

City of Bellevue Development Services Department Land Use Staff Report

Proposal Name:

Gallaugher Residence

Proposal Address:

6615 170th PI SE

Proposal Description:

The applicant requests a Critical Areas Land Use Permit to construct a 2-story single-family dwelling within a steep slope critical area buffer. The applicant has provided a geotechnical report and a critical area

report as support for the proposal.

File Number:

16-144110-LO

Applicant:

Craig Stillwell, Stillwell Hanson Architects

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

Vind m Bel

Elizabeth Stead, Land Use Director Development Services Department

Application Date:

October 12, 2016

Notice of Application Publication Date:

January 12, 2017

Decision Publication Date:

July 20, 2017

Project/SEPA Appeal Deadline:

August 3, 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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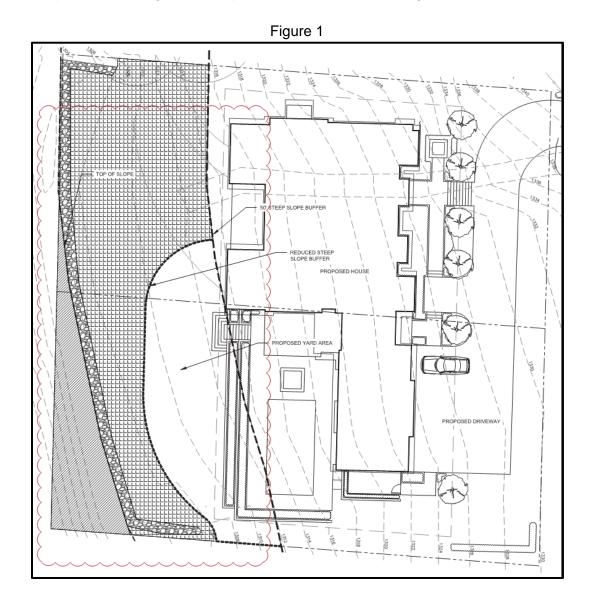
Attachments

- Environmental Checklist (in file)
 Geotechnical Report (in file)
 Site Plan

- 4. Critical Areas Report (in file)

I. Proposal Description

The applicant is requesting a Critical Areas Land Use Permit approval in order to reduce the prescribed 50-foot top-of-slope buffer from a steep slope to construct a 2-story single-family residence, deck, lawn, and pool on the property. In addition to the improvements associated with the single-family development, the proposal includes the restoration of approximately 5,844 square feet of degraded steep slope area on-site. See Figure 1 for Site Plan.



Land Use Code (LUC) 20.25H.120.B prescribes a 50-foot critical area buffer from the surveyed top-of-slope. The request is to reduce the prescribed buffer to a minimum distance of 16 feet. LUC 20.25H.095.C.2 allows for the modification of a critical area buffer through a critical areas report. The critical areas report is a mechanism by which certain LUC requirements may be modified for a specific proposal.

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 steep slope critical area and buffer on the property are degraded in function and value because they lack the vegetative structural diversity found in higher-quality steep slope critical areas. Therefore, the 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 currently vacant and approximately 26,434 square feet in size, located directly north of the Belvedere subdivision in southeast Bellevue. Approximately 1,237 square feet of steep slope critical area is located on the southwest side of the lot. Vegetation on the site mainly features meadow grasses, red alder (*Alnus rubra*) saplings, non-native blackberry (*Rubus ameniacus*), and Scotch broom (*Cytisus scoparius*).

B. Zoning

The property is zoned R-1 and is located in the Newcastle subarea.

C. Land Use Context

The comprehensive plan designation for this site is SF-L (Single-Family Low Density) and is bordered in all directions with SF-L comprehensive plan areas.

D. 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 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 zoning district. Preliminary plans demonstrate conformance with zoning dimensional standards, however conformance will be verified during construction 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, lawn, and pool 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 (LUC 20.25H.125)

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 improvements are not proposed within a steep slope critical area. Alterations will be limited to the top-of-slope buffer and will be limited to approximately 2,904 square feet. Majority of the single-family residence and appurtenances are located outside of the buffer requiring minimal alteration to existing grade within the buffer area (See Attachment 3 for site plan).

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

The improvements have been located within the buffer outside of the steep slope critical area in order to avoid impacts to the steep slope. Vegetation impacts will be limited to ornamental grasses and other non-native, invasive plantings.

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

The project geotechnical engineer (PanGEO) reviewed the proposal and provided recommendations. The geotechnical engineer analysis and findings reported that the proposed development "will not increase the threat of geologic hazard to the subject property or adjacent properties, or reduce the stability of the site or surrounding properties..." (pg. 8 Geotechnical Engineering Report). The

Geotechnical Report, including construction recommendations, is included as Attachment 2. The applicant is required to follow the recommendations included in the project geotechnical report, which shall be verified by an inspection made by a qualified geotechnical engineer. See Conditions of Approval in Section IX of this report.

- 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; No new retaining walls or alterations to existing slope contours are proposed. The existing rockery at the top of the slope will remain as is.
- 5. Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer;

The single-family structural and impervious surface intrusions into the steep slope buffer have been minimized through the site planning process and will be limited to approximately 650 square feet of the total modification.

- 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; No grade changes outside of the building footprint are 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 does not include new freestanding retaining walls as part of the development. The existing rockery at the top of the slope will remain as is.
- 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; No development is proposed on 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 the steep slope or steep slope buffer.

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 5,844 square feet of native vegetation will be installed as restoration for degraded conditions that have been documented within the steep slope. Disturbance is limited to areas defined for construction of a single-family dwelling, deck, lawn, and pool within the buffer.

C. Consistency with Critical Areas Report LUC 20.25.250.

The applicant supplied a complete critical areas report prepared by The Watershed Company and a geotechnical report Prepared by: Jon C. Rehkopf (PE) & Siew L Tan (PE), qualified professionals. 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 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:

Geotechnical Engineering Report – October 11, 2016
 Prepared by: Jon C. Rehkopf (PE) & Siew L Tan (PE)

The geotechnical analysis found that the development will not "...reduce the stability of the site..." (Section 4.2) provided that the stated recommendations for development are observed and utilized. See Section VIII for conditions of approval.

IV. Public Notice and Comment

Application Date: October 12, 2016
Public Notice (500 feet): January 12, 2016
Minimum Comment Period: January 26, 2016

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on January 12, 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. 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.

VI. 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.

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 designed to completely avoid the steep slope critical area and to locate most of the single-family construction outside of the steep slope buffer. Restoration planting within the slope and slope buffer will alter an area identified to contain non-natives species in order to increase habitat value and water quality functions. The proposal represents an increase in ecological value to the property from that which exist currently. 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.

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: Restoration of the degraded area within the slope and slope buffer provide greater protection to the adjacent lot to the west. 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 will all adjacent uses and is one of the allowed uses of the R-1 residential zoning district.

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 and plans submitted shall be in conformance with plans found in Attachment 3. 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 locate the majority of the single-family dwelling improvements outside of the steep slope buffer to avoid permanent impacts to the steep slope critical area and to minimize impacts to the buffer. In addition, the proposal include restoration of the steep slope and buffer that has been degraded by the presence invasive species and historical impacts. With the incorporation of the geotechnical report recommendations, the proposal will utilize the best available design and development techniques. See Section IX for condition of approval.

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. A hold harmless agreement will be required to be submitted with the building permit. See Section IX for condition of approval.

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 restoration plan for 5,844 square feet of native planting has been included and meets the requirements of LUC 20.25H.210. The plan shall be submitted along with the required building permit. 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 dwelling, deck, lawn, and pool within the steep slope critical area 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	Savina Uzunow, 425-452-7860
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. Restoration and Enhancement 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 restoration plan in Attachment 4.

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

2. 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

3. 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 April 2017, Attachment 2. 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

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Year 2

- 80% survival rate of all trees (100% of all conifers) 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 and shrubs 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
- 70% cover of native trees and shrubs by year four
- 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 and shrubs
- Establish at least four native shrub species
- 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 Gallaugher Residence 16-144110-LO Page **10**

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

4. Geotechnical Recommendations: The project shall abide by all recommendations included in the Geotechnical Engineering Report submitted by PanGEO dated October 11, 2016, which include but are not limited to site drainage, temporary construction erosion and sediment control, and oversight of recommendations by an on-site geotechnical engineer.

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

5. 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

6. 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

7. 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

8. 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.

