



CITY OF KIRKLAND  
Planning and Building Department  
123 5th Avenue, Kirkland, WA 98033  
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ADVISORY REPORT  
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

To: City of Kirkland Hearing Examiner

From: Sean LeRoy Sean LeRoy, Project Planner

 Eric R. Shields, AICP, Planning Director

Date: January 25, 2017

File: SAR16-01958; MEDICI-GRANGER WETLAND BUFFER MODIFICATION PERMIT

Hearing Date and Place: February 2, 2017 9:00am  
City Hall Council Chamber  
123 Fifth Avenue, Kirkland

I. INTRODUCTION

A. APPLICATION

1. Applicant: Schuyler Tutt, Medici Architects
2. Site Location: 130 18<sup>th</sup> Ave (see Attachment 1)
3. Request: Proposed buffer reduction, through enhancement, of a Type 2 wetland located in a primary basin, for the construction of a new single-family residence (see Attachment 2).
4. Review Process: Process IIA, Hearing Examiner Decision
5. Summary of Key Issues and Conclusions:
  - a. Compliance with Kirkland Zoning Code 90.60 (see Section II.C).
  - b. Compliance with the Process IIA Decisional Criteria (see Section II.D).

B. RECOMMENDATIONS

Based on Statements of Fact and Conclusions (Section II), and Attachments in this report, I recommend approval of this application subject to the following conditions:

1. This application is subject to the applicable requirements contained in the Kirkland Municipal Code, Zoning Code, and Building and Fire Code. It is the responsibility of the applicant to ensure compliance with the various provisions contained in these ordinances. Attachment 3, Development Standards, is provided in this report to familiarize the applicant with some of the additional

development regulations. This attachment does not include all of the additional regulations. When a condition of approval conflicts with a development regulation in Attachment 3, the condition of approval shall be followed.

2. Prior to the issuance of a building permit the applicant shall:
  - a. Include in the plan set the approved sensitive area buffer enhancement, monitoring, and maintenance plans. Additionally the conditions outlined **in The Watershed Company's review letter dated** November 22, 2016 shall be incorporated into the plans (See Conclusion II.C.11.b.(1).(a)).
  - b. Submit full erosion control plans, which shall depict the location of a six-foot high construction phase fence along the boundary of the entire modified sensitive area buffer with silt screen fabric installed per City standard. The fencing shall be installed prior to issuance of any permits. The fence shall remain upright in the approved location for the duration of the development activities (See Conclusion II.C.11.b.(1).(b)).
  - c. Revise the plans to include construction details for permeable driveway and sidewalks in accordance to the City of Kirkland Public Works Department Standard Plans. (See Conclusion II.C.5.b).
  - d. Submit a financial security device to cover the cost of completing the buffer enhancement improvements. The security shall be consistent with the standards outlined in Zoning Code section 90.145 (See Conclusion II.C.11.b.(1).(c)).
  - e. Submit a signed and notarized covenant that holds the City harmless against any future claims that may arise as a result of the development of the property (See Conclusion II.C.11.b.(1).(d)).
  - f. Dedicate a Natural Greenbelt Protective Easement (NGPE) over all sensitive areas and buffer areas on the subject property not impacted by the proposed development (See Conclusion II.C.11.b.(1).(e)).
3. Prior to final inspection of the building permit, the applicant shall:
  - a. Complete installation of the buffer enhancement plan, subject to **inspection by the City's wetland** consultant at the applicant's expense (See Conclusion II.C.11.b.(2).(a)).
  - b. Provide proof of a written contract with a qualified professional who will perform the monitoring program, together with a completed contract and fees to fund peer review of the monitoring and maintenance activities, (i.e. inspection of plant materials, annual monitoring reports or re-vegetation activities) **by the City's wetland consultant. Alternatively, the applicant shall provide a copy of a completed contract and fees to fund completion of the monitoring program by the City's wetland** consultant (See Conclusion II.C.11.b.(2).(b)).
  - c. Provide proof of a written contract to cover maintenance activities outlined in the buffer report (See Conclusion II.C.11.b.(2).(c)).
  - d. Install either: 1) a permanent 3 to 4 foot tall split rail fence, or 2) permanent planting of equal barrier value between the boundary of the sensitive area buffer and the developed portion of the site (See Conclusion II.C.11.b.(2).(d)).
  - e. Submit to the Planning Department a financial security device to cover all monitoring and maintenance activities that will need to be done including wetland consultant site visits, reports to the Planning Department, and any vegetation that needs to be replaced. The security shall be consistent

with the standards outlined in Zoning Code section 90.145 (See Conclusion II.C.11.b.(2).(e)).

## II. FINDINGS OF FACT AND CONCLUSIONS

### A. SITE DESCRIPTION

#### 1. Site Development and Zoning:

##### a. Facts:

- (1) Size: 12,254 square feet
- (2) Land Use: Vacant; an existing single family residence has been removed with a demolition permit issued by the City of Kirkland.
- (3) Zoning: RS 7.2, low density residential
- (4) Terrain and Vegetation:
  - (a) The subject property contains a Type 2 wetland in the Forbes Creek basin, a primary basin as defined in KZC 90.30.10 (see Attachments 4 and 5). KZC 90.45 requires a **75' buffer and 10' buffer setback for Type 2** wetlands located in primary basins.
  - (b) **The site's terrain slopes gradually in the area delineated** as wetland, from a low point on the west property line of 224 **feet to the wetland's eastern line at roughly** 228 feet. Continuing east, the property slopes up to 246 feet at the southeast property corner.
  - (c) The area designated as a wetland contains a mixture of native and non-native vegetation. The remainder of the property outside of the wetland includes mostly overgrown vegetation, including grass, trees and various shrubs.

##### b. Conclusions:

- (1) The presence of the sensitive areas and buffer are relevant factors in this buffer reduction request. Buffer reduction and mitigation plans are discussed in Section II.C.
- (2) Land use and zoning are not constraining factors.

#### 2. Neighboring Development and Zoning:

##### a. Facts: The neighborhood properties are zoned as follows and contain the following uses:

- (1) North: RS 7.2, vacant; Applicant has submitted a Reasonable Use Exception permit for the construction of a new single family residence.
- (2) South: RS 7.2, 18<sup>th</sup> Avenue
- (3) East: RS 7.2, 2<sup>nd</sup> Street
- (4) West: RS 7.2, single family residential

##### b. Conclusion: The neighborhood development and zoning are not constraining factors in this proposal.

B. PUBLIC COMMENT

1. Facts: The public comment period for this Buffer Modification proposal ran from August 10, 2016 to September 6, 2016. During that time the City received comments from several residents (see Attachment 6). Below is a summary of public comments followed by a brief staff response.

a. Comment: On-site stream should be protected

*Staff Response: The City has no record of a stream on the subject property. There is a Class B stream on 1813 2<sup>nd</sup> Street, but neither its classification nor buffer has a bearing on the processing of this permit as it is located approximately 140 feet from the subject property.*

b. Comment: Sidewalks and storm water management

*Staff Response: Sidewalks installed within sensitive area buffers will be constructed of pervious concrete allowing storm water to infiltrate. A full **review of the applicant's drainage plan will occur at the building permit stage.***

c. Comment: Concern that development approval would lead to potential threat of increased water flow on adjacent private property.

*Staff Response: Staff is recommending that the buffer reduction permit be conditioned with appropriate storm water and erosion management practices to manage on-site storm water during and after construction. These conditions include pre-development erosion practices including the installation of straw bales or wattles, filter fabric and fencing, which cumulatively appropriately manage any surface water generated or present during the early stages of development.*

*The proposed conditions also require pervious driveways to further promote infiltration of storm water and not facilitate or create unwanted run off onto adjacent properties.*

*As part of the building permit, the applicant will be required to submit full storm water plans which comply with City codes and will be designed in such a manner as to prevent additional water from reaching neighboring lots.*

*The proposed single-family residence is to be located in the existing wetland buffer, not the wetland itself. Impacts to the buffer are proposed to be mitigated through enhancement of the reduced buffer and wetland, improving the overall function of the sensitive area.*

d. Comment: Inability of adjacent parcels to modify their wetland buffer setback as part of their development.

*Staff Response: Wetland buffer reductions, such as the applicant is proposing, are permitted under the Code through a Process IIA approval.*

e. Comment: Miscellaneous questions were also submitted to the City regarding this Buffer Modification permit:

(1) Are variances necessary?

- (2) What is the wetland buffer?
- (3) Did the applicant submit a sensitive areas report and impact report?
- (4) Will a fence be required at the line of the buffer?
- (5) Could the applicant develop the subject property, along with the three parcels to the south, which would result in less of an impact to the wetland?

