City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	**TZ & Moon**
Proposal Address:	**6980 169th Ave SE**
Proposal Description:	The applicant requests a Critical Areas Land Use Permit to construct a new single-family residence within a steep slope, steep slope buffer, and Type-O stream buffer. The applicant has provided a geotechnical report, stream study, and a critical area report as support for the proposal.
File Number:	**16-129393-LO**
Applicant:	**Vinh Vuong, TP Home, LLC**
Decisions Included:	Critical Areas Land Use Permit (Process II. LUC 20.30P)
Planner:	**David Wong**, Planner
State Environmental Policy Act Threshold Determination:	**Exempt**
Director's Decision:	**Approval with Conditions**

Elizabeth Stead, Land Use Director
Development Services Department

Application Date:	April 14, 2016
Notice of Application Publication Date:	May 19, 2016
Decision Publication Date:	June 15, 2017
Project/SEPA Appeal Deadline:	June 29, 2017

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. 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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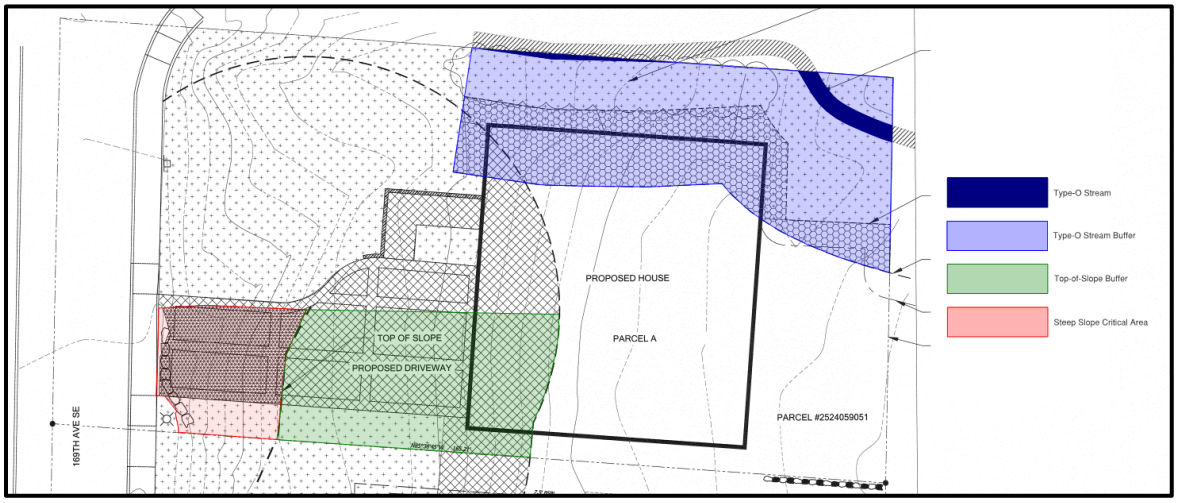
Attachments

1. Environmental Checklist (in file)
2. Geotechnical Report (in file)
3. Stream Study (in file)
4. Site Plan
5. Critical Areas Report (in file)