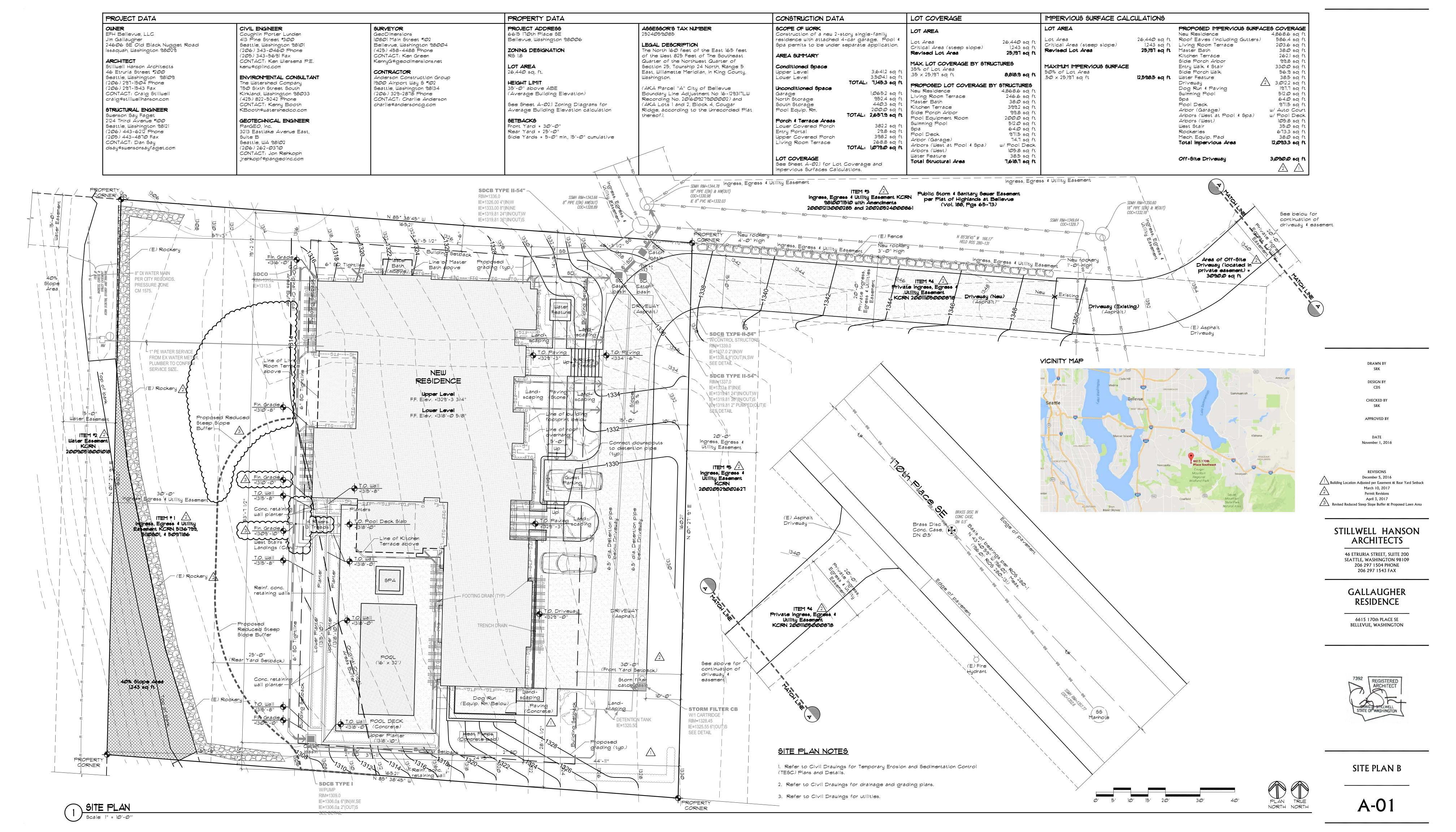
Gallaugher Residence 16-144110-LO Page **11**

Authority: Bellevue City Code 23.76.093.A

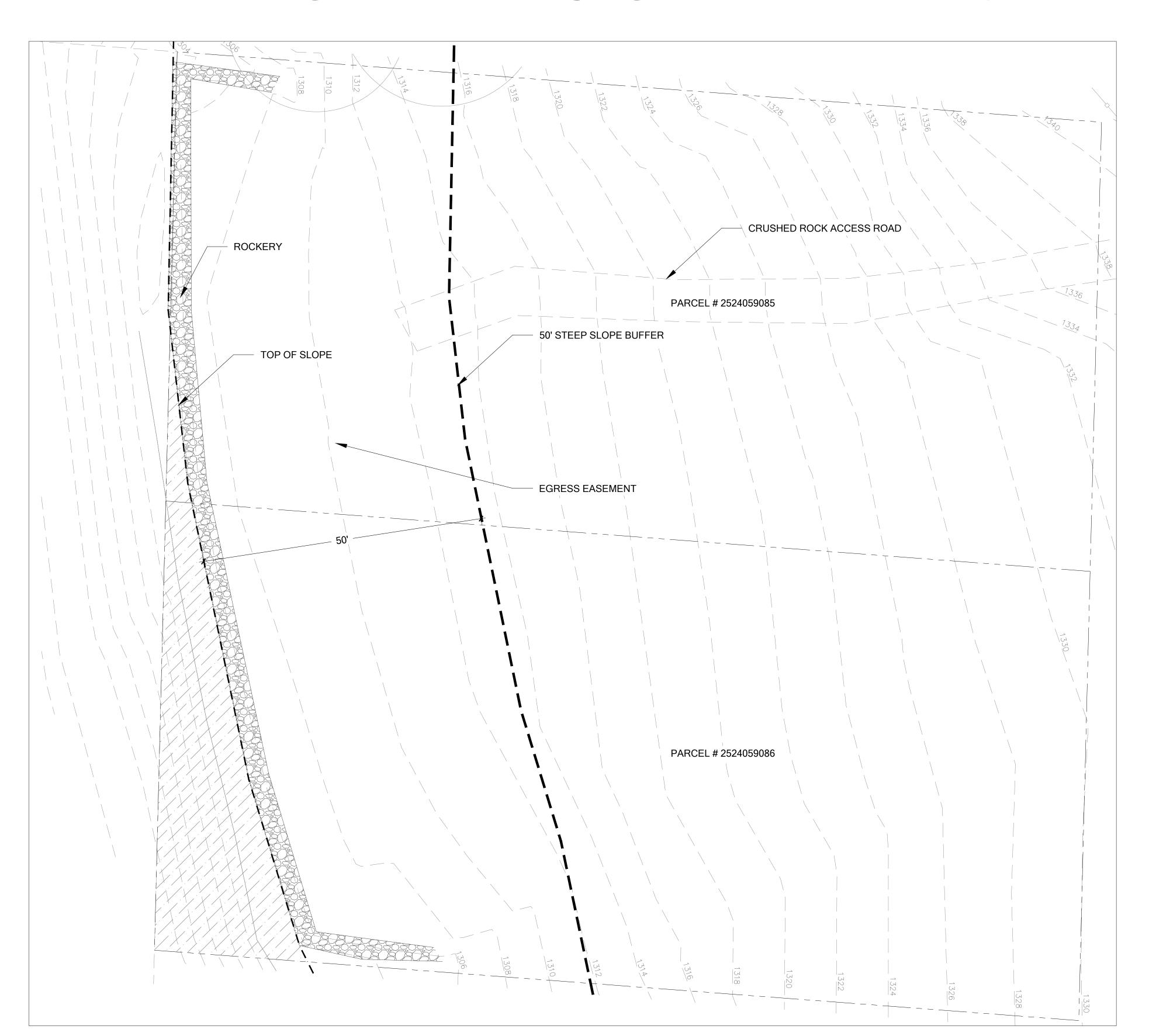
Reviewer: Tom McFarlane, Clearing and Grading

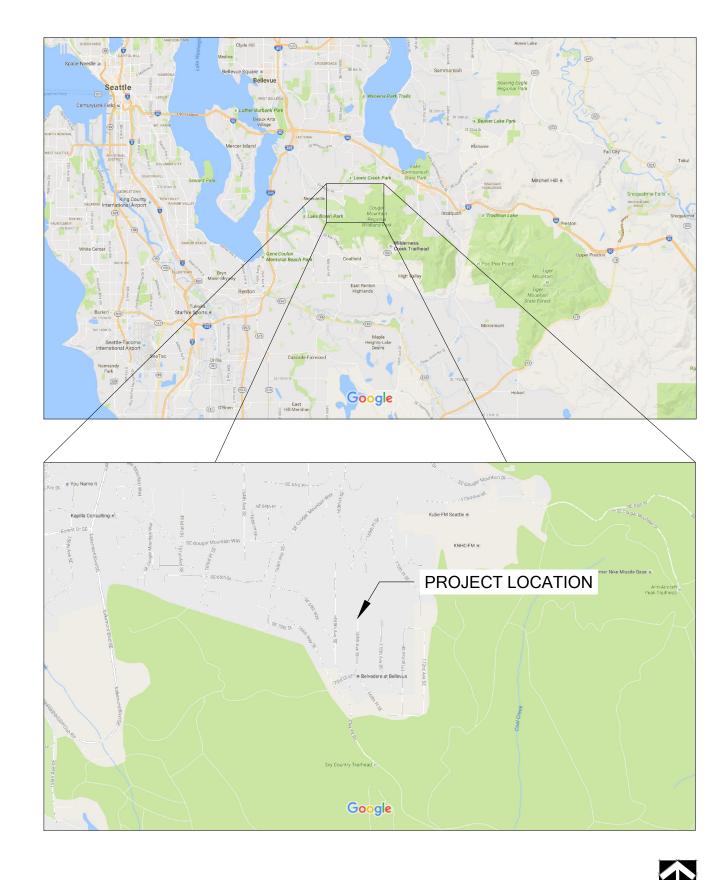
9. Noise Control: Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited 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