*Staff Response: These questions are addressed within the body of this staff report.*

## C. BUFFER MODIFICATION CRITERIA

### 1. Review Process and Decisional Criteria

#### a. Facts:

- (1) The subject property contains a Type 2 wetland in a primary basin (Forbes Creek). KZC Section 90.45 requires a 75 foot buffer and a 10 foot buffer setback from the wetland. Approximately two-thirds of the subject property is encumbered by the wetland, wetland buffer and buffer setback.
- (2) Applying the required wetland buffer and setback in re-developing the subject property, the applicant would be left with a building envelope of approximately 200 square feet, considering the property is further encumbered with the requirement of two 20 foot front setbacks from 18<sup>th</sup> Avenue and 2<sup>nd</sup> Street.
- (3) KZC 90.60.2 establishes a process to modify wetland buffers by no more than one-third of the standard buffer width, when no modification is proposed to the wetland itself. In such cases, buffers may be modified in one of two ways:
  - (a) Buffer averaging, requiring the area of the buffer resulting from the averaging to be equal in size and quality to the buffer area calculated by the standards found in KZC 90.45.(1).
  - (b) Buffer enhancement, requiring the applicant enhance the buffer by removal of invasive plants, planting native vegetation and/or other means.
- (4) **The applicant's plan proposes to modify the existing buffer of the Type 2 wetland through enhancement, reducing the wetland buffer one-third from the required 75 feet to 50 feet.**
- (5) KZC 90.60.2.a.(2) establishes submittal requirements for a wetland buffer modification. The applicant has submitted a report, prepared by a qualified professional, meeting KZC.90.60.2.a.(2) (see Attachment 7). The report has been reviewed by **The Watershed Company, the City's consultant** (see Attachment 8). They have recommended several minor items that should be addressed in the proposal.
- (6) Kirkland Zoning Code section 90.60.2.b establishes nine (9) decisional criteria for approving a wetland buffer modification proposal. Sections II.C.2 through II.C.10 **contain the staff's findings of facts and conclusions based on these nine (9) criteria.**

b. Conclusions:

Based upon the following analysis in Section 2 through 10, and with the recommended conditions of approval, the application meets the established criteria for approving a buffer modification through enhancement under a Process IIA.

2. Criterion 1 KZC 90.60.2b.(1): It is consistent with *Kirkland's Streams, Wetland and Wildlife Study (The Watershed Company, 1998)* and *The Kirkland Sensitive Areas Regulatory Recommendations Report (Adolphson Associates, Inc., 1998)*.

a. Facts:

- (1) **The applicant's environmental report addresses the main tenants** of the two reports mentioned above.
- (2) **Goals of the two reports, relevant to the applicant's** proposal, include:
  - a. Limiting the reduction of wetland buffers by one-third
  - b. Enhancement of the remaining or modified buffer.
- (3) **The applicant's plans show a proposed buffer reduction of one-third**, from the required 75 feet to 50 feet, and a plan to enhance the remaining buffer and existing wetland.
- (4) **The City's consultant**, The Watershed Company, has reviewed the mitigation plan and recommended that it be approved with conditions.

b. Conclusion: **The applicant's proposal complies with this criteria.**

3. Criterion 2 KZC 90.60.2b.(2): It will not adversely affect water quality;

a. Facts:

- (1) The proposal buffer modification requests to reduce the existing 75 foot buffer by one-third to a 50 foot buffer. Development impacts will not occur in the modified 50 foot buffer or the wetland itself.
- (2) **The applicant's plans call for:**
  - (a) The removal of invasive vegetation;
  - (b) The removal and mulching of the large area within the wetland and wetland buffer currently maintained as lawn;
  - (c) The planting of native species.
- (3) **The applicant's restoration efforts are expected to make a positive impact on overall water quality.**
- (4) The removal of invasive plants and the establishment of native plants will improve and aid water quality on site.
- (5) Residential lawn will be replaced by native vegetation which does not require chemicals and fertilizers frequently applied to lawn.

b. Conclusion: **The applicant's proposal complies with this criteria.**

4. Criterion 3 KZC 90.60.2b.(3): It will not adversely affect fish, wildlife or their habitat;

a. Facts:

- (1) No fish are present on the subject property. The nearest stream is approximately 140 feet from the subject property.
  - (2) The applicant's enhancement plan includes planting diverse native vegetation, snags, logs and brush piles incorporated into the wetland and modified wetland buffer.
  - (3) The existing wetland buffer is substantially degraded and is either lawn or has a weedy understory.
  - (4) **The applicant's plans contain** a comprehensive approach to not only the overall hydrology of the site, but the habitat as well.
    - (a) Typical residential grass will be replaced with native plants, which provide habitat and food for a variety of wildlife.
    - (b) In addition to plantings, the applicant proposes to include other features important to wildlife habitat, including snags, logs and brush piles. Such features are expected to provide habitable locations for nesting, feeding and shelter for a variety of birds and amphibians.
- b. Conclusions: **The applicant's proposal complies with this criterion.**
5. Criterion 4 KZC 90.60.2b.(4): It will not have an adverse effect on drainage and/or storm water detention capabilities;
- a. Facts:
- (1) The plans for the proposed single family residence provide the following information:
    - (a) The structure has an approximate footprint of 1,600 square feet with a proposed driveway and walkway of approximately 500 square feet.
    - (b) The proposed lot coverage is approximately 19% of the total lot size.
    - (c) The surface of the driveway serving the residence and the front entry walkway is proposed to be constructed of permeable pavers.
  - (2) The subject property had previously contained a single family residence and a large concrete driveway area with an approximate disturbance area of 2,300 square feet. The proposed improvements will be located further from the wetland edge than the existing driveway.
- b. Conclusion: **The applicant's proposal will not have an adverse effect on drainage and/or storm water detention capabilities.** The proposal drawing should include details for the driveway and walkways to be constructed of permeable pavers. The proposal complies with this criteria.
6. Criterion 5 KZC 90.60.2b.(5): It will not lead to unstable earth conditions or create an erosion hazard;
- a. Facts:

- (1) The **site's topography slopes gently and from the west property** line to edge of the delineated wetland boundary.
    - (2) The proposed new single family residence will be located on an area of the site which contains a flatter topography, and formerly contained a single family residence.
  - b. Conclusion: **The applicant's proposal will not lead to unstable earth** conditions or create an erosion hazard.
7. Criterion 6 KZC 90.60.2b.(6): It will not be materially detrimental to any other property;
- a. Facts:
    - (1) The proposed footprint is approximately 1,600 square feet and conforms to the required setbacks (see the discussion and analysis in Section II.C.10).
    - (2) The proposed residence will conform to all other zoning standards and regulations, such as lot coverage, floor area ratio, height and setbacks.
  - b. Conclusion: **The applicant's proposal will not be materially detrimental to** any other property.
8. Criterion 7 KZC 90.60.2b.(7): Fill material does not contain organic or inorganic material that would be detrimental to water quality or to fish, wildlife or their habitat;
- a. Facts:
    - (1) The report submitted by the applicant states that the fill material used during the development will not contain materials detrimental to water quality, fish, wildlife or their habitat.
  - b. Conclusion: The **applicant's proposal complies with this** criteria.
9. Criterion 8 KZC 90.60.2b.(8): All exposed areas are stabilized with vegetation normally associated with native wetland buffers, as appropriate;
- a. Facts:
    - (1) **The applicant's** submittal includes plans for revegetation and enhancement of impacted areas as a result of the proposed development.
    - (2) The wetland and modified buffer will be densely vegetated according to the approved planting plan, containing a proper mixture of native shrubs, herbs and trees.
  - b. Conclusion: **The applicant's proposal** complies with this criteria and will result in exposed areas being stabilized with an appropriate amount of native plantings normally associated with wetland buffers.
10. Criterion 9 KZC 90.60.2b.(9): There is no practicable or feasible alternative development proposal that results in less impact to the buffer.
- a. Facts:

- (1) The subject property is located on the corner of 2<sup>nd</sup> Street and 18<sup>th</sup> Avenue in the RS 7.2 zone, which requires two 20 foot front yard setbacks.
  - (2) Subject to KZC 15.30, Special Regulation DD-14, on corner lots with two required front yards, one may be reduced to the average of the front yards for the two adjoining properties fronting the same street as the front yard to be reduced. The applicant may select which front yard will be reduced.
  - (3) The two properties that adjoin the subject property and front 18<sup>th</sup> Avenue have front yard setbacks of 15 feet and 48 feet, respectively, the average of which is 31.5 feet.
  - (4) The wetland, wetland buffer, buffer setback, and required yards comprise approximately 73% of the total property, leaving only an irregular shaped building footprint of approximately 200 square feet.
- b. Conclusion: Given the constraints of the site, there is no practicable or feasible alternative development proposal that results in less impact to the buffer.
11. Kirkland Zoning Code Chapter 90 – Additional Requirements and Standards:
- a. Facts:
- In addition to the approval criteria for a wetland buffer modification through enhancement, Kirkland Zoning Code Chapter 90 contains various regulations applicable to developments proposed on subject properties containing wetlands and associated buffers.
- (1) KZC 90.50 – Wetland Fence or Barrier
    - (a) Prior to the commencement of development activities, chain link fencing is to be installed at the upland boundary of the entire wetland.
    - (b) Upon project completion a permanent split rail fence or equivalent barrier is to be installed at the upland boundary of the wetland buffer and the developed portion of the site.
  - (2) KZC 90.60.2.a.(2).(a)-(c) – Buffer Modification Through Enhancement Plan
    - (a) Developments which propose to modify wetland buffers through enhancement are required to provide an enhancement plan prepared by a qualified professional consistent with the standards specified in KZC 90.55.4.
    - (b) The applicant has provided an enhancement plan prepared by a qualified professional, which has been **reviewed by the City’s consultant The Watershed Company**.
  - (3) KZC 90.145 – Bond or Performance Security

To ensure compliance with the regulations found within this chapter, the applicant is required to submit a performance or maintenance bond.

(4) KZC 90.150 – Dedication

The applicant is required to dedicate the appropriate greenbelt protection area to the City to protect sensitive areas and their buffers.

(5) KZC 90.155 – Liability

The applicant is required to enter into an agreement with the City that runs with the property, indemnifying the City from any claims, actions, liability and damages to sensitive areas arising out of development activity on the subject property.

b. Conclusions:

- (1) Prior to the issuance of the building permit the applicant should:
  - (a) Include in the plan set the approved sensitive area buffer enhancement, monitoring, and maintenance plans. Additionally the conditions outlined in The Watershed **Company's review letter dated November 22, 2016 shall** be incorporated into the plans.
  - (b) The applicant should submit full erosion control plans, which depict the location of a six-foot high construction phase fence along the boundary of the entire modified sensitive area buffer setback with silt screen fabric installed per City standard. The fencing shall be installed prior to issuance of any permits. The fence shall remain upright in the approved location for the duration of the development activities.
  - (c) Submit a financial security device to cover the cost of completing the buffer enhancement improvements. The security shall be consistent with the standards outlined in Zoning Code section 90.145.
  - (d) Submit a signed and notarized covenant that holds the City harmless against any future claims that may arise as a result of the development of the property.
  - (e) Dedicate a Natural Greenbelt Protective Easement (NGPE) over all sensitive areas and buffer areas on the subject property not impacted by the proposed development.
- (2) Prior to the final inspection of the building permit the applicant should:
  - (a) Complete installation of the buffer enhancement plan, **subject to inspection by the City's wetland consultant at the applicant's expense.**
  - (b) Provide proof of a written contract with a qualified professional who will perform the monitoring program, together with a completed contract and fees to fund peer review of the monitoring and maintenance activities, (i.e. inspection of plant materials, annual monitoring reports or **re-vegetation activities) by the City's wetland consultant.**

Alternatively, the applicant shall provide a copy of a completed contract and fees to fund completion of the **monitoring program by the City's wetland consultant**

- (c) Provide proof of a written contract to cover maintenance activities outlined in the buffer report
- (d) The applicant should install a three to four-foot tall split rail fence or equivalent as approved by the Planning Official.
- (e) Submit to the Planning Department a financial security device to cover all monitoring and maintenance activities that will need to be done including wetland consultant site visits, reports to the Planning Department, and any vegetation that needs to be replaced. The security shall be consistent with the standards outlined in Zoning Code section 90.145

#### D. PROCESS IIA APPROVAL CRITERIA

- 1. Fact: KZC 150.65.3 states that a Process IIA application may be approved if:
  - a. It is consistent with all applicable development regulations; and
  - b. To the extent there is no applicable development regulation, the Comprehensive Plan; and it is consistent with the public health, safety and welfare.
- 2. Conclusion: With the recommended conditions approval, the proposal complies with the criteria in KZC 150.65.3. It is consistent with all applicable development regulations (see Section II.C and D) and the Comprehensive Plan (see Section II.E). In addition, it is consistent with the public health, safety and welfare because it will allow reasonable use of a property while improving the quality and function of the sensitive area buffers.

#### E. COMPREHENSIVE PLAN

- 1. Facts:
  - a. The subject property is located within the Norkirk neighborhood. The Comprehensive Plan Land Use Map designates the subject property for low density residential at 6 units per acre.
  - b. The following policies listed in the Natural Environmental Element of the Comprehensive Plan are applicable to the proposal:
    - (1) Policy NE-1.6: Strive to minimize human impacts on habitat areas.
    - (2) Policy NE-2.2: Protect surface water functions by preserving and enhancing natural drainage system whenever possible.
  - c. KZC 90.50 requires that the applicant install a barrier (split rail fence or vegetative barrier) at the edge of the wetland buffer.
  - d. The proposal preserves the existing wetland on site in its natural state. The proposal will result in the removal of invasive plants covering the wetland and wetland buffer and the installation of appropriate native plantings.
  - e. Steps to limit damage include minimizing creation of new impervious

surfaces, maximizing use of soils and vegetation in slowing and filtering runoff and installing structural flow control facilities at redeveloping sites where appropriate to mimic the predevelopment hydrologic regime.

2. Conclusions:

- a. The proposal is consistent with the Comprehensive Plan Land Use Map.
- b. With the inclusion of a split rail fence at the edge of the disturbance area, use of pervious paved materials, and the installation of wetland and wetland buffer plantings, the proposal would be consistent with the Natural Environment Element of the Comprehensive Plan.

F. DEVELOPMENT REGULATIONS

1. Fact: Additional comments and requirements placed on the project are found in Attachment 3, Development Standards.
2. Conclusion: The applicant should follow the requirements set forth in Attachment 3.

III. SUBSEQUENT MODIFICATIONS

Modifications to the approval may be requested and reviewed pursuant to the applicable modification procedures and criteria in effect at the time of the requested modification.

IV. APPEALS AND JUDICIAL REVIEW

The following is a summary of the deadlines and procedures appeals. Any person wishing to file or respond to an appeal should contact the Planning Department for further procedural information.

A. APPEALS

1. Appeal to the City Council:

Section 150.80 of the Zoning Code allows the **Hearing Examiner's** decision to be appealed by the applicant or any person who submitted written or oral testimony or comments to the Hearing Examiner on the application. A party who signed a petition may not appeal unless such party also submitted independent written comments or information. The appeal must be in writing and must be delivered, along with any fees set by ordinance, to the Planning and Building Department by 5:00 p.m., \_\_\_\_\_, fourteen (14) calendar days following the postmarked date **of distribution of the Hearing Examiner's** decision.

B. JUDICIAL REVIEW

Section 150.130 of the Zoning Code allows the action of the City in granting or denying this zoning permit to be reviewed in King County Superior Court. The petition for review must be filed within 21 calendar days of the issuance of the final land use decision by the City.

V. LAPSE OF APPROVAL

The applicant must begin construction or submit to the City a complete building permit application for the development activity, use of land or other actions approved under this chapter within five (5) years after the final approval of the City of Kirkland on the matter, or the decision becomes void; provided, however, that in the event judicial review is initiated per KZC 150.135 the running of the five (5) years is tolled for any period of time during which a court order in said judicial review proceeding prohibits the required development activity, use of land, or other actions.

The applicant must substantially complete construction for the development activity, use of land, or other actions approved under this chapter and complete the applicable conditions listed on the notice of decision within nine (9) years after the final approval on the matter, or the decision becomes void.

VI. ATTACHMENTS

Attachments 1 through 10 are attached.