I. Proposal Description

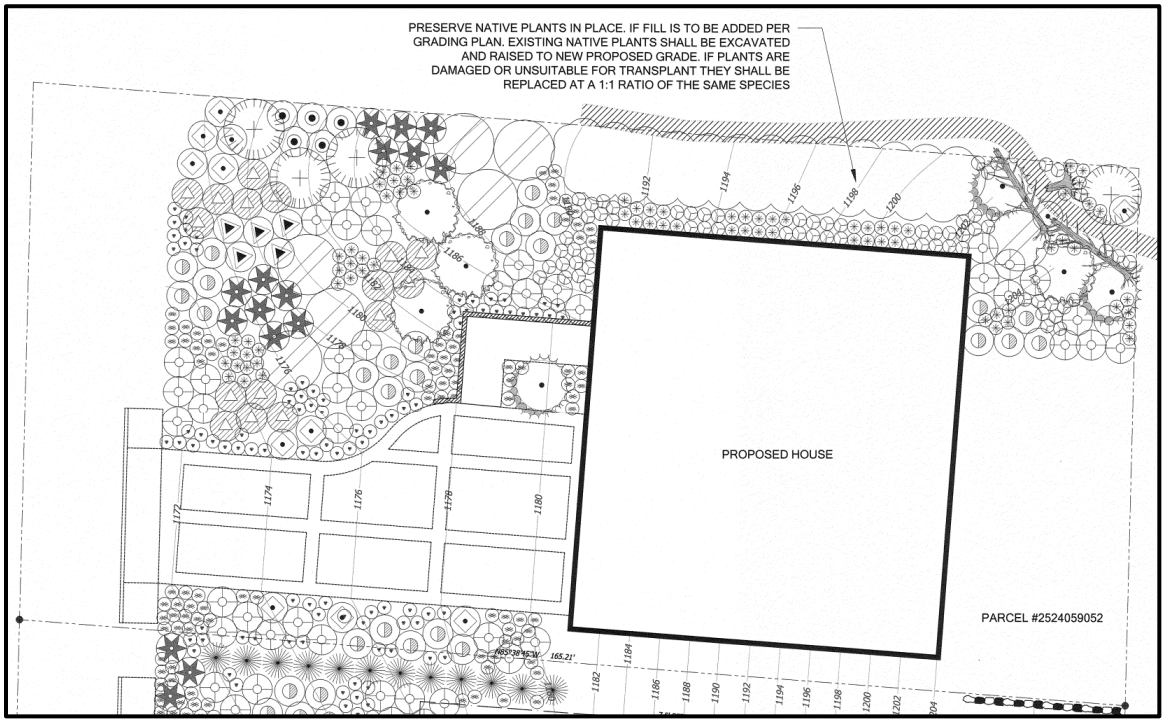
The applicant is requesting a Critical Areas Land Use Permit approval in order to remove a steep slope critical area, reduce the prescribed 50-foot top-of-slope buffer from a steep slope, and to reduce the prescribed 25-foot buffer associated with a Type-O stream to construct a single-family residence (approx. footprint of 3,355 sqft.) on the property. See Figure 1 for proposed impacts to the existing critical areas and buffers.

Figure 1



In addition to the improvements associated with the single-family development, the proposal includes mitigation planting of approximately 4,000 square feet of disturbed steep slope, steep slope buffer, and stream buffer area on-site. See Figure 2 for Site Plan.

Figure 2



Land Use Code (LUC) 20.25H.075.C.1.a.ii prescribes a 25-foot (or buffer established by existing NGPE/NGPA) buffer from the survey top of bank from a Type-O stream. The request is to reduce the prescribed buffer to a minimum distance of 10 feet. LUC 20.25H.075.C.2 allows for the modification of a critical area stream buffer through a Critical Areas Report (CAR). The CAR is a mechanism by which certain LUC requirements may be modified for specific proposals.

In addition to the request above, the proposal requests to grade the area of steep slope so that it no longer meets the criteria for steep slope distinction, as defined by LUC 20.25H.120.A.2, and to reduce the prescribed 50-foot buffer, as defined by LUC 20.25H.120.B.1, to a minimum distance of 0 feet. LUC 20.25H.095.C.2 allows for the modification of steep slope critical area and critical area buffer through a CAR.

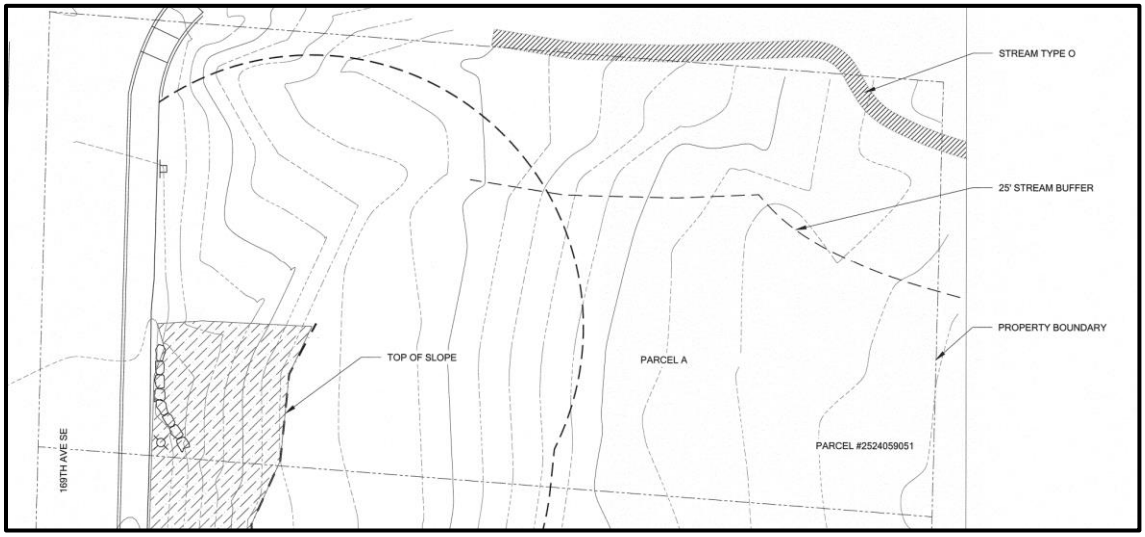
The critical areas report is intended to provide flexibility for sites where the expected critical areas functions and values are not present due to degraded conditions. The Type-O stream buffer, steep slope critical area, and steep slope buffer on the property are degraded in function and value because they lack the vegetative structural diversity found in higher-quality stream and steep slope critical areas. Therefore, the Type-O stream buffer, steep slope critical area and buffer are currently not fully performing their water quality, erosion control and wildlife habitat functions.