GALLAUGHER RESIDENCE





VICINITY MAPS



W1 EXISTING SITE CONDITIONS

W2 IMPACTS ASSESSMENT AND MITIGATION PLAN

SITE PREP PLAN

TESC PLAN

W5 PLANTING PLAN W6 PLANTING INSTALATION DETAILS AND NOTES

W7 MITIGATION PLAN NOTES

NOTES

SITE VISIT CONDUCTED BY THE WATERSHED COMPANY ON AUGUST 29TH, 2016.

2. SURVEY RECEIVED FROM GEODIMENSIONS, INC. 10801 MAIN STREET, SUITE 102, BELLEVUE, WASHINGTON 98004.

LEGEND

- - - TOP OF SLOPE

- STANDARD STEEP SLOPE BUFFER

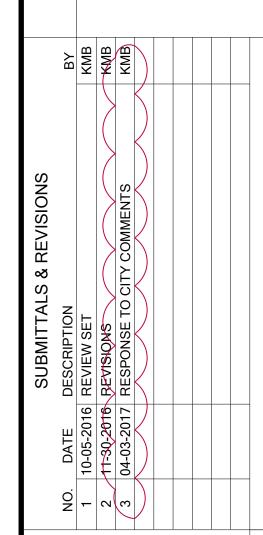
— – – — PROPERTY BOUNDARY

STEEP SLOPE AREA

NOT FOR CONTRACTOR BIDDING

JOB NUMBER:

750 Sixth Street South Kirkland WA 98033 p 425.822.5242 Science & Design



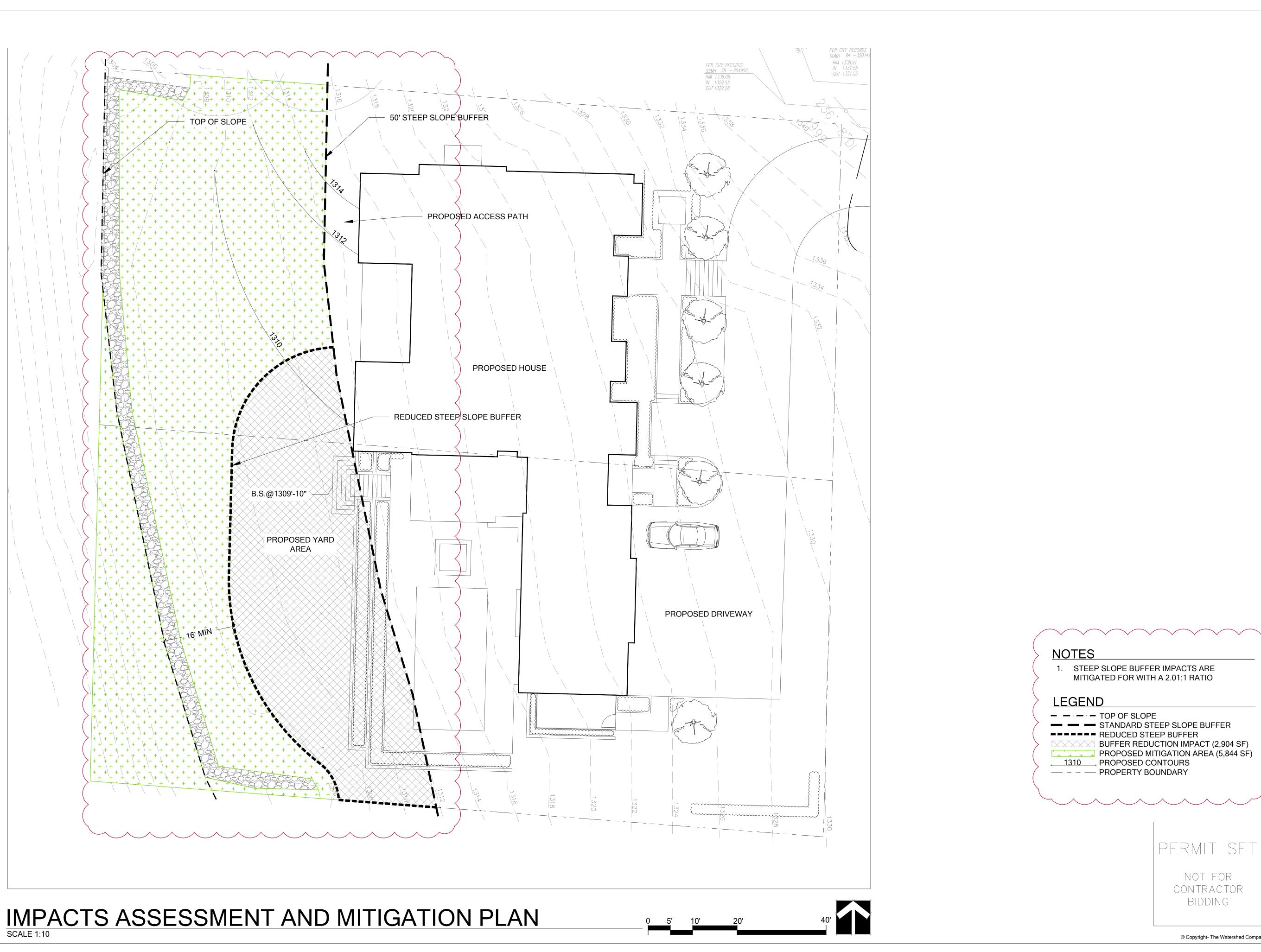
SHEET SIZE: ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY.

DESIGNED: DRAFTED: KMB CHECKED: KB/NL

SHEET NUMBER:

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EXISTING SITE CONDITIONS



750 Sixth Street South Kirkland WA 98033

> p 425.822.5242 www.watershedco.com

Science & Design

GALLAUGHER RESIDENCE

KMB KMB KMB KMB

— — STANDARD STEEP SLOPE BUFFER

BUFFER REDUCTION IMPACT (2,904 SF)