1. Vicinity Map
2. Plans
3. Development Standards
4. Sensitive Areas Report
5. **The Watershed Company's Review of Sensitive Areas Report**
6. Public Comments
7. Buffer Modification and Mitigation Plan
8. **The Watershed Company's Review of the** Buffer Modification and Mitigation Plan
9. Save Harmless Agreement – Wetland
10. Natural Greenbelt Protective Easement

VII. PARTIES OF RECORD

Applicant – Schuyler Tutt, Medici Architects

Parties of Record

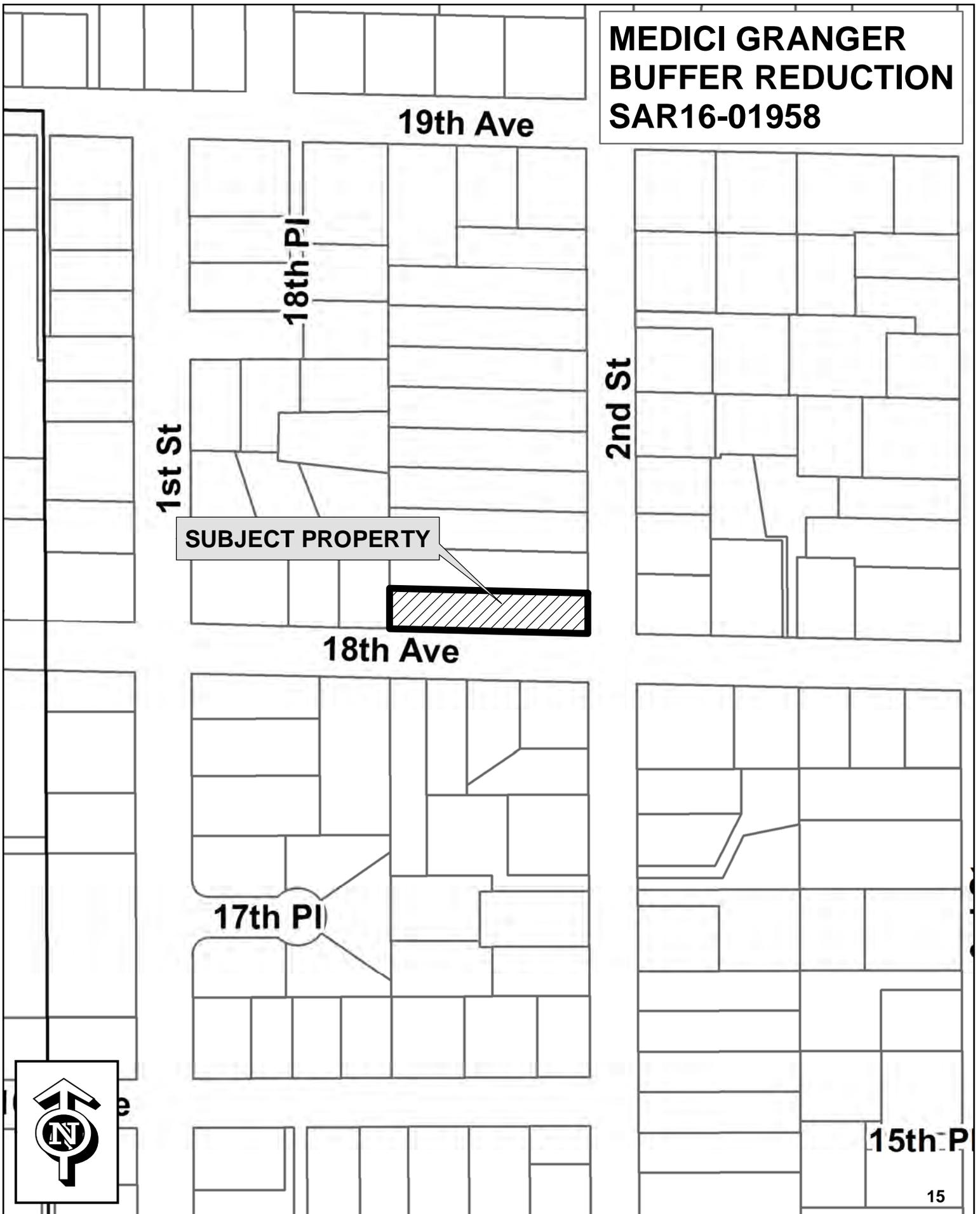
Planning and Building Department

Public Works Department

Fire Department



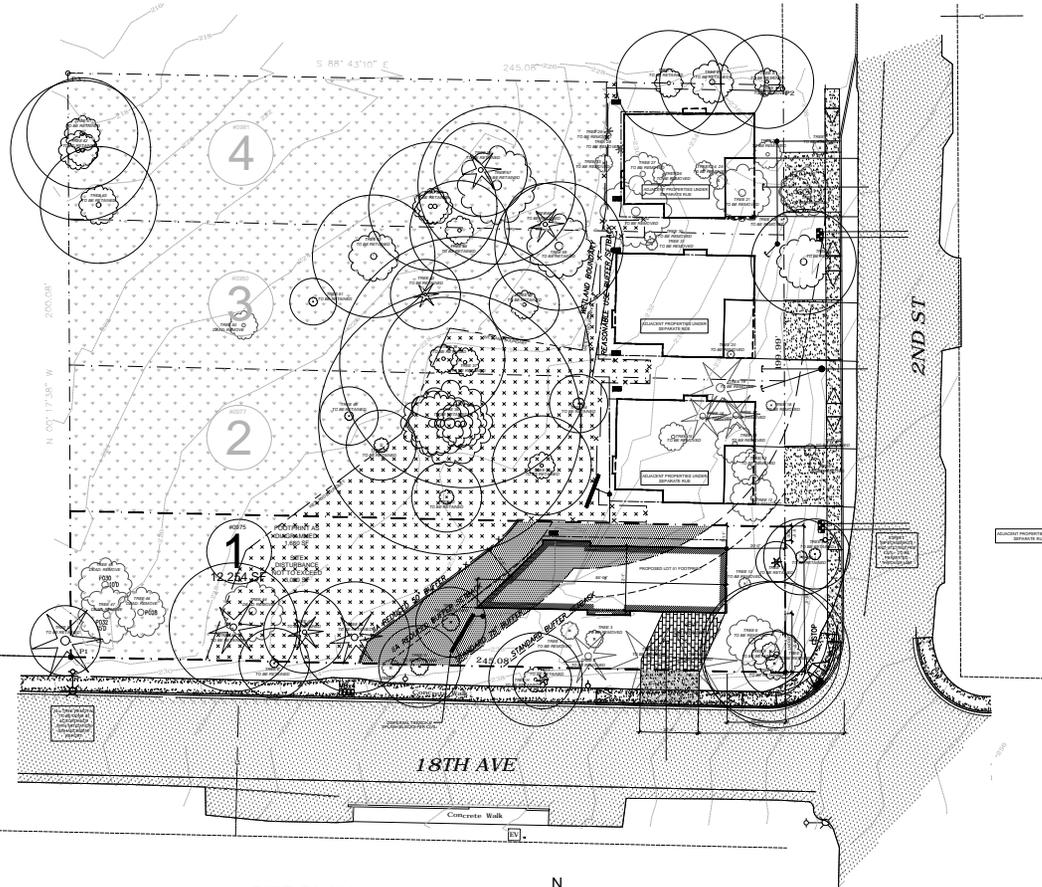
**MEDICI GRANGER  
BUFFER REDUCTION  
SAR16-01958**







# LOT 01 - 140 18TH AVE, KIRKLAND WA



**SITE PLAN**  
SCALE: 1" = 20'

- ENHANCED WETLAND
- ENHANCED BUFFER
- BUFFER REDUCTION
- PERMEABLE PAVERS
- IMPERVIOUS CONCRETE
- WETLAND DELINEATION
- 75' WETLAND BUFFER
- 10' BUFFER BSBL
- SPLIT RAIL FENCE



**VICINITY MAP**  
SCALE: NTS



**QT SECTION MAP**  
SCALE: NTS

## PARCEL & ZONING INFORMATION

**PROJECT DESCRIPTION:**  
DEMO EXISTING STRUCTURES AND BUILD ONE NEW SINGLE FAMILY HOME PER THE REASONABLE USE EXCEPTION, INCLUDING BUFFER MITIGATION AND ENHANCEMENT.

**JURISDICTION:** CITY OF KIRKLAND  
**ZONING:** RS 7.2

**PARCEL ASSESSOR'S #:** Parcel # 124500-0975

**LEGAL DESCRIPTION:**

**BURKE-FARRARS KIRKLAND DIV #27**  
Plat Block: 119  
Plat Lot: 7

**SET BACKS REQUIRED:** FRONT YARD - 20'-0" (10'-0" UNDER REASONABLE USE PROPOSED)  
SIDE YARD - 5'-0" MIN.,  
REAR YARD - 10'-0"

**MAX LOT COVERAGE:** 50%  
**MAX FAR:** 50%  
**MAX HEIGHT:** 25' ABOVE ABE

## FLOOR AREA RATIO

LOT SIZE:	12,254 SF
F.A.R. 50%:	6,127 SF
UPPER FLOOR (-100 SF FOR STAIRS):	1,464 SF
MAIN FLOOR:	1,536 SF
<b>TOTAL:</b>	<b>3,000 SF</b>

## PER REASONABLE USE EXCEPTION:

KZC 90.140 If the strict application of this chapter would preclude all reasonable use of a site, an owner of real property may apply for a reasonable use exception to this chapter. For a single-family development proposal which does not exceed a total of 3,000 square feet of site disturbance, and does not encroach into the sensitive area, but only the associated buffer, the application shall be considered pursuant to subsection (7) of this section, Reasonable Use Process: Administrative Alternative.