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

A. Site Description

The site is approximately 13,217 square feet in size and located in southeast Bellevue on 169th Ave SE near the city limits. Approximately 649 square feet of steep slope critical area is located on the west side of the lot. A Type-O stream flowing east to west occurs along the north and northwest boundary of the lot. Vegetation on the site mainly features non-native grasses and other non-native species, with the exception of a small area of native planting directly south of the stream. See Figure 3 for existing conditions.

Figure 3



B. Zoning

The property is zoned R-1.8 and is located in the Newcastle subarea. Development of a single-family residential dwelling is permitted within this zoning district.

C. Land Use Context

The comprehensive plan designation for this site is SF-L (Single-Family Low Density) with SF-UR (Single-Family Urban Residential) in the vicinity to the west.

D. Critical Areas Functions and Values

i. Streams and Riparian Areas

Most of the elements necessary for a healthy aquatic environment rely on processes sustained by dynamic interaction between the stream and the adjacent riparian area (Naiman et al., 1992). Riparian vegetation in floodplains and along stream banks provides a buffer to help mitigate the impacts of urbanization (Finkenbine et al., 2000 in Bolton and Shellberg, 2001). Riparian areas support healthy stream conditions.

Riparian vegetation, particularly forested riparian areas, affect water temperature by providing shade to reduce solar exposure and regulate high ambient air temperatures, slowing or preventing increases in water temperature (Brazier and Brown, 1973; Corbett and Lynch, 1985).

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams (Ecology, 2001; City of Portland 2001). The roots of riparian plants also hold soil and prevent erosion and sedimentation that may affect spawning success or other behaviors, such as feeding.

Both upland and wetland riparian areas reduce the effects of flood flows. Riparian areas and wetlands reduce and desynchronize peak crests and flow rates of floods (Novitzki, 1979; Verry and Boelter, 1979 in Mitsch and Gosselink, 1993). Upland and wetland areas can infiltrate floodflows, which in turn, are released to the stream as baseflow

Stream riparian areas, or buffers, can be a significant factor in determining the quality of wildlife habitat. For example, buffers comprised of native vegetation with multi-canopy structure, snags, and down logs provide habitat for the greatest range of wildlife species (McMillan, 2000). Vegetated riparian areas also provide a source of large woody debris that helps create and maintain diverse in-stream habitat, as well as create woody debris jams that store sediments and moderate flood velocities.

Sparsely vegetated or vegetated buffers with non-native species may not perform the needed functions of stream buffers. In cases where the buffer is not well vegetated, it is necessary to either increase the buffer width or require that the standard buffer width be restored or revegetated (May 2003). Until the newly planted

buffer is established the near term goals for buffer functions may not be attained. Riparian areas often have shallow groundwater tables, as well as areas where groundwater and surface waters interact. Groundwater flows out of riparian wetlands, seeps, and springs to support stream baseflows. Surface water that flows into riparian areas during floods or as direct precipitation infiltrates into groundwater in riparian areas and is stored for later discharge to the stream (Ecology, 2001; City of Portland, 2001).

ii. 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 linkages between habitat areas in the City. These steep slope areas also act as conduits for groundwater, which drains from hillsides to provides 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 site is located in the R-1.8 zoning district. The plans demonstrate conformance with zoning dimensional standards, however conformance will be verified during building permit review.

