SITE AT ALL TIMES DURING WORK AND INSTALLATION WHO IS THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE BEST METHODS FOR THEIR INSTALLATION, AND WHO SHALL DIRECT ALL WORK BEING PERFORMED UNDER THESE SPECIFICATIONS. THIS PERSON SHALL HAVE A MINIMUM OF FIVE (5) YEARS EXPERIENCE INSTALLING NATIVE PLANT MATERIALS FOR WETLAND MITIGATION OR RESTORATION PROJECTS, UNLESS OTHERWISE ALLOWED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST AND/OR THE CITY OF BELLEVUE.
6.

EXISTING NON-NATURAL MATERIALS + ORNAMENTAL VEGETATION SHALL BE REMOVED FROM ALL MITIGATION AREAS AND GRADED PER CIVIL ENGINEER'S PLAN PRIOR TO PLANTING. GEOTECHNICAL ENGINEER TO APPROVE SUBGRADE, AND TOPSOIL PLACEMENT PRIOR TO PLANTING. IMPORTED TOPSOIL TO CONSIST OF 6" DEJONG'S THREE WAY TOPSOIL.
7.

PLANTING PITS SHALL BE BACKFILLED WITH A 30/70 MIX OF STEERCO TO NATIVE SOIL.
8.

ALL PLANTS SHOULD BE INSTALLED BETWEEN DECEMBER 1ST AND MARCH 15TH UNLESS SUPPLEMENTAL IRRIGATION IS PROVIDED IMMEDIATELY AFTER PLANTING.
9.

INTERMEDIATE INSPECTIONS. ALL PLANTS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE DESIGNER AND/OR WETLAND BIOLOGIST PRIOR TO INSTALLATION. CONDITION OF ROOTS OF A RANDOM SAMPLE OF PLANTS WILL BE INSPECTED, AS WELL AS ALL ABOVEGROUND GROWTH ON ALL PLANTS. ROOTS OF ANY BARE ROOT PLANTS, IF PERMITTED FOR USE, WILL BE INSPECTED. PLANT MATERIAL MAY BE APPROVED AT THE SOURCE, AT THE DISCRETION OF THE LANDSCAPE DESIGNER AND THE WETLAND BIOLOGIST, BUT ALL MATERIAL MUST BE RE-INSPECTED AND APPROVED ON THE SITE PRIOR TO INSTALLATION. PLANT LOCATIONS SHALL ALSO BE INSPECTED AND APPROVED PRIOR TO PLANTING.
10.

PRIOR TO INSTALLATION OF PLANT MATERIAL, ALL HIMALAYAN BLACKBERRY, ENGLISH IVY OR OTHER INVASIVE PLANT SPECIES LOCATED IN THE PLANTING AREAS WILL BE REMOVED BY HAND.
11.

SOIL AMENDMENTS SHALL BE INSTALLED PRIOR TO PLACEMENT OF BIODEGRADABLE JUTE MATTING INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND BMP C122. THEN PLANTING SHALL OCCUR. AOA TO REVIEW PRIOR TO PLANTING. THEN 3" OF HOGFUEL MULCH SHALL BE APPLIED OVER ALL EXPOSED GROUND PER BMP C121.
12.

ALL PLANTS SHALL BE PIT-PLANTED IN PLANTING PITS EXCAVATED 2X THE DIAMETER OF THE PLANT BY CUTTING THROUGH THE JUTE, PULLING AWAY THE HOG-FUEL, PLANTING THE PLANT 3" HIGH, THEN REPLACING THE SOIL, THEN MULCH.
13.

ALL PLANTS SHALL BE NURSERY GROWN (IN WESTERN WA OR OR) FOR AT LEAST 1 YEAR FROM PURCHASE DATE, FREE FROM DISEASE OR PESTS, WELL-ROOTED, BUT NOT ROOT-BOUND AND TRUE TO SPECIES.
14.

PLANT LAYOUT SHALL BE APPROVED BY AOA PRIOR TO INSTALLATION AND APPROVED UPON COMPLETION OF PLANTING.
15.