The proposal is compatible in design, scale and use with other legally established development in the immediate vicinity of the subject property in the same zone and with similar site constraints

The required front yard may be reduced by up to 50% where the applicant demonstrates that the development cannot meet the City's code requirements without encroaching into the sensitive area buffer.

## PROJECT INFO

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bpudiets@thebluegroup.com

**WETLAND CONSULTANT:**  
AQUATICA ENVIRONMENTAL CONSULTING, LLC  
TERESA OPOLKA, PWS  
PO BOX 308  
DUVALL, WA 98019  
PHONE: 425-802-8988  
teresa@aquaticacc.com

**ARBORIST:**  
ARBOR OPTIONS, LLC  
RYAN RINGE, PRINCIPAL  
PHONE: 206-755-9526  
RYAN@ARBOROPTIONS.COM

## ARCHITECTURAL SHEET INDEX

A0.0 TITLE SHEET/SITE PLAN

## CIVIL SHEET INDEX

CV-01	COVER SHEET
TP-01	TESC AND DEMO PLAN
TD-01	TESC NOTES & DETAILS
UT-01	ROAD AND UTILITY PLAN
GN-01	GENERAL NOTES
DT-01	DETAILS
DT-02	DETAILS
DT-03	DETAILS

## SURVEY

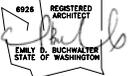
TOPOGRAPHIC SURVEY INCLUDED

## MEDICI ARCHITECTS

Architecture  
Programming  
Accessible Design  
Interior Design

11661 SE 1ST ST., STE 200  
Bellevue, Washington 98005  
Tel: (425) 453-9298  
Fax: (425) 452-8448

## REGISTRATION:



## REVISIONS:

NO.	DATE:
1.	
2.	
3.	
4.	
5.	

## PROJECT / CLIENT:

Lot 1 - Neubert Wetland Buffer Modification

**JOB ADDRESS:**  
140 18TH AVE  
KIRKLAND, WA 98033  
PARCEL # 124500-0975

## DRAWING NAME:

**COVER SHEET & SITE PLAN**

## ISSUE:

**WETLAND BUFFER MODIFICATION 08/03/16**

Drawn By: SDT  
Checked By: EB  
Owner Approval:

## PHASE:

## WETLAND BUFFER MODIFICATION

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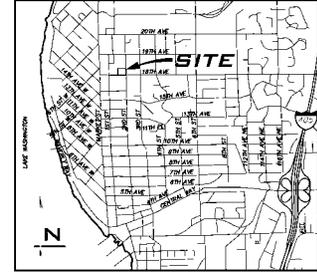
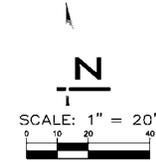
PROJECT No.: 2015109

DATE: 08-03-16

SCALE: 1" = 1'

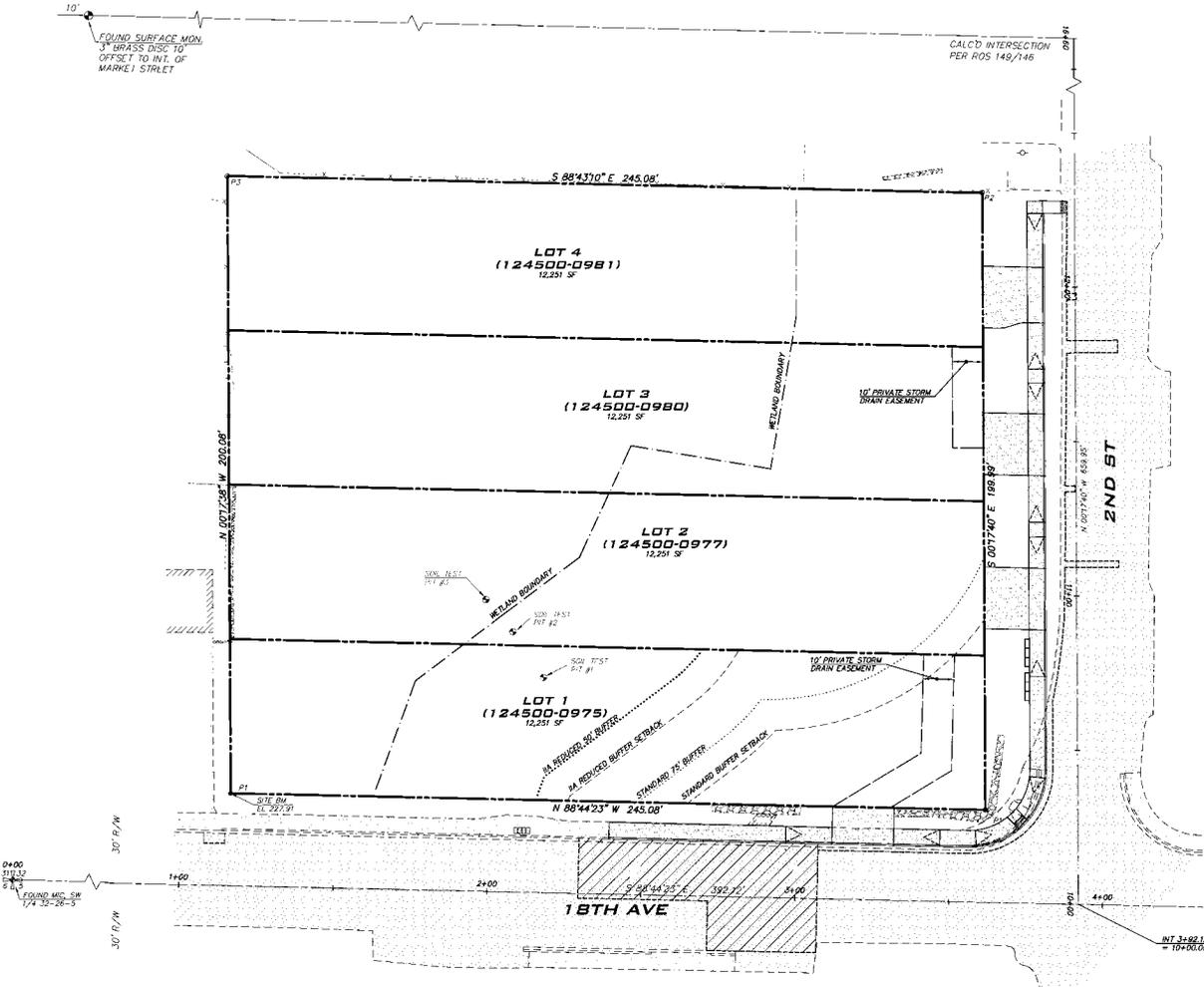
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SW 1/4, SW 1/4, SEC 32, TWP 26N, RGE 5E, W.M.  
**140 18TH AVE**  
**LSM PERMIT PLANS**



**VICINITY MAP**  
SCALE: 1" = 500'

**BLUELINE**  
 SCALE: AS NOTED  
 PROJECT MANAGER:  
 BRETT K. PUDISTS, PE  
 PROJECT ENGINEER:  
 BRETT K. PUDISTS, PE  
 DESIGNER:  
 NADIA KROUMOVA  
 ISSUE DATE:  
 7/18/2016



**PROJECT TEAM**

**OWNER/APPLICANT**  
 DC GRANGER  
 604 AUDORA AVE N SUITE D  
 SEATTLE, WA 98103  
 206 362-7855  
 CONTACT: DARRN GRANGER

**CIVIL ENGINEER**  
 THE BLUELINE GROUP  
 25 CENTRAL WAY, SUITE 400  
 KIRKLAND, WA 98033  
 (425) 216-4251  
 CONTACT: BRETT K. PUDISTS, PE

**ARCHITECT**  
 MEDIO ARCHITECTS  
 18807 SE 1ST ST, SUITE 200  
 BELLEVUE, WA 98008  
 (425) 453-3289  
 CONTACT: SCHUYLER TUTT, AIA

**SURVEYOR**  
 EMERALD LAND SURVEYING, INC  
 14407 63RD DRIVE SE  
 SNOHOMISH, WA 98062  
 (425) 358-7198  
 CONTACT: BRYNNE BRILE, PLS