B. Critical Areas Requirements LUC 20.25H:

The City of Bellevue Land Use Code Critical Areas 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, critical area buffer or structure setback from a critical area or buffer. The proposed single-family dwelling, deck, and patio modify the 50-foot top-of-slope buffer. The project is subject to the performance standards found in LUC 20.25H.125 which are reviewed below.

i. Consistency with Steep Slope Performance Standards

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;
Due to the location of the steep slope and the stability of the slope, development of the site with no modification to the existing contours is not possible. To provide greater safety, foundation walls will be constructed to support the single-family residence and the entry walkway. To provide access from 169th Ave SE, the steep slope of approximately 42% will be graded creating a slope of approximately 25% rather than constructing several free-standing retaining walls within the slope.

2. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;
The single-family home has been located in the flattest portion of the site to avoid flattening of the slope entirely and outside of existing restoration planting within the stream buffer. The steep slope critical area and buffer have been documented as degraded due to past grading activities under King County jurisdiction and lack of existing native vegetation.

3. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;
The project geotechnical engineer (Ages Engineering, LLC) reviewed the proposal and provided analysis and recommendations in a preliminary geotechnical report (Attachment 2). The engineer did not give recommendation for increased buffers on-site or on any of the adjacent sites, and based on analysis of the proposal and recommendations, the geotechnical engineer expects "*an increase in overall stability of the site*" (pg. 9 Preliminary Geotechnical Report) and that the proposal "*will not result in greater risk or a need for increased buffers on neighboring properties*" (pg. 7).

4. 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 wall;
The size and shape of the slope relative to the proximity to the street frontage would require the use of several free-standing retaining walls, and would additionally require the lower floor of the single-family dwelling to be raised resulting in a "*less stable configuration*" (pg. 7).

5. Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer;
The site has been designed such that the driveway is the only improvements located within the current limits of the steep slope. The single-family dwelling has been designed such that impervious areas outside of the foundation are limited to one

front door access walkway and one driveway.

6. 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;
Due to the location of the slope in proximity to the street access, grade changes outside of the footprint are required. As discussed above and in the Preliminary Geotechnical Report, a "*less stable configuration*" would result from a system utilizing several freestanding retaining walls within the slope. The project proposes to alter the grade of the steep slope area from approximately 42% to 25% and will include dense native planting to further stabilize the slope area. No recreational front yard area is proposed.

7. 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 proposal includes the use of foundation walls as recommended by the project geotechnical engineer.

8. 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;
The single-family dwelling has been located outside of the slopes in excess of 40%.

9. 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 new parking facilities or garages are proposed within slopes of 40% or greater.

10. 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.
Approximately 4,000 square feet of native vegetation will be installed as restoration for degraded conditions that have been documented within the steep slope, steep slope buffer, and stream buffer. Disturbance is limited to areas defined for construction of the single-family dwelling, walkway, and driveway.

C. Consistency with Critical Areas Report LUC 20.25H.250
The applicant supplied a complete critical areas report prepared by The Watershed Company, a qualified professional. The report met the minimum requirements in LUC 20.25H.250 and LUC 20.25H.140.

D. Consistency with Critical Areas Report LUC 20.25H.140 & 20.25H.145

Modification of a steep slope or steep slope buffer requires a critical areas report as part of the application for a Critical Area Land Use Permit. The applicant has obtained the services of a qualified geotechnical engineering company to study the site and document the observed conditions. Staff has reviewed the following documents:

- Preliminary Geotechnical Report – 169th Avenue Residential
  Prepared by: Bernard P. Knoll II, P.E.

IV. Public Notice and Comment

Application Date:	April 14, 2016
Public Notice (500 feet):	May 19, 2016
Minimum Comment Period:	June 2, 2016

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on April 14, 2016. It was mailed to property owners within 500 feet of the project site. No comments have been received from the public as of the writing of this staff report.

V. State Environmental Policy Act (SEPA)

The proposal is exempt from SEPA review, per WAC 197-11-800 and BCC 22.02.032. Construction of a single family residence, even when located in a critical area, is a categorical exemption.

VI. Summary of Technical Reviews

Clearing and Grading:

The Clearing and Grading Division of the Development Services Department has reviewed the proposed development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development.