UPON COMPLETION OF PLANTING, ALL PLANTS SHALL BE THOROUGHLY WATERED.
16.

UPON APPROVAL OF PLANTING INSTALLATION BY AOA, THE CITY OF BELLEVUE WILL BE NOTIFIED TO CONDUCT A SITE REVIEW FOR FINAL APPROVAL OF CONSTRUCTION.
17.

MAINTENANCE SHALL BE REQUIRED IN ACCORDANCE WITH THE CITY OF BELLEVUE SENSITIVE AREAS MITIGATION GUIDELINES AND APPROVED PLANS.
18.

A TEMPORARY DRIP IRRIGATION SYSTEM WILL BE DESIGN/BUILT BY LANDSCAPE CONTRACTOR TO COVER ALL PLANTING AREAS.
19.

SET FLOW TO PROVIDE 1/2" OF FLOW 2-3 TIMES WEEKLY FROM JUNE 15 -OCTOBER 15 THE FIRST YEAR AFTER PLANTING. FLOW SHALL REDUCE TO 1-2 TIMES WEEKLY THE SECOND YEAR AFTER PLANTING FROM JULY 1- SEPTEMBER 30 AND ONCE WEEKLY YEAR 3. NO FURTHER IRRIGATION IS NECESSARY AFTER THE THIRD YEAR FOR THE NATIVE PLANTING BEDS.
20.

PROJECT GEOTECH TO REVIEW IRRIGATION PLAN PRIOR TO INSTALL.
21.

MAINTENANCE SHALL BE IMPLEMENTED ON A REGULAR BASIS ACCORDING TO THE SCHEDULE BELOW.

ANNUAL MAINTENANCE SCHEDULE

MAINTENANCE ITEM	J	F	M	A	M	J	J	A	S	O	N	D
WEED CONTROL			I		I	I	I	I	I	I		
GENERAL MAINT.			I		I	I	I	I	I	I		
WATERING - YEAR 1						4-8	8-12	8-12	8-12	4-8		
WATERING - YEAR 2							4-8	4-8	4-8			
WATERING - YEAR 3							4	4	4			

1-8 = NUMBER OF TIMES TASK SHALL BE PERFORMED PER MONTH.



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FIGURE 6: SPECIFICATIONS
PANDEY PROPERTY - STEEP SLOPE RESTORATION PLAN
5020 155TH PL SE
BELLEVUE, WA 98006
PARCEL 2141310470

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MAINTENANCE & MONITORING PLAN

CONSTRUCTION MANAGEMENT

- 1. PRIOR TO COMMENCEMENT OF ANY WORK IN THE STEEP SLOPE, THE CLEARING LIMITS WILL BE STAKED AND ALL EXISTING VEGETATION TO BE SAVED WILL BE CLEARLY MARKED. A PRE-INSTALLATION MEETING WILL BE HELD AT THE SITE TO REVIEW AND DISCUSS ALL ASPECTS OF THE PROJECT WITH THE OWNER, AOA, THE GEOTECHNICAL ENGINEER AND THE CIVIL ENGINEER.
- 2. A BIOLOGIST WILL SUPERVISE PLAN IMPLEMENTATION DURING CONSTRUCTION TO ENSURE THAT OBJECTIVES AND SPECIFICATIONS OF THE STEEP SLOPE PLAN ARE MET.
- 3. ANY NECESSARY SIGNIFICANT MODIFICATIONS TO THE DESIGN THAT OCCUR AS A RESULT OF UNFORESEEN SITE CONDITIONS WILL BE JOINTLY APPROVED BY THE CITY OF BELLEVUE AND THE BIOLOGIST PRIOR TO THEIR IMPLEMENTATION.