**WETLAND BIOLOGIST**  
 AQUATICA ENVIRONMENTAL CONSULTING, LLC  
 PO BOX 308  
 SPOKANE, WA 99219  
 (425) 802-8088  
 CONTACT: TERESA OPIJAKA, BLS

**SITE DATA**

SITE ADDRESS: 140 18TH AVE  
 TAX ACCOUNT NUMBER: 124500-0975, 124500-0977, 124500-0980, 124500-0981  
 ZONING: R57.2  
 SITE AREA: 12,251 SF / 0.28 AC PER LOT  
 MIN LOT SIZE ALLOWED: 7,200 SF/LNFT  
 PROPOSED USE: SINGLE FAMILY  
 SETBACKS: FRONT 20' (10' UNDER REASONABLE USE EXCEPTION KCC 90.140), REAR 10', SIDE 5' (15' TWO SIDES)  
 MAX BUILDING HEIGHT: 25' AFE  
 MAX LOT COVERARGE: 50%  
 SEWAGE DISPOSAL: CITY OF KIRKLAND  
 WATER SYSTEM: CITY OF KIRKLAND

**LEGAL DESCRIPTION**

LOTS 7, 8, 9 AND 10, BLOCK 116, SUBDIVISION: FARRAR'S KIRKLAND ADDITION DIVISION #77 ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 81 OF PLATS, PAGE 90, RECORDS OF KING COUNTY, WASHINGTON.  
 APN: 124500-0975

**PROPERTY CORNERS**

- P1 SET REBAR & CAP, LS 30581
- P2 FOUND REBAR & CAP, LS 8408, 0.05' W & 0.07' N
- P3 FOUND REBAR & CAP, LS 8408, 0.06' W & 0.08' S

**SURVEY NOTES**

INSTRUMENT USED: SOKKIA SET 5 EDM  
 METHOD USED: FIELD TRAVERSE  
 APPROXIMATE POINT ACCURACY: ±0.05'  
 SURVEY MEETS OR EXCEEDS STATE STANDARDS PER WAC 332-130-090.  
 MONUMENTS SHOWN HEREON WERE VISITED ON DECEMBER 22, 2015.  
 THE INFORMATION SHOWN ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE INDICATED DATE AND CAN ONLY BE CONSIDERED AS THE GENERAL EXISTING CONDITION AT THAT TIME.  
 NO EASEMENTS, RESTRICTIONS OR RESERVATION OF RECORD WHICH SHOULD BE DISCLOSED BY A TITLE REPORT ARE SHOWN.  
 VERTICAL DATUM - NAVD 1988  
 CONTOUR INTERVAL - 2 FEET

**SHEET INDEX**

- 1 CV-01 COVER SHEET
- 2 TP-01 TESC, DEMO AND GRADING PLAN
- 3 TD-01 TESC NOTES & DETAILS
- 4 TR-01 TREE RETENTION PLAN
- 5 UT-01 ROAD AND UTILITY PLAN
- 6 RP-01 ROAD PROFILE
- 7 RD-01 ROAD SECTIONS AND CURB DETAILS
- 8 GN-01 GENERAL NOTES
- 9 DT-01 DETAILS
- 10 DT-02 DETAILS
- 11 DT-03 DETAILS

**UNDERGROUND UTILITY NOTE**

UNDERGROUND UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES. TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL, THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON81.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

COVER SHEET  
 140 18TH AVE  
 LSM PERMIT PLANS  
 WASHINGTON  
 CITY OF KIRKLAND

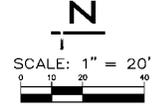
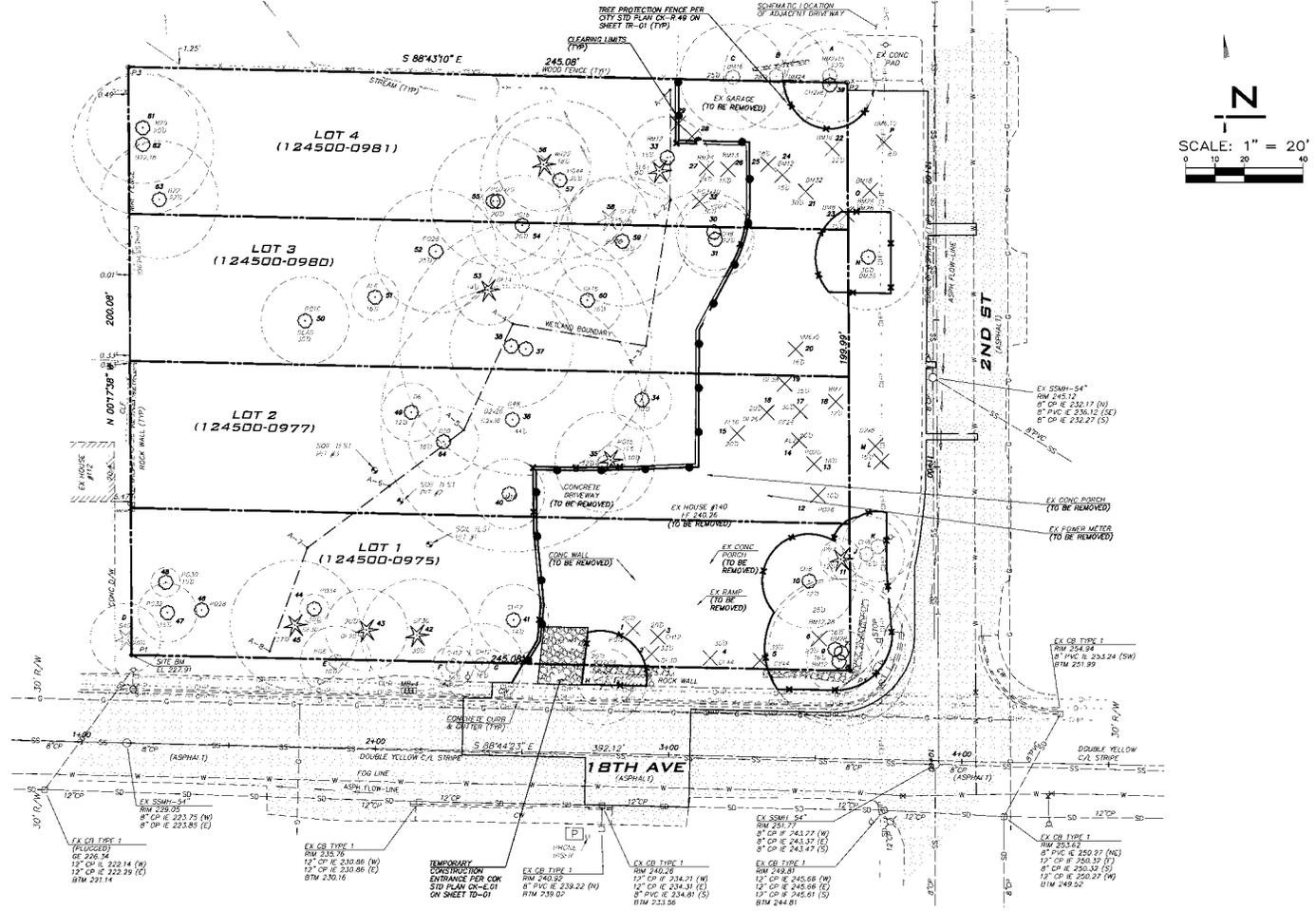
7/19/16  
 JOB NUMBER:  
**15-251**  
 SHEET NAME:  
**CV-01**  
 SHT 1 OF 11

2016 7/18/2016 - 2:11pm - User: rmmahel  
 C:\Projects\15251\15251\15251.dwg (15251.dwg)  
 © 2016 THE BLUELINE GROUP