VII. Decision Criteria

A. Critical Areas Report Decision Criteria- General Criteria LUC 20.25H.255

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;**

   Finding: As described in the Critical Areas Report authored by The Watershed Company, the proposed development has been located to minimize impacts to the

Type-O stream and in the flattest portion of the site. Impacts to the steep slope critical area cannot be avoided entirely due to the proximity of the street frontage and the ability to access the site, however the degraded conditions of the steep slope, slope, steep slope buffer, and Type-O stream buffer will be improved with the installation of approximately 4,000 square feet of native vegetation. The proposal represents an increase in ecological value to the property from that which exist currently by providing additional native vegetation and structural diversity conducive to improving habitat for wildlife. See Section IX for condition of approval.

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

   Finding: The proposal has included a maintenance and monitoring plan and will be required to provide financial surety as a guarantee. See Section IX for condition of approval.

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**

   Finding: Mitigation planting adjacent to the Type-O stream will provide greater protection to and greater ecological function of the stream. Regrading and mitigation planting of the slope along the western and northwestern portions of the site will provide safer conditions and increased ecological functions. No additional buffers or setbacks from the critical area will need to be provided.

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

   Finding: Proposed single-family dwelling is compatible with adjacent uses.

B. Critical Areas Land Use Permit Decision Criteria 20.30P

The Director may approve or approve with modifications an application for a critical areas land use permit if:

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

   Finding: A single-family building permit will be required to be obtained prior to any construction activities. See Section IX for condition of approval.

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 proposal has been designed to provide the safest conditions based

on geotechnical recommendation while avoiding impact of the Type-O stream. Impacts to the steep slope cannot be avoid due to its location relative to the street frontage and access to the lot, however degraded ecological conditions of the site can be improved by installing native vegetation. In addition, the proposal includes dense mitigation planting within the on-site portions of the stream buffer.

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

   Finding: As discussed in Section III, the proposal incorporates and adheres to the performance standards of LUC 20.25H.125.

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

   Finding: The proposal is currently served by 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 for 4,000 square feet of native plantings has been included and meets the requirements of LUC 20.25H.210. See Section IX for condition of approval.

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

   Finding: As discussed in Section III and V of 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, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the proposal to construct a single-family residential addition within the steep slope critical area, slope buffer, and Type O stream buffer.

Note- Expiration of 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 Clearing and Grading 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	Tom McFarlane, 425-452-5207
Land Use Code- BCC 20.25H	David Wong, 425-452-4282
Noise Control- BCC 9.18	David Wong, 425-452-4282

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

1. Building Permit Required:
Approval of this Critical Areas Land Use Permit does not constitute an approval of a development permit. Application for a Single-Family Building Permit or other required permits must be submitted an approved. Plans submitted as part of a permit application shall be consistent with the activity under this approval.

Authority: Land Use Code 20.30P.140
Reviewer: David Wong, Land Use

2. Mitigation Plan: A mitigation plan for all areas of permanent new disturbance is required to be submitted for review and approval by the City of Bellevue prior to issuance of a Building Permit and/or Clearing and Grading Permit. The plan shall document the restoration area and quantity & size of plant material used and shall be in conformance with the mitigation plan in Attachment 4.

Authority: Land Use Code 20.25H.220
Reviewer: David Wong, Land Use

3. Planting Cost Estimate: A restoration plan estimate for the cost of plant materials, labor, and maintenance & monitoring activities shall be provided with the Building Permit application.

Authority: Land Use Code 20.25H.220
Reviewer: David Wong, Land Use

4. Maintenance & Monitoring: Maintenance & Monitoring of the project shall meet the stated performance standards outlined in Section 7 of the Critical Areas Report authored by The Watershed Company, dated September 2016, Attachment 5. These standards include:

Year 1
- 100% survival of all trees and shrubs within the restoration area
- No greater than 10% non-native vegetative cover within the restoration and enhancement area

Year 2

- 80% survival rate of all trees and shrubs within the restoration area
- No greater than 10% non-native vegetative cover within the restoration and enhancement area

Year 3

- 80% survival rate of all trees and shrubs within the restoration area
- 40% cover of native trees, shrubs, and groundcovers by year three
- No greater than 10% non-native vegetative cover within the restoration and enhancement area

Year 4

- 80% survival rate of all trees and shrubs within the restoration area
- No greater than 10% non-native vegetative cover within the restoration and enhancement area

Year 5

- 80% survival rate of all trees and shrubs within the restoration area
- 60% cover of native trees, shrubs, and groundcovers by year five
- Establish at least four native shrub species by year five
- No greater than 10% non-native vegetative cover within the restoration and enhancement area

Reporting shall be submitted no later than the end of each growing season or by October 31st, and shall include a site plan and photos from photo points established at the time of Land Use inspection. Reports shall be submitted to David Wong or Heidi Bedwell by the above listed date and can be emailed to dwong@bellevuewa.gov or mailed directly to:

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

Authority: Land Use Code 20.25H.220
Reviewer: David Wong, Land Use

5. Geotechnical Recommendations: The project shall abide by all recommendations included in the Preliminary Geotechnical Report submitted by Ages Consulting dated September 6, 2016.