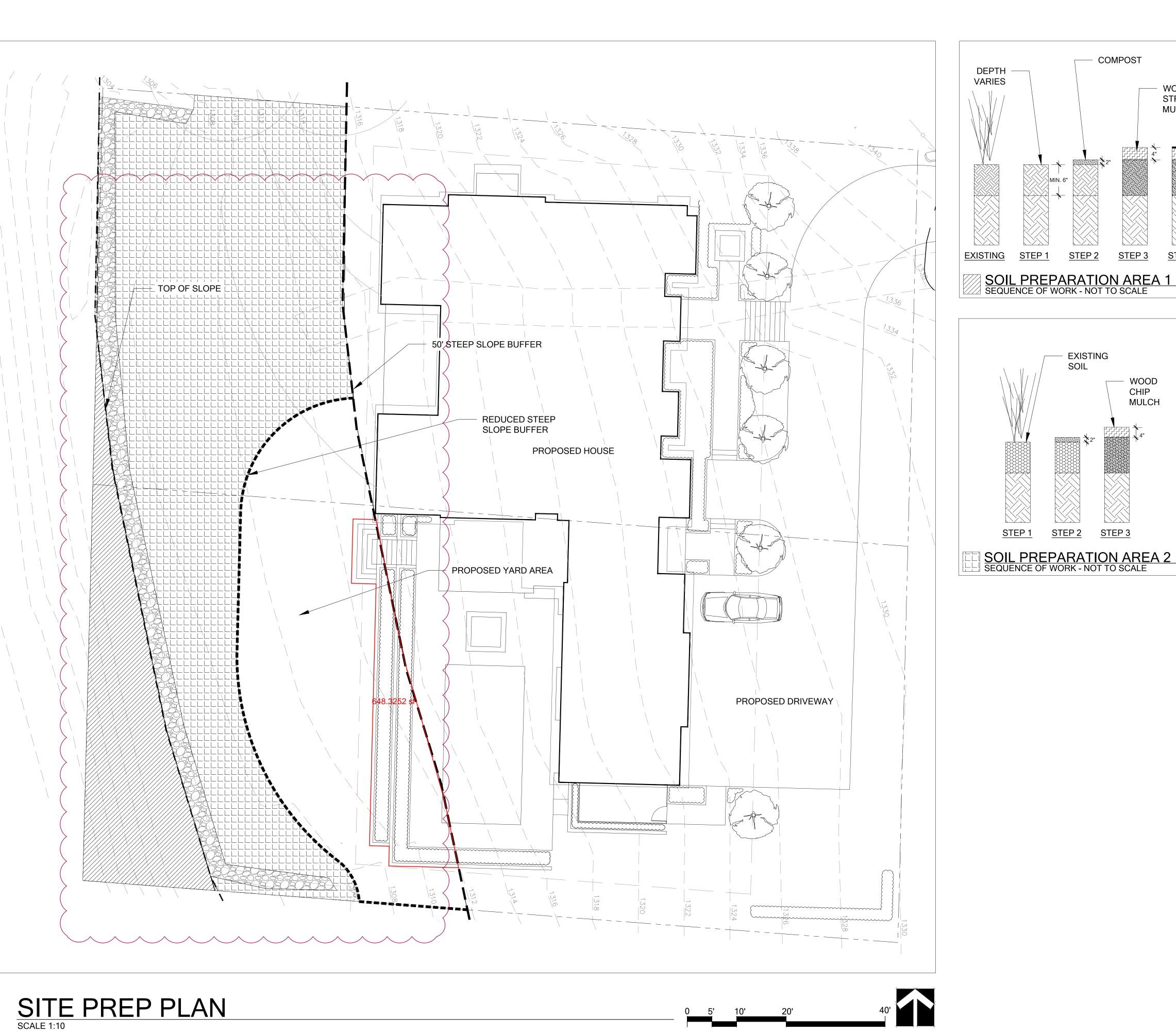
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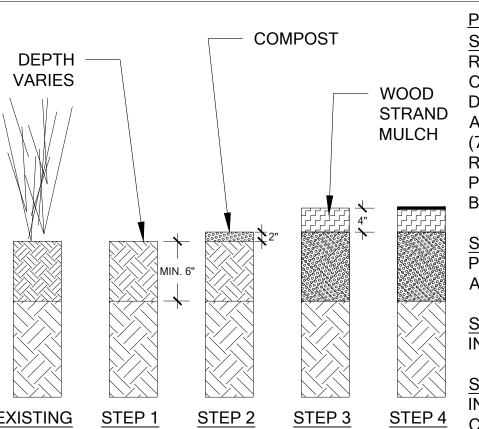
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ORIGINAL PLAN IS 22" x 34".

160832 SHEET NUMBER:

KMB





PLANTING AREA PREPARATION

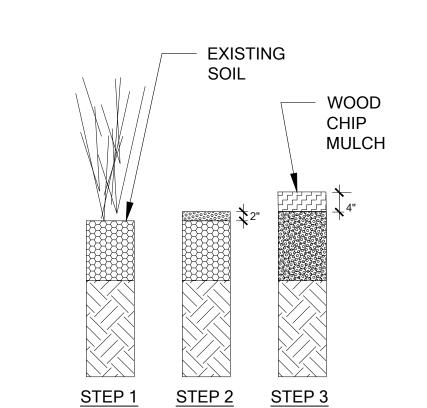
REMOVE INVASIVE SPECIES. ADDRESS COMPACTION TO A MINIMUM SIX (6) INCH DEPTH. COMPACTION LEVELS SHOULD BE APPROPRIATE FOR ROOT GROWTH (75-85% PROCTOR DENSITY). DRAINAGE RATE SHALL BE BETWEEN 1 - 5 INCHES PER HOUR OR AS OTHERWISE APPROVED BY THE RESTORATION SPECIALIST.

PLACE TWO (2) INCHES COMPOST AND AMEND WITH DE-COMPACTED TOPSOIL

INSTALL WOOD STRAND MULCH 4" DEEP.

INSTALL BIODEGRADABLE EROSION CONTROL FABRIC. SEE SHEET W-4

SOIL PREPARATION AREA 1
SEQUENCE OF WORK - NOT TO SCALE



PLANTING AREA PREPARATION

REMOVE INVASIVE SPECIES. VERIFY EXISTING SOIL COMPACTION LEVELS ARE APPROPRIATE FOR ROOT GROWTH (75-85% PROCTOR DENSITY) OR AS OTHERWISE APPROVED BY THE RESTORATION SPECIALIST. IF THEY ARE COMPACTED, FOLLOW STEPS FOR PLANTING AREA 1.

PLACE TWO (2) INCHES COMPOST AND THEN AMEND WITH DE-COMPACTED TOPSOIL.

STEP 3
PLACE FOUR INCHES (4) OF WOOD CHIP MULCH.