MONITORING METHODOLOGY

- 1. THE MONITORING PROGRAM WILL BE CONDUCTED TWICE YEARLY (IN THE BEGINNING AND END OF THE GROWING SEASON) FOR A PERIOD OF FIVE YEARS, WITH REPORTS SUBMITTED ANNUALLY (AT THE END OF THE GROWING SEASON) TO THE CITY OF BELLEVUE.
- 2. VEGETATION ESTABLISHMENT WITHIN THE STEEP SLOPE RESTORATION AREAS WILL BE MONITORED DURING EACH FIELD VISIT WITH A RECORD KEPT OF ALL PLANT SPECIES FOUND.
- 3. PHOTO-POINTS WILL BE ESTABLISHED FROM WHICH PHOTOGRAPHS WILL BE TAKEN THROUGHOUT THE MONITORING PERIOD. THESE PHOTOGRAPHS WILL DOCUMENT GENERAL APPEARANCE AND PROGRESS IN PLANT COMMUNITY ESTABLISHMENT IN THE RESTORATION AREAS. REVIEW OF THE PHOTOS OVER TIME WILL PROVIDE A SEMI-QUANTITATIVE REPRESENTATION OF SUCCESS OF THE RESTORATION PLAN.

PERFORMANCE STANDARDS

SUCCESS OF PLANT ESTABLISHMENT WITHIN THE STEEP SLOPE ENHANCEMENT AREAS WILL BE EVALUATED ON THE BASIS OF PERCENT SURVIVAL OF PLANTED SPECIES.

- 1. NATIVE WOODY COVER WILL BE A MINIMUM OF; 10% AT CONSTRUCTION COMPLETION, 15% AT YEAR 1, 20% AT YEAR 2, 30% AT YEAR 3 AND 60% AT YEAR 5.
- 2. THERE WILL BE 100% SURVIVAL OF ALL WOODY PLANTED SPECIES THROUGHOUT THE MITIGATION PLANTED AREA AT THE END OF THE FIRST YEAR OF PLANTING. FOR YEARS 2-5, SUCCESS WILL BE BASED ON AN 85% SURVIVAL RATE OR SIMILAR NUMBER OF RECOLONIZED NATIVE WOODY PLANTS.
- 3. EXOTIC AND INVASIVE PLANT SPECIES WILL BE MAINTAINED AT LEVELS BELOW 10% TOTAL COVER. REMOVAL OF THESE SPECIES WILL OCCUR IMMEDIATELY FOLLOWING THE MONITORING EVENT IN WHICH THEY SURPASS THE ABOVE MAXIMUM COVERAGE. REMOVAL WILL OCCUR BY HAND WHENEVER POSSIBLE.

MAINTENANCE (M) & CONTINGENCY (C)

- 1. ESTABLISHED PERFORMANCE STANDARDS FOR THE PROJECT WILL BE COMPARED TO THE MONITORING RESULTS IN ORDER TO JUDGE THE SUCCESS OF THE RESTORATION PROJECT.
- 2. CONTINGENCY WILL INCLUDE MANY OF THE ITEMS LISTED BELOW AND WOULD BE IMPLEMENTED IF THESE PERFORMANCE STANDARDS ARE NOT MET.
- 3. MAINTENANCE AND REMEDIAL ACTION ON THE SITE WILL BE IMPLEMENTED IMMEDIATELY UPON COMPLETION OF THE MONITORING EVENT, (UNLESS OTHERWISE SPECIFICALLY INDICATED BELOW).

- REPLACE DEAD PLANTS WITH THE SAME SPECIES OR A SUBSTITUTE SPECIES THAT MEET THE GOAL OF THE ENHANCEMENT PLAN (C)
- RE-PLANT AREAS AFTER REASON FOR FAILURE HAS BEEN IDENTIFIED (E.G., MOISTURE REGIME, POOR PLANT STOCK, DISEASE, SHADE/SUN CONDITIONS, WILDLIFE DAMAGE, ETC.) (C)
- IRRIGATE FOLLOWING PLANT INSTALLATION FOR FIVE YEARS (M)

PERFORMANCE BOND

- 1. A PERFORMANCE BOND OR OTHER SURETY DEVICE WILL BE POSTED WITH THE CITY OF BELLEVUE BY THE APPLICANT TO COVER THE COSTS OF STEEP SLOPE RESTORATION PLAN IMPLEMENTATION (INCLUDING LABOR, MATERIALS, MAINTENANCE, AND MONITORING).
- 2. THE BOND OR ASSIGNMENT MAY BE RELEASED IN PARTIAL AMOUNTS IN PROPORTION TO WORK SUCCESSFULLY COMPLETED OVER THE FIVE YEAR MONITORING PERIOD, AS THE APPLICANT DEMONSTRATES PERFORMANCE AND CORRECTIVE MEASURES.