Authority: Land Use Code 20.25H.145
Reviewer: David Wong, Land Use

6. Geotechnical Review: The project geotechnical engineer must review the final plans, including all foundation, retaining wall, and shoring 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: Tom McFarlane, Clearing and Grading

7. Surety: Financial surety equal to 100% of the cost of plant materials and labor, or 20% of the cost of the maintenance contract for five (5) years of maintenance shall be provided with the Building Permit application.

Authority: Land Use Code 20.30P.160
Reviewer: David Wong, Land Use

8. Land Use Inspection: Following installation of planting the applicant shall contact Land Use staff to inspect the planting area. At the end of five (5) years inspection by Land Use staff is required to release the maintenance surety. Staff will need to find that the plants are in a healthy and growing condition and the mitigation plan is successful per the established performance standards in the monitoring plan. Throughout the monitoring period Land Use staff has the right to enter the property to inspect the planting.

Authority: Land Use Code 20.25H.220
Reviewer: David Wong, Land Use

9. Hold Harmless Agreement: The applicant shall provide a signed, notarized, and recorded copy of the City's Hold Harmless Agreement under the Building Permit application prior to approval and issuance of the Building Permit.

Authority: Land Use Code 20.30P.170
Reviewer: David Wong, Land Use

10. Rainy Season restrictions: Due to the proximity to steep slope critical area, 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 measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093.A
Reviewer: Tom McFarlane, Clearing and Grading

11. Clearing Limits and Temporary Erosion & Sedimentation Control: Prior to the initiation of any clearing or grading activities, clearing limits and the location of all temporary erosion and sedimentation control measures shall be field staked for approval by the on-site clearing and grading inspector.

Authority: Bellevue City Code 23.76.060 and 23.76.090
Reviewer: Tom McFarlane, Clearing and Grading

12. Pesticides, Insecticides, and Fertilizers: The applicant must submit as part of the required Clearing and Grading Permit information regarding the use of pesticides, insecticides, and fertilizers in accordance with the City of Bellevue's "Environmental Best Management Practices".

Authority: Land Use Code 20.25H.220.H
Reviewer: David Wong, Land Use

13. Noise Control: Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done in advance with submittal of a construction noise expanded exempt hours permit.

Authority: Bellevue City Code 9.18
Reviewer: David Wong, Land Use

IMPACTS ASSESSMENT AND MITIGATION PLAN

SCALE 1:10

0 5' 10' 20' 40'

IMPACTS AND MITIGATION TABLE

	Parcel A	Parcel B
Stream Buffer Reduction	1,131 SF	N/A
Steep Slope Buffer Reduction	2,091 SF	3,417 SF
Steep Slope Impacts	462 SF	402 SF
TOTAL IMPACTS	3,684 SF	3,819 SF
TOTAL MITIGATION	4,743 SF	3,240 SF

NOTES

1. 37 SF OF STREAM BUFFER AND STEEP SLOPE BUFFER OVERLAP. OVERLAP IS ACCOUNTED FOR IN STEEP SLOPE BUFFER REDUCTION.
2. THIS SHEET SHOWS EXISTING CONTOURS. REFER TO SHEET W3 FOR PROPOSED CONTOUR.