LEGEND

- - - TOP OF SLOPE STANDARD STEEP SLOPE BUFFER **=====** REDUCED STEEP BUFFER SOIL PREP AREA 2

> NOT FOR CONTRACTOR BIDDING

160832 SHEET NUMBER:

750 Sixth Street South Kirkland WA 98033

p 425.822.5242

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Science & Design

KMB KMB

GALLAUGHER RESIDENCE

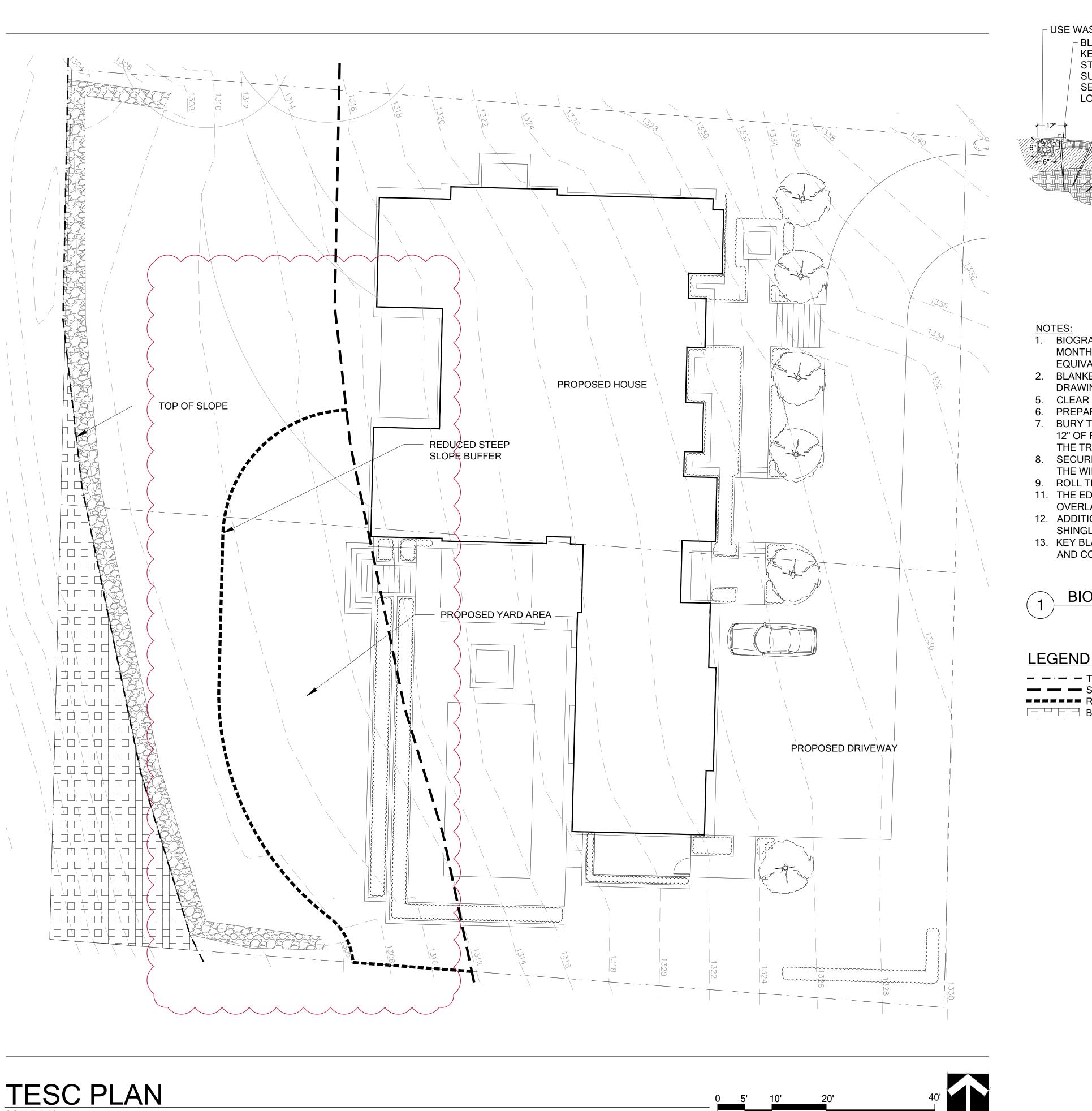
MITIGATED FOR PCL# 29

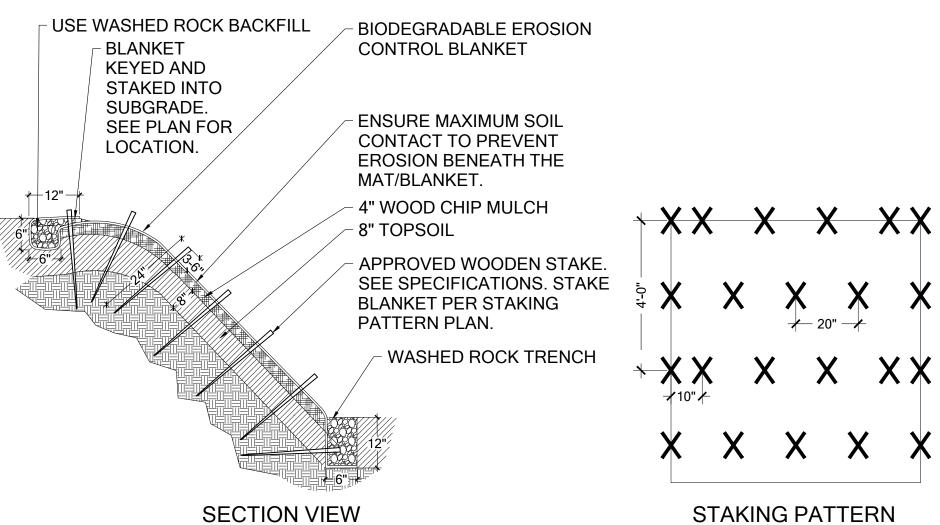
PREP/

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

DESIGNED: DRAFTED: KMB CHECKED: KB/NL JOB NUMBER:

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- 1. BIOGRADABLE EROSION CONTROL BLANKET SHALL PROVIDE EROSION PROTECTION FOR 24-36 MONTHS, AND SHALL BE 100% COIR MATTING, 900 GRAMS, BY BROTHERS COIR MILLS PVT. LTD. OR EQUIVALENT AS APPROVED BY THE OWNER'S REPRESENTATIVE.
- 2. BLANKET SHALL BE CUT LARGER THAN THE INSTALLATION AREA SHOWN ON THE CONTRACT DRAWINGS IN ORDER TO EXTEND BEYOND THE EDGES AND KEY INTO THE SUBGRADE AS SHOWN.
- 5. CLEAR ANY WEEDS OR DEBRIS FROM THE INSTALLATION AREA BEFORE INSTALLING THE BLANKET 6. PREPARE SLOPE SOIL SURFACE PER PLAN.
- 7. BURY THE TOP END OF THE BLANKET IN A TRENCH 6 INCHES DEEP AND 6 INCHES WIDE WITH A MIN. 12" OF FABRIC EXTENDING BEYOND UPSLOPE PORTION OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER SECURING.
- 8. SECURE THE BLANKET AT THE TOP TRENCH WITH A ROW OF STAKES PLACED 12" APART ACROSS THE WIDTH OF THE BLANKET.
- 9. ROLL THE BLANKET ACROSS SLOPE AS DIRECTED BY OWNER'S REPRESENTATIVE.
- 11. THE EDGES OF ALL HORIZONTAL AND VERTICAL SEAMS MUST BE SECURED WITH A MIN. 12" OF OVERLAP.
- 12. ADDITIONAL HORIZONTAL BLANKETS SHALL BE JOINED USING A MINIMUM 12" OVERLAPPING OR SHINGLE STYLE. PLACE STAKES MIN. 6" APART ALONG THE OVERLAPPING SEAMS.
- 13. KEY BLANKET INTO SUBGRADE AT BOTTOM OF SLOPE IN A 12" X 6" ANCHOR TRENCH. BACKFILL AND COMPACT TRENCH AFTER SECURING WITH STAKES EVERY 12".

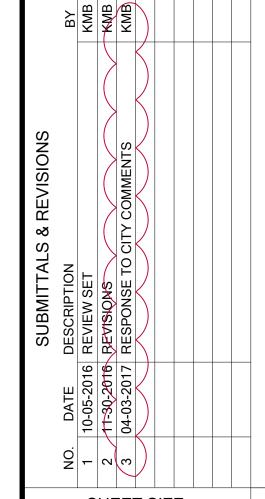
BIODEGRADABLE EROSION CONTROL BLANKET

Scale: NTS

- - - - - TOP OF SLOPE

STANDARD STEEP SLOPE BUFFER

===== REDUCED STEEP SLOPE BUFFER BIODEGRADABLE EROSION CONTROL BLANKET



NOT FOR CONTRACTOR BIDDING

DRAFTED: KMB CHECKED: KB/NL JOB NUMBER: 160832

SHEET NUMBER:

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MITIGA ED FOF PCL#

RESIDENCE

GALLAUGHER

WATERSHED

750 Sixth Street South

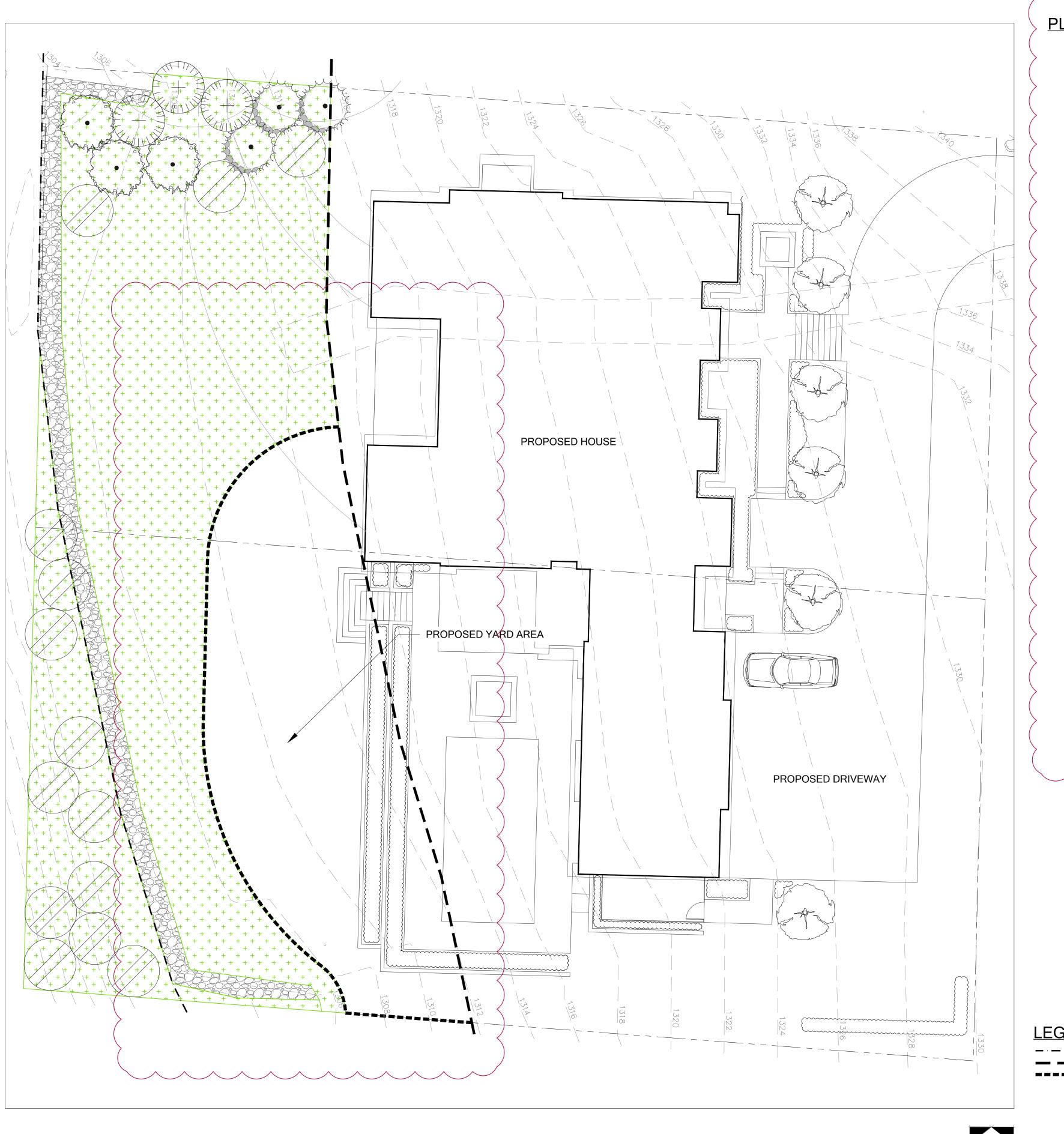
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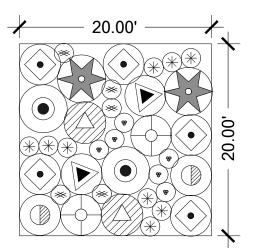
Science & Design

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



PLANTING SCHEDULE AND TYPICAL

PLANTING TYPICAL



PLANT GROUND COVER AND SHRUBS IN THE UNDERSTORY AND AROUND PROPOSED TREE PLANTINGS.