REVISION #2:
REMOVED TYPO IN RESPONSE TO
COMMENT 12 ON PAGE 7 PER
THE 2ND REVISION OF CITY
COMMENTS.



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FIGURE 7: MAINTENANCE & MONITORING PLAN
PANDEY PROPERTY - STEEP SLOPE RESTORATION PLAN
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REVISED
02-18-26

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7749

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Critical Areas Mitigation Bond Quantity Worksheet

Project Name: Pandey

Date: 12/10/25

Prepared by: AOA

Project Number: 2141310470

Project Description: Steep Slope Restoration & Mitigation Plan

Location: 5020 155th PL SE Bellevue, WA 98006

Applicant: Chandra Pandey

Phone: 425.333.4535

PLANT MATERIALS (includes labor cost for plant installation)

Type	Unit Price	Unit	Quantity	Description	Cost
PLANTS: Container, 1 gallon, medium soil	\$15.00	Each	772.00		\$ 11,580.00
PLANTS: Container, 2 gallon, medium soil	\$25.00	Each	15.00		\$ 375.00
PLANTS: Container, 6' ht. B&B	\$125.00	Each	2.00		\$ 250.00
TOTAL					\$ 12,205.00

INSTALLATION COSTS (LABOR, EQUIPMENT, & OVERHEAD)

Type	Unit Price	Unit	Quantity	Description	Cost
Compost, vegetable, delivered and spread	\$55.00	CY	15.00		\$ 825.00
Labor, general (landscaping other than plant installation)	\$65.00	HR	48.00		\$ 3,120.00
Labor: Consultant, supervising	\$125.00	HR	6.00		\$ 750.00
Labor: Consultant, on-site re-design	\$175.00	HR	2.00		\$ 350.00
Staking material (set per tree)	\$10.00	Each	3.00		\$ 30.00
Irrigation - temporary	\$8,000.00	Acre	0.07		\$ 560.00
TOTAL					\$ 5,635.00

EROSION CONTROL

ITEMS	Unit Cost	Unit	Quantity	Description	Cost
Mulch, by hand, wood chips, 2" deep	\$4.00	SY	360.00		\$ 1,440.00
Hauling and disposal	\$35.00	CY	30.00		\$ 1,050.00
Topsoil, delivered and spread	\$50.00	CY	30.00		\$ 1,500.00
TOTAL					\$ 3,990.00

OTHER

(Construction Cost Subtotal) **\$ 21,830.00**

ITEMS	Percentage of Construction	Unit	Quantity	Description	Cost
Mobilization	10%	1			\$ 2,183.00
Contingency	30%	1			\$ 6,549.00
TOTAL					\$ 8,732.00

MAINTENANCE AND MONITORING

NOTE: Projects with multiple permit requirements may be required to have longer monitoring and maintenance terms. This will be evaluated on a case-by-case basis for development applications. Monitoring and maintenance ranges may be assessed anywhere from 5 to 10 years.

Maintenance, annual (by owner or consultant)					
Larger than 1,000 sq. ft. but less than 5,000 sq.ft. of wetland or aquatic area mitigation	\$ 450.00	EACH	20.00		\$ 9,000.00
Monitoring, annual (by owner or consultant)					
Larger than 1,000 sq.ft. but less than 5,000 wetland or buffer mitigation	\$ 800.00	EACH	10.00		\$ 8,000.00
TOTAL					\$ 17,000.00

Total

\$47,562.00