LEGEND

- TOP OF SLOPE
- STEEP SLOPE IMPACT
- STEEP SLOPE BUFFER REDUCTION
- STREAM BUFFER REDUCTION
- PROPOSED MITIGATION
- NATIVE PLANT PRESERVATION AREA
- STEEP SLOPE BUFFER
- STREAM
- PROPOSED STREAM BUFFER
- PARCEL BOUNDARY

PERMIT SET

NOT FOR CONTRACTOR BIDDING

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www.watershedco.com
Science & Design

COUGAR MOUNTIAN HOMES
MITIGATION PLAN
PREPARED FOR VINH VOUNG
PARCEL # 252405-9051 and -9052
6980-7016 169TH AVENUE SOUTHEAST
BELLEVUE, WA 98006

SUBMITTALS & REVISIONS

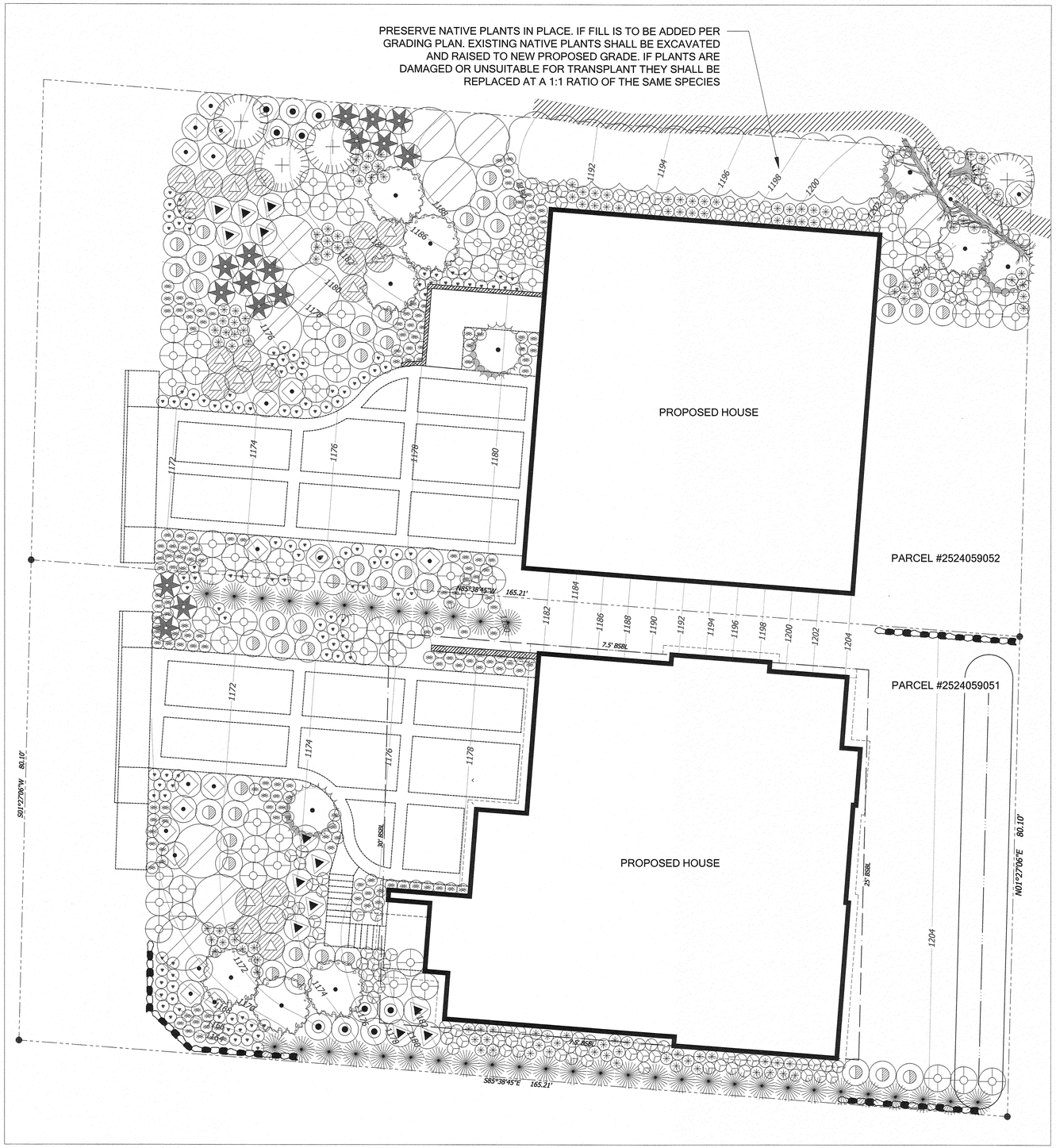
NO.	DATE	DESCRIPTION	BY
1	09-30-2016	REVIEW SET	KMB
2	12-02-2016	REVISIONS	KMB
3	03-28-2017	CITY COMMENT REVISIONS	KMB