MITIGATION <u>PLANTING</u>

TREES / SPACING @ 9'-0" O.C. (AS SHOWN ON PLAN) THUJA PLICATA / WESTERN RED CEDAR PHAMNUS PURSHIANA / CASCARA TSUGA MERTENSIANA / MOUNTAIN HEMLOCK ACER CIRCINATUM / VINE MAPLE SHRUBS / SPACING @ 5'-0" O.C. CORYLUS CORNUTA / BEAKED HAZELNUT

2 GAL. 2 GAL. AMELANCHIER ALNIFOLIA / SERVICEBERRY SHRUBS / SPACING @ 42" O.C. 2 GAL.

(•) RIBES SANGUINEUM / RED-FLOWERING CURRANT 2 GAL. ROSA GYMNOCARPA / BALDHIP ROSE 2 GAL. RHODODENDRON MACROPHYLLUM / PACIFIC RHODODENDRON 2 GAL. SYMPHORICARPOS ALBUS / SNOWBERRY VACCINIUM OVATUM / EVERGREEN HUCKLEBERRY 2 GAL.

GROUNDCOVERS / SPACING @ 24" O.C. (*) POLYSTICHUM MUNITUM / SWORD FERN 1 GAL. ARCTOSTAPHYLOS UVA-URSI / KINNIKINNICK 1 GAL.

■ FRAGARIA CHILOENSIS / COASTAL STRAWBERRY

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2 GAL.

2 GAL.

2 GAL.

2 GAL.

1 GAL.

100

KMB KMB KMB KMB

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

DESIGNED: DRAFTED: CHECKED: JOB NUMBER:

160832 SHEET NUMBER:

KMB

KB/NL

LEGEND

- - - TOP OF SLOPE — — STANDARD STEEP SLOPE BUFFER

===== REDUCED STEEP BUFFER

NOT FOR

CONTRACTOR

BIDDING

PLANT INSTALLATION SPECIFICATIONS

GENERAL NOTES

QUALITY ASSURANCE

- 1. PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL
- 2. PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF).
- 3. TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUN SCALD WILL BE REJECTED.
- 4. NOMENCLATURE: PLANT NAMES SHALL CONFORM TO FLORA OF THE PACIFIC NORTHWEST BY HITCHCOCK AND CRONQUIST, UNIVERSITY OF WASHINGTON PRESS, 1973 AND/OR TO A FIELD GUIDE TO THE COMMON WETLAND PLANTS OF WESTERN WASHINGTON & NORTHWESTERN OREGON, ED. SARAH SPEAR COOKE, SEATTLE AUDUBON SOCIETY, 1997

DEFINITIONS

- 1. PLANTS/PLANT MATERIALS. PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS: LIVE STAKES AND FASCINES (WATTLES): TUBERS, CORMS, BULBS, ETC ...: SPRIGS, PLUGS, AND LINERS.
- 2. CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS

- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
- 2. SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE RESTORATION CONSULTANT.
- 3. IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
- 4. SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION

1. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE RESTORATION CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE

SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK. PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE

REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE. 3. THE RESTORATION CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE RESTORATION CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENT OF PLANTS

- 1. PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
- 2. HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
- 3. WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.).

SUBMITTALS

PROPOSED PLANT SOURCES

1. WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES

- 1. PLANT MATERIALS LIST SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION.
- 2. HAVE COPIES OF VENDOR'S OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SCIENTIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED).

DELIVERY, HANDLING, & STORAGE

NOTIFICATION

CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS

- 1. TRANSPORTATION DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
- SCHEDULING AND STORAGE PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR.
- 3. HANDLING PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL, BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
- 4. LABELS PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY

PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

REPLACEMENT

- 1. PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS AT THE CONSULTANT'S DISCRETION MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONTRACTOR'S
- PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

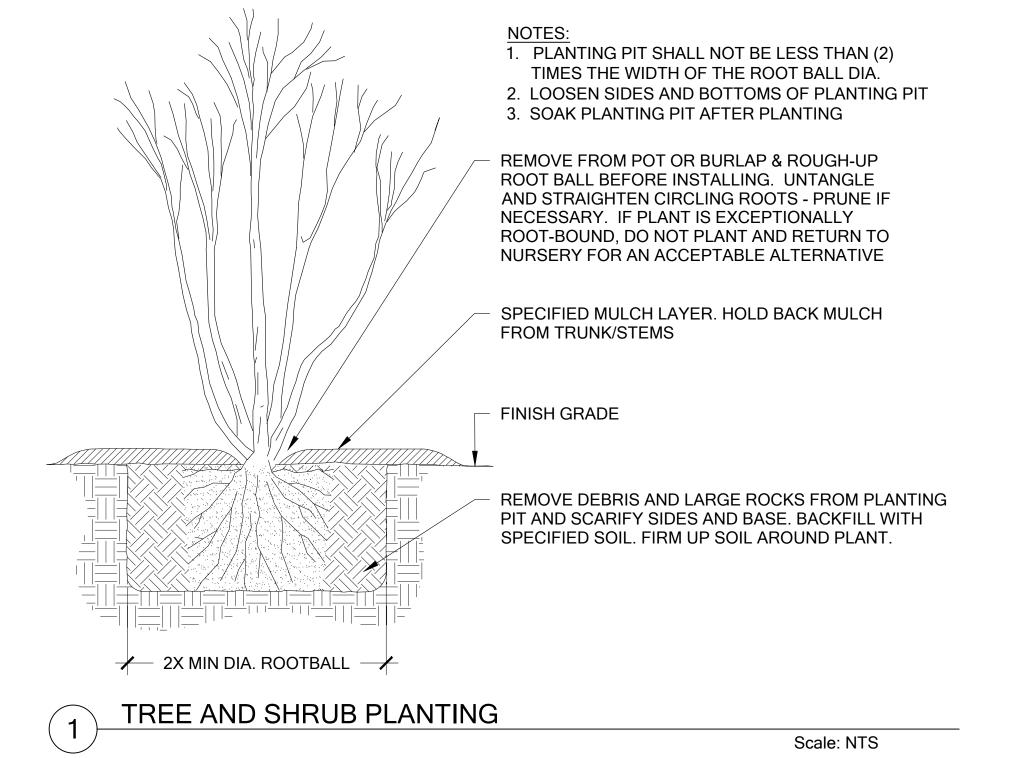
PLANT MATERIAL

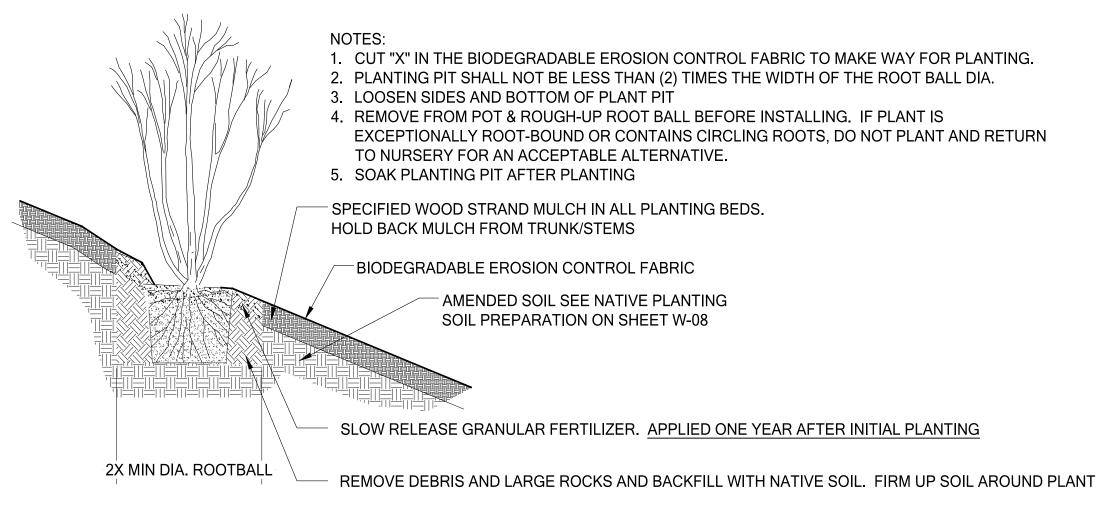
- 1. PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES
- UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE 2. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH

SEE PLANT LIST ON ACCOMPANYING PLANS AND PLANT SCHEDULES.