Received
APR 25 2017
Permit Processing

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: KB
DESIGNED: KMB
DRAFTED: KMB
CHECKED: NL/KB
JOB NUMBER:
160841
SHEET NUMBER:
W2 OF 7

DATE 3/8/2017 | PRINTED BY KYLE BRAUN | FILENAME 160841_BELLEVUE_VUONG.DWG



PLANTING AND STREAM ENHANCEMENT PLAN

SCALE 1:10

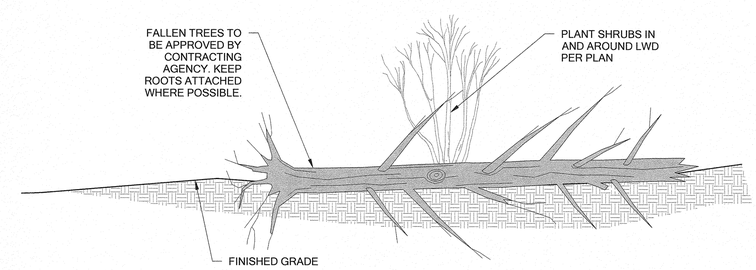
0 5' 10' 20' 40'

PLANTING SCHEDULE

	PARCEL A QTY	PARCEL B QTY	SIZE
TREES / SPACING @ 9'-0" O.C.			
THUJA PLICATA / WESTERN RED CEDAR	4	0	2 GAL.
PHAMNUS PURSHIANA / CASCARA	4	3	2 GAL
TSUGA MERTENSIANA / MOUNTAIN HEMLOCK	3	1	2 GAL
ACER CIRCINATUM / VINE MAPLE	6	3	2 GAL
SHRUBS / SPACING @ 42" O.C.			
CORYLUS CORNUTA / BEAKED HAZELNUT	5	5	1 GAL.
RIBES SANGUINEUM / RED-FLOWERING CURRANT	38	25	1 GAL.
ROSA NOOTKA / NOOTKA ROSE	12	8	1GAL.
RHODODENDRON MACROPHYLLUM / PACIFIC RHODODENDRON	25	18	1GAL
PHYSOCARPUS CAPITATUS / PACIFIC NINEBARK	5	8	1GAL.
AMELANCHIER ALNIFOLIA / SERVICEBERRY	13	3	1GAL.
SYMPHORICARPOS ALBUS / SNOWBERRY	16	5	1GAL.
MYRICA CALIFORNICA / PACIFIC WAX MYRTLE	0	39	1GAL.
GROUNDCOVERS / SPACING @ 24" O.C.			
POLYSTICHUM MUNITUM / SWORD FERN	74	46	4" POT
GAULTHERIA SHALLON / SALAL	67	61	4" POT
ARCTOSTAPHYLOS UVA-URSI / KINNIKINNICK	80	53	4" POT
FRAGARIA VESCA / WOODS STRAWBERRY	70	90	4" POT

LEGEND

- STREAM
- PROPOSED STREAM BUFFER
- PARCEL BOUNDARY
- PROPOSED CONTOURS
- RELOCATED ON-SITE ROOTWAD
- LARGE WOODY DEBRIS



NOTES:
1. LAYOUT OF DETAIL IS CONCEPTUAL. SEE PLAN FOR LOCATION. LAYOUT IN FIELD WITH ASSISTANCE FROM THE CONTRACTING AGENCY.
2. FALLEN TREE SHALL BE BURIED 1/3 THE TOTAL LOG DIAMETER.

1 LARGE WOODY DEBRIS PLACEMENT

Scale: NTS

PERMIT SET

NOT FOR CONTRACTOR BIDDING

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Science & Design

COUGAR MOUNTIAN HOMES

MITIGATION PLAN
PREPARED FOR VINH VOUNG
PARCEL # 252405-9051 and -9052
6980-7016 169TH AVENUE SOUTHEAST
BELLEVUE, WA 98006

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
1	09-30-2016	REVIEW SET	KMB
2	12-02-2016	REVISIONS	KMB
3	03-01-2017	CITY COMMENT REVISIONS	KMB

Received
APR 25 2017
Permit Processing

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: KB
DESIGNED: KMB
DRAFTED: KMB
CHECKED: NL/KB
JOB NUMBER:
160841
SHEET NUMBER:
W5 OF 7

DATE: 3/8/2017 PRINTED BY: KYLE BRAUN FILENAME: 160841_BELLEVUE_VUONG.DWG