ROOT TREATMENT

- 1. CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
- PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
- ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.





TREE AND SHRUB PLANTING ON A SLOPE Scale: NTS

NOT FOR CONTRACTOR BIDDING

KMB JOB NUMBER: SHEET NUMBER:

PLANT INSTALLATION DETAILS AND NOTES

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RE

ALL

BY KMB KMB KMB

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

DESIGNED: DRAFTED: CHECKED:

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MITIGATION PLAN NOTES

THIS PLAN HAS BEEN PREPARED AS MITIGATION FOR THE REDUCTION OF THE STEEP SLOPE BUFFER ON A RESIDENTIAL PROPERTY IN BELLEVUE (PARCEL NUMBER 2524059085). THE BUFFER REDUCTION IS NECESSARY TO ACCOMMODATE A SINGLE-FAMILY RESIDENCE AND ASSOCIATED DEVELOPMENT. THE PROPOSED NEW STRUCTURE WAS DESIGNED TO TAKE ADVANTAGE OF TERRITORIAL VIEWS AND ACCOMMODATE ACCESS CONSTRAINTS AND TOPOGRAPHY. IMPACTS TO THE STANDARD BUFFER WILL OCCUR OVER DEGRADED AREAS OF MEADOW GRASSES AND INVASIVE WEEDS. THE STEEP SLOPE AREA IS ALSO DEGRADED AND

THIS PROPOSAL WILL REDUCE THE TOTAL ON-SITE BUFFER AREA FROM 9,461 SQUARE FEET TO 6,557 SQUARE FEET, FOR A NET REDUCTION OF 2,904 SQUARE FEET OF BUFFER AREA. TO OFFSET THE REDUCTION IN THE STANDARD BUFFER, 5,844 SQUARE FEET OF DEGRADED STEEP SLOPE AND STEEP SLOPE BUFFER WILL BE ENHANCED, PROVIDING AN ENHANCEMENT TO IMPACT RATIO OF 2.01:1.

ENHANCEMENT OF THE REDUCED BUFFER WILL INCLUDE REMOVAL OF INVASIVE SPECIES (SPECIFICALLY SCOTCH BROOM, BULL THISTLE, AND HIMALAYAN BLACKBERRY) AND THE INSTALLATION OF A NATIVE TREE AND SHRUB COMMUNITY.

MITIGATION AREA WORK SEQUENCE (SEE MATERIALS FOR ITEMS IN BOLD)

A RESTORATION SPECIALIST SHALL MAKE SITE VISITS TO VERIFY THE FOLLOWING PROJECT MILESTONES:

- 1. MARK THE CLEARING LIMITS WITH HIGH VISIBILITY FENCING OR SIMILAR MEANS.
- 2. INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE TESC PLAN (SHEET W4).
- 3. PREPARE SITE SOILS PER THE SITE PREP PLANS AND DETAILS ON SHEET W3.
- 4. INSTALL BIODEGRADABLE EROSION CONTROL BLANKET ON THE STEEP SLOPE PLANTING AREA (SEE SHEET W3, SOIL PREPARATION AREA 1).
- 5. INSTALL NATIVE PLANTS PER PLANTING DETAILS ON SHEET W5 AND W6.
 - a. NATIVE PLANT INSTALLATION SHALL OCCUR DURING THE DORMANT SEASON (OCTOBER 15TH THROUGH MARCH 1ST) IN FROST-FREE PERIODS ONLY.
 - b. LAYOUT PLANT MATERIAL PER PLAN FOR INSPECTION BY THE RESTORATION SPECIALIST. PLANT SUBSTITUTIONS WILL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE RESTORATION SPECIALIST.

c. INSTALL PLANTS PER PLANTING DETAILS

- 6. WATER EACH PLANT THOROUGHLY TO REMOVE AIR POCKETS.
- 7. INSTALL A TEMPORARY IRRIGATION SYSTEM CAPABLE OF SUPPLYING AT LEAST 1-INCH OF WATER PER WEEK TO THE ENTIRE PLANTED AREA DURING THE DRY SEASON (JUNE 1ST THROUGH SEPTEMBER 30TH).
- 8. ONE YEAR AFTER INITIAL PLANTING, APPLY A SLOW-RELEASE, PHOSPHOROUS-FREE, GRANULAR FERTILIZER TO EACH INSTALLED PLANT.

MAINTENANCE

THE SITE SHALL BE MAINTAINED FOR FIVE YEARS FOLLOWING SUCCESSFUL INSTALLATION.

- 1. REPLACE EACH PLANT FOUND DEAD IN THE SUMMER MONITORING VISITS IN THE FOLLOWING DORMANT SEASON (OCTOBER 15 MARCH 1). REPLACEMENT SHALL BE OF THE SAME SPECIES AND SIZE PER PLAN UNLESS OTHERWISE APPROVED BY THE RESTORATION SPECIALIST.
- 2. GENERAL WEEDING FOR ALL PLANTED AREAS
 - a. AT LEAST TWICE ANNUALLY, REMOVE COMPETING GRASSES AND WEEDS FROM AROUND THE BASE OF EACH INSTALLED PLANT TO A RADIUS OF 12 INCHES. WEEDING SHOULD OCCUR AT LEAST ONCE IN THE SPRING AND ONCE IN THE SUMMER. THOROUGH WEEDING WILL RESULT IN LOWER PLANT MORTALITY AND ASSOCIATED PLANT REPLACEMENT COSTS.
 - b. MORE FREQUENT WEEDING MAY BE NECESSARY DEPENDING ON WEED CONDITIONS THAT DEVELOP AFTER PLANT INSTALLATION.
 - c. NOXIOUS WEEDS MUST BE REMOVED FROM THE ENTIRE MITIGATION AREA, AT LEAST TWICE ANNUALLY
 - d. DO NOT USE STRING TRIMMERS IN THE VICINITY OF INSTALLED PLANTS, AS THEY MAY DAMAGE OR KILL THE PLANTS.
- 3. MAINTAIN A FOUR-INCH-THICK LAYER OF WOODCHIP MULCH ACROSS THE ENTIRE PLANTING AREA. MULCH SHOULD BE PULLED BACK TWO INCHES FROM THE PLANT STEMS.
- 4. INSPECT AND REPAIR THE IRRIGATION SYSTEM AS NECESSARY EACH SPRING. DURING AT LEAST THE FIRST TWO GROWING SEASONS, MAKE SURE THAT THE ENTIRE PLANTING AREA RECEIVES A MINIMUM OF ONE INCH OF WATER PER WEEK FROM JUNE 1ST THROUGH SEPTEMBER 30TH.

GOALS

- MAINTAIN SLOPE STABILITY BY ESTABLISHING TREES IN THE STEEP SLOPE AND STEEP SLOPE BUFFER AREAS (AREAS CURRENTLY DOMINATED BY SHALLOW-ROOTING INVASIVE SPECIES).
- 2. ENHANCE 5,844 SQUARE FEET OF DEGRADED STEEP SLOPE AND STEEP SLOPE BUFFER.
 - a. CREATE A DENSE, NATIVE, TREE AND SHRUB COMMUNITY.
 - b. REMOVE NON-NATIVE AND INVASIVE PLANT SPECIES FROM THE ENHANCEMENT AREA.

PERFORMANCE STANDARDS

THE FOLLOWING PERFORMANCE STANDARDS WILL BE USED TO GAUGE THE SUCCESS OF THE PROJECT OVER TIME. IF ALL PERFORMANCE STANDARDS HAVE BEEN SATISFIED BY THE END OF YEAR FIVE, THE PROJECT SHALL BE CONSIDERED COMPLETE AND THE CITY OF BELLEVUE SHALL RELEASE THE PERFORMANCE BOND.

SURVIVAL

- a. ACHIEVE 100% SURVIVAL OF ALL INSTALLED TREES AND SHRUBS BY THE END OF YEAR ONE.
- b. ACHIEVE 80% SURVIVAL OF ALL INSTALLED TREES AND SHRUBS AND 100% SURVIVAL OF ALL INSTALLED CONIFERS BY THE END OF YEAR TWO.
- c. ACHIEVE 80% SURVIVAL OF ALL INSTALLED TREES AND SHRUBS BY THE END OF YEAR FIVE. SURVIVAL STANDARDS MAY BE ACHIEVED THROUGH ESTABLISHMENT OF PLANTED MATERIAL, RECRUITMENT OF NATIVE VOLUNTEERS, OR REPLACEMENT PLANTS AS NECESSARY.

2. DIVERSITY

a. ESTABLISH AT LEAST FOUR NATIVE SHRUB SPECIES IN THE ENHANCEMENT AREA BY THE END OF YEAR FIVE. ESTABLISHMENT IS DEFINED AS FIVE OR MORE INDIVIDUAL PLANTS OF THE SAME SPECIES ALIVE AND HEALTHY.

- a. ACHIEVE 40% COVER OF NATIVE TREES AND SHRUBS BY THE END OF YEAR THREE.
- b. ACHIEVE 60% COVER OF NATIVE TREES AND SHRUBS BY THE END OF YEAR FIVE.
- c. NO MORE THAN 10% COVER BY INVASIVE SPECIES LISTED AS CLASS A, B, OR C BY THE KING COUNTY NOXIOUS WEED CONTROL BOARD IN ANY MONITORING YEAR.

MONITORING

PRIOR TO THE COMMENCEMENT OF THE MONITORING PHASE, AN AS-BUILT PLAN DOCUMENTING THE SUCCESSFUL INSTALLATION OF THE PROJECT WILL BE SUBMITTED TO THE CITY OF BELLEVUE. IF NECESSARY, THE AS-BUILT REPORT MAY INCLUDE A MARK-UP OF THE ORIGINAL PLAN THAT NOTES ANY SIGNIFICANT CHANGES OR SUBSTITUTIONS THAT OCCURRED. DURING THE AS-BUILT INSPECTION, THE RESTORATION SPECIALIST WILL ESTABLISH AT LEAST FOUR PERMANENT PHOTO-POINTS.

THE SITE WILL BE MONITORED TWICE ANNUALLY FOR FIVE YEARS BEGINNING WITH APPROVAL OF THE AS-BUILT REPORT. EACH SPRING THE RESTORATION SPECIALIST WILL CONDUCT A BRIEF MAINTENANCE INSPECTION FOLLOWED BY A MEMO SUMMARIZING MAINTENANCE ITEMS NECESSARY FOR THE UPCOMING GROWING SEASON. THE FORMAL LATE-SEASON MONITORING INSPECTION WILL TAKE PLACE ONCE ANNUALLY DURING LATE SUMMER OR EARLY FALL. DURING EACH LATE-SEASON MONITORING INSPECTION, THE FOLLOWING DATA WILL BE COLLECTED:

- PERCENT SURVIVAL OF ALL INSTALLED PLANTINGS, INCLUDING SPECIES SPECIFIC COUNTS OF INSTALLED TREE AND SHRUB PLANTINGS (NOTE: GROUNDCOVER PLANTS COUNTED IN YEAR-1 ONLY, FOR WARRANTY PURPOSES).
- 2. NATIVE WOODY COVER AS DETERMINED USING VISUAL COVER CLASS ESTIMATES.
- 3. ESTIMATES OF INVASIVE HERBACEOUS PLANTS OR GROUNDCOVER USING VISUAL COVER ESTIMATES.
- 4. THE SPECIES COMPOSITION, NOTING WHETHER A SPECIES IS NATIVE OR EXOTIC AND WHETHER PLANTS WERE INSTALLED OR ARE VOLUNTEERS.
- 5. THE GENERAL HEALTH AND VIGOR OF THE INSTALLED VEGETATION.
- 6. PHOTOGRAPHS FROM FIXED PHOTO-POINTS ESTABLISHED DURING THE AS-BUILT INSPECTION.
- 7. ANY EVIDENCE OF WILDLIFE USAGE IN THE MITIGATION AREA.

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY TO THE CITY. REPORTS SHALL DOCUMENT THE CONDITIONS OF THE SITE, INCLUDING QUANTITATIVE DATA COLLECTED DURING THE MONITORING INSPECTION, AND SHALL PROVIDE MAINTENANCE RECOMMENDATIONS THAT MAY BE NECESSARY TO HELP THE SITE ACHIEVE THE STATED PERFORMANCE STANDARDS.

CONTINGENCY PLAN

IF ANY MONITORING REPORT REVEALS THAT THE RESTORATION PLAN HAS FAILED IN WHOLE OR IN PART, AND SHOULD THAT FAILURE BE BEYOND THE SCOPE OF ROUTINE MAINTENANCE, THE APPLICANT WILL SUBMIT A CONTINGENCY PLAN TO THE CITY OF BELLEVUE FOR APPROVAL. THIS PLAN MAY INCLUDE REPLANTING, SOIL AMENDMENTS OR TOPDRESSING, SUBSTITUTIONS FOR SPECIES SELECTED IN THE ORIGINAL PLAN, AND ADAPTIVE WEED CONTROL METHODS.

<u>ATERIALS</u>

- 1. WOODCHIP MULCH: "ARBORIST CHIPS" (CHIPPED WOODY MATERIAL) APPROXIMATELY ONE TO THREE INCHES IN MAXIMUM DIMENSION (NOT SAWDUST). THIS MATERIAL IS COMMONLY AVAILABLE IN LARGE QUANTITIES FROM ARBORISTS OR TREE-PRUNING COMPANIES. THIS MATERIAL IS SOLD AS "ANIMAL FRIENDLY HOG FUEL" AT PACIFIC TOPSOILS [(800) 884-7645]. MULCH SHALL NOT CONTAIN APPRECIABLE QUANTITIES OF GARBAGE, PLASTIC, METAL, SOIL, AND DIMENSIONAL LUMBER OR CONSTRUCTION/DEMOLITION DEBRIS. APPROX. QUANTITY REQUIRED: 63 CUBIC YARDS.
- 2. COMPOST: CEDAR GROVE COMPOST OR EQUIVALENT "COMPOSTED MATERIAL" PER WASHINGTON ADMIN. CODE 173-350-220. QUANTITY REQUIRED: 31 CUBIC YARDS
- 3. BIODEGRADABLE EROSION CONTROL BLANKET: MATERIAL SHALL BE COIR MATTING 900 BY BROTHERS COIR MILLS PVT. LTD. OR EQUIVALENT AS APPROVED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROCURE SUFFICIENT QUANTITY TO ACCOUNT FOR OVERLAP AND KEYING INTO SLOPE.
- **4.** APPROVED TOPSOIL: ON-SITE SOIL STRIPPINGS MAY BE USED AS APPROVED TOPSOIL UNDER THE FOLLOWING CONDITIONS: SOIL SHALL BE SCREENED TO ½"AND FREE OF WEEDS, STICKS, SEEDS, CLAY LUMPS OR ANY NON-ORGANIC MATERIAL. SOIL MUST MEET THE FOLLOWING CHARACTERISTICS:
- a) COMPACTION LEVELS APPROPRIATE FOR ROOT GROWTH (75-85% PROCTOR DENSITY)
- b) ADEQUATE AMOUNT OF ORGANIC MATTER (2% TO 5% ORGANIC CONTENT BY OVEN DRIED WEIGHT.)
- c) PLANT-APPROPRIATE SOIL NUTRIENT LEVELS AND PHd) ADEQUATE DRAINAGE: DRAINAGE RATE BETWEEN 1 5 INCHES PER HOUR.
- IF THESE CHARACTERISTICS ARE NOT MET, DECOMPACT AND AMEND WITH COMPOST PER THE RESTORATION SPECIALIST'S RECOMMENDATION.
- **5.** FERTILIZER: SLOW-RELEASE, PHOSPHOROUS-FREE GRANULAR FERTILIZER. MOST COMMERCIAL NURSERIES CARRY THIS PRODUCT. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR USE. KEEP FERTILIZER IN WEATHER-TIGHT CONTAINER WHILE ON-SITE. FERTILIZER IS ONLY TO BE APPLIED IN YEARS TWO AND THREE, NOT IN YEAR ONE.
- **6.** RESTORATION SPECIALIST: QUALIFIED PROFESSIONAL ABLE TO EVALUATE AND MONITOR THE CONSTRUCTION OF ENVIRONMENTAL RESTORATION PROJECTS.



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Science & Design

GALLAUGHER RESIDENCE
MITIGATION PLAN
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SUBMITTALS & REVISIONS

NO. DATE DESCRIPTION

1 10-05-2016 REVIEW SET

2 11-30-2016 REVISIONS

3 04-03-2017 RESPONSE TO CITY COMMENTS

KMB

SINCE

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ORIGINAL PLAN IS 22" x 34"
SCALE ACCORDINGLY.

PROJECT MANAGER:
DESIGNED: KMB/
DRAFTED: KM
CHECKED: KB/

CHECKED: KB/NL JOB NUMBER: 160832

160832 SHEET NUMBER:

KMB

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MITIGATION PLAN NOTES