**TREE TABLE**

Tree #	Species	Latin Name	DBH (in.)	Drip Line Radius (ft.)	Retain Yes/No
1	English Walnut	Juglans regia	11.4	17	No
2	Douglas Fir	Pseudotsuga menziesii	29.8	20	No
3	Wild Cherry	Prunus avium L.	10.1	14	No
4	Western Red Cedar	Thuja plicata	36.7	26	No
5	Douglas Fir	Pseudotsuga menziesii	37.5	23	No
6	European Chestnut	Castanea sativa	21.9	20	No
7	Bigleaf Maple	Acer macrophyllum	28.0	25	Yes
8	European Chestnut	Castanea sativa	12.4	11	Yes
9	European Chestnut	Castanea sativa	35.1	24	Yes
10	Wild Cherry	Prunus avium L.	8.3	16	No
11	Chinese Fir	Cariniamomium latifolium	6.8	7	Yes
12	Black Poplar	Populus nigra	25.2	8	No
13	Black Poplar	Populus nigra	20.7	9	No
14	European Chestnut	Castanea sativa	18.2	24	No
15	European Chestnut	Castanea sativa	13.9	17	No
16	Douglas Fir	Pseudotsuga menziesii	24.2	18	No
17	Douglas Fir	Pseudotsuga menziesii	22.7	18	No
18	European Chestnut	Castanea sativa	6.4	9	No
19	Douglas Fir	Pseudotsuga menziesii	33.1	25	No
20	Hazelnut cluster	Corylus avellana	13.8	16	No
21	Bigleaf Maple	Acer macrophyllum	23.1	22	No
22	Bigleaf Maple	Acer macrophyllum	13.4	16	No
23	Bigleaf Maple	Acer macrophyllum	7.7	10	No
24	Bigleaf Maple	Acer macrophyllum	14.3	14	No
25	Bigleaf Maple	Acer macrophyllum	11.1	13	No
26	Bigleaf Maple	Acer macrophyllum	10.7	14	No
27	Bigleaf Maple	Acer macrophyllum	19.7	17	No
28	Bigleaf Maple	Acer macrophyllum	8.2	12	No
29	Bigleaf Maple	Acer macrophyllum	9.5	13	No
30	Wild Cherry	Prunus avium L.	7.5	13	No
31	Wild Cherry	Prunus avium L.	8.4	13	No
32	Bigleaf Maple	Acer macrophyllum	63.9	36	No
33	Bigleaf Maple	Acer macrophyllum	10.6	14	No
34	Common Apple	Malus domestica	7.3	10	Yes
35	English Walnut	Juglans regia	13.5	17	Yes
36	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	86.3	45	Yes
37	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	72.3	43	Yes
38	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	20.9	21	Yes
39	Wild Cherry	Prunus avium L.	14.2	15	No
40	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	8.8	12	Yes
41	Wild Cherry	Prunus avium L.	9.8	12	Yes
42	Douglas Fir	Pseudotsuga menziesii	26.7	19	Yes
43	Douglas Fir	Pseudotsuga menziesii	19.4	14	Yes
44	Black Poplar	Populus nigra	27.5	N.A.	No
45	Douglas Fir	Pseudotsuga menziesii	29.1	22	Yes
46	Black Poplar	Populus nigra	23.8	N.A.	No
47	Black Poplar	Populus nigra	27.8	10	No
48	Black Poplar	Populus nigra	23.0	N.A.	No
49	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	7.9	10	Yes
50	Black Poplar	Populus nigra	13.2	N.A.	No
51	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	6.0	8	Yes
52	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	23.3	21	Yes
53	Douglas Fir	Pseudotsuga menziesii	11.5	12	Yes
54	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	14.0	17	Yes
55	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	29.0	22	Yes
56	Western Red Cedar	Thuja plicata	17.0	16	Yes
57	Red Alder	Alnus rubra	32.3	27	Yes
58	Norway Spruce	Picea abies	15.7	14	Yes
59	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	25.2	22	Yes
60	Douglas Fir	Pseudotsuga menziesii	12.3	12	Yes
61	Red Alder	Alnus rubra	14.0	19	Yes
62	Red Alder	Alnus rubra	22.5	24	Yes
63	Red Alder	Alnus rubra	18.0	20	Yes
64	Black Cottonwood	Populus balsamifera L. ssp. trichocarpa	9.2	12	Yes
A	Bigleaf Maple	Acer macrophyllum	20.6	16	Yes
B	Bigleaf Maple	Acer macrophyllum	18	18	Yes
C	Bigleaf Maple	Acer macrophyllum	14	18	Yes
D	Norway Spruce	Picea abies	18	12	Yes
E	European Chestnut	Castanea sativa	18.4	12	Yes
F	Wild Cherry	Prunus avium L.	6.0	7	No
G	Wild Cherry	Prunus avium L.	13.7	14	Yes
H	Pacific Madonia	Arbutus menziesii	17.9	16	Yes
I	Douglas Fir	Pseudotsuga menziesii	8.2	10	Yes
J	Wild Cherry	Prunus avium L.	7.4	13	Yes
K	Hazelnut cluster	Corylus avellana	10.8	12	Yes
L	English Walnut	Juglans regia	7.5	10	No
M	English Walnut	Juglans regia	8.1	10	No
N	European Chestnut	Castanea sativa	20.7	18	No
O	Bigleaf Maple	Acer macrophyllum	35.0	26	No
P	Bigleaf Maple	Acer macrophyllum	13.0	13	No

SW 1/4, SW 1/4, SEC 32, TWP 26N, RGE 5E, W.M.



**BLUELINE**

SCALE: AS NOTED  
 PROJECT MANAGER: BRETT K. RUDISTS, PE  
 PROJECT ENGINEER: BRETT K. RUDISTS, PE  
 DESIGNER: MADIA KROMKOVA  
 ISSUE DATE: 7/18/2016

NO.	DATE	BY	REVISIONS

TREE RETENTION PLAN  
 140 18TH AVE  
 LSM PERMIT PLANS  
 CITY OF KIRKLAND  
 WASHINGTON



7/19/16  
 JOB NUMBER: 15-251  
 SHEET NAME: TR-01  
 SHEET 4 OF 11

**TREE RETENTION CALCULATIONS**

LOT #	LOT SIZE	*REQUIRED TREE CREDITS	**EXISTING TREE CREDITS	REPLACEMENT TREES
1	12,251 SF (0.28 AC)	9	50	0
2	12,251 SF (0.28 AC)	9	28	0
3	12,251 SF (0.28 AC)	9	45	0
4	12,251 SF (0.28 AC)	9	44	0

\*30 CREDITS PER ACRE  
 \*\*TO REMAIN. CREDITS FOR TREE # 6,10,30,31,39 WERE NOT AVAILABLE AND HAVE NOT BEEN INCLUDED IN EXISTING TREE CREDIT TOTALS.

**CLEARING LIMITS**  
 ONSITE AREAS OUTSIDE OF TREE PROTECTION FENCE ARE SUBJECT TO CLEARING UNLESS OTHERWISE NOTED.

**DEMO NOTE**  
 UNLESS OTHERWISE NOTED, EXISTING ONSITE BUILDINGS AND HARDSCAPE TO BE REMOVED.

**TREE NOTES**  
 - INSTALL TREE PROTECTION FENCE AND SIGNAGE AT LOD PER CITY SID PLAN OK-R-49 ON SHEET TO-01.  
 - REFER TO ARBORIST REPORT FOR ADDITIONAL DETAILS RELATED TO TREE PROTECTION MEASURES FOR ACTIVITIES WITHIN DRIP LINE OF TREES.  
 - LOCATION AND SPECIES OF REPLACEMENT TREES, IF REQUIRED, TO BE DETERMINED AT BUILDING PERMIT.  
 - WORK TO BE PERFORMED WITHIN THE DRIP LINE OF ANY SAVED TREE SHALL REQUIRE ONSITE CONSULTATION WITH THE ARBORIST PRIOR TO CONSTRUCTION.

**TREE LEGEND**

- ✕ EXISTING CONSPICUOUS TREE TO BE REMOVED
- ✕ EXISTING TREE CREDITS TRF TO BE REMOVED
- ✕ EXISTING CONSPICUOUS TREE TO REMAIN
- ✕ EXISTING TREE CREDITS TRF TO REMAIN
- ✕ EXISTING OFF-SITE DECIDUOUS TREE
- DRIFLINE

**UNDERGROUND UTILITY NOTE**

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2017.07.20 10:25 AM - User: bkrudists  
 2017.07.20 10:25 AM - User: bkrudists  
 2017.07.20 10:25 AM - User: bkrudists

**MEDICI ARCHITECTS**

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Accessible Design  
Interior Design

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Bellevue, Washington 98005  
Tel: (425) 453-9288  
Fax: (425) 452-8448

REGISTRATION:



INTAKE: \_\_\_\_\_ DATE: \_\_\_\_\_

REVISIONS: \_\_\_\_\_ DATE: \_\_\_\_\_

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

PROJECT / CLIENT:

**130 18TH AVE**  
DC GRANGER, INC  
4014 ALURORA AVE. N, SUITE B  
SEATTLE, WA 98103  
P. 206.459.1980  
dgranger@dcgrangerhomes.com

JOB ADDRESS:

130 18TH AVE,  
KIRKLAND, WA 98033  
**PARCEL # 124500-0975**

DRAWING NAME:

**PERSPECTIVES**

Drawn By: JJ

Checked By: EB

Owner Approval: \_\_\_\_\_

PHASE:

**CONSTRUCTION DOCUMENTS**

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APPROVED FOR CONSTRUCTION: \_\_\_\_\_

PROJECT No.: 2015 109

DATE: 06-29-16

PLOT SCALE: 1:1 **A4.2**



**SOUTH**  
NTS



**SOUTH EAST OVERALL**  
NTS



**SOUTH EAST**  
NTS



**SOUTH WEST**  
NTS



**NORTH WEST**  
NTS



**NORTH**  
NTS



**NORTH EAST**  
NTS

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Interior Design

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Tel: (425) 453-9298  
Fax: (425) 452-8448

REGISTRATION:



INTAKE: \_\_\_\_\_ DATE: \_\_\_\_\_

REVISIONS:	DATE:
1.	
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**130 18TH AVE**  
DC GRANGER, INC  
4014 AURORA AVE. N, SUITE B  
SEATTLE, WA 98103  
P. 206.459.1980  
dgranger@dcgrangerhomes.com  
JOB ADDRESS:  
130 18TH AVE,  
KIRKLAND, WA 98033  
**PARCEL # 124500-0975**

DRAWING NAME:

**SECTION**

Drawn By: JJ  
Checked By: EB  
Owner Approval: \_\_\_\_\_

PHASE:

**CONSTRUCTION DOCUMENTS**

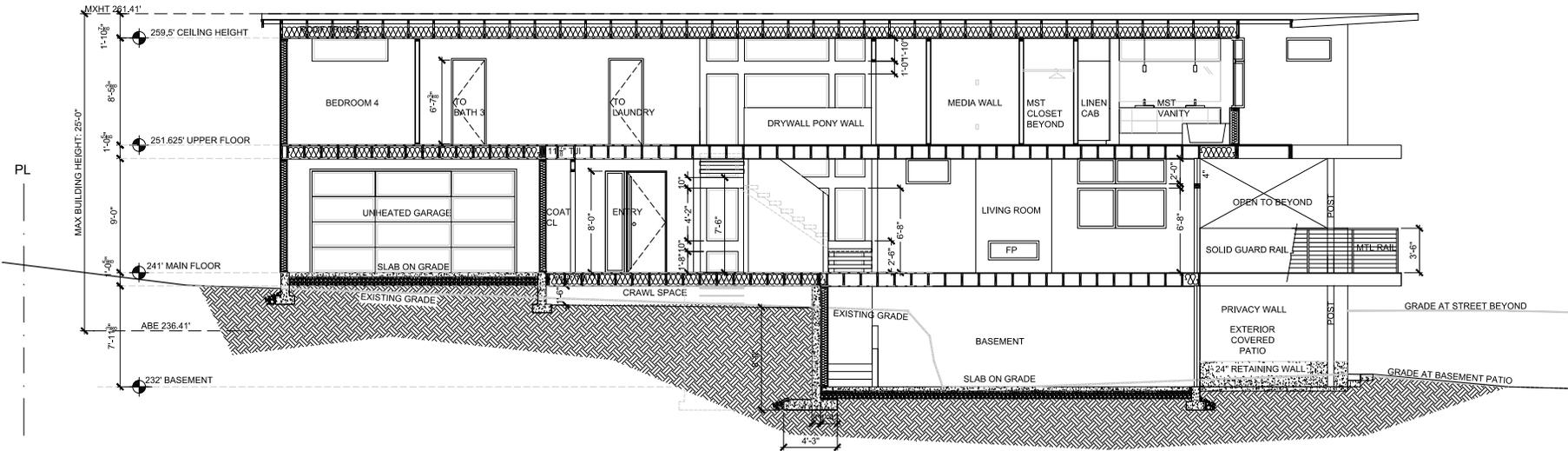
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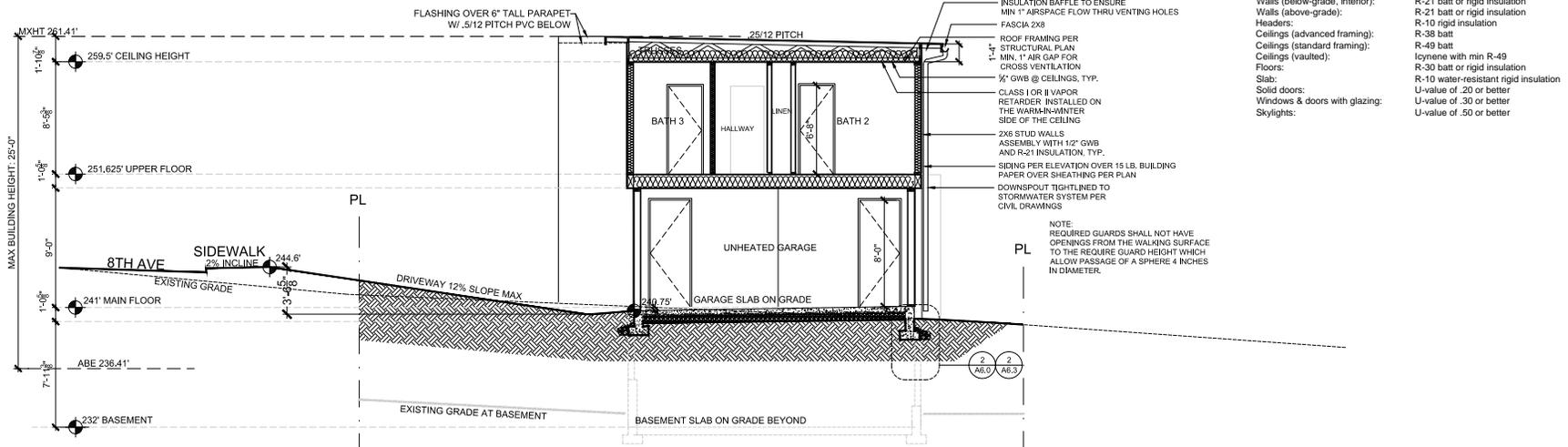
L  
PROJECT No.: 2015 109  
DATE: 06-29-16

**A5.0**

PLOT SCALE: 1:1



**A EAST - WEST SECTION**  
SCALE: 1/4" = 1'-0"



**B NORTH - SOUTH SECTION**  
SCALE: 1/4" = 1'-0"

- THERMAL INSULATION:**  
Walls (below-grade, exterior): R-10 rigid insulation  
Walls (below-grade, interior): R-21 batt or rigid insulation  
Walls (above-grade): R-21 batt or rigid insulation  
Headers: R-10 rigid insulation  
Ceilings (advanced framing): R-38 batt  
Ceilings (standard framing): R-49 batt  
Ceilings (vaulted): Ignynene with min R-49  
Floors: R-30 batt or rigid insulation  
Slab: R-10 water-resistant rigid insulation  
Solid doors: U-value of .20 or better  
Windows & doors with glazing: U-value of .50 or better  
Skylights: U-value of .50 or better

- INSULATION BAFFLE TO ENSURE MIN 1" AIRSPACE FLOW THRU VENTING HOLES
- FASCIA 2X8
- ROOF FRAMING PER STRUCTURAL PLAN
- MIN. 1" AIR GAP FOR CROSS VENTILATION
- 3/4" GWS @ CEILING; TYP.
- CLASS I OR II VAPOR RETARDER INSTALLED ON THE WARM-IN-WINTER SIDE OF THE CEILING
- 2X8 STUD WALLS ASSEMBLY WITH 1/2" GWS AND R-21 INSULATION, TYP.
- SIDING PER ELEVATION OVER 15 LB. BUILDING PAPER OVER SHEATHING PER PLAN
- DOWNSPOUT TIGHTLINED TO STORMWATER SYSTEM PER CIVIL DRAWINGS

NOTE:  
REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT WHICH ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.



**CITY OF KIRKLAND**  
**Planning and Building Department**  
**123 5th Avenue, Kirkland, WA 98033**  
**425.587.3600 ~ [www.kirklandwa.gov](http://www.kirklandwa.gov)**

## **DEVELOPMENT STANDARDS LIST**

**File: SAR16-01958**

### **ZONING CODE STANDARDS**

**90.45 Wetlands and Wetland Buffers.** No land surface modification may take place and no improvement may be located in a wetland or within the environmentally sensitive area buffers for a wetland, except as specifically provided in this Section.

**90.50 Wetland Buffer Fence.** Prior to development, the applicant shall install a six-foot high construction phase fence along the upland boundary of the wetland buffer with silt screen fabric installed per City standard. The fence shall remain upright in the approved location for the duration of development activities. Upon project completion, the applicant shall install between the upland boundary of all wetland buffers and the developed portion of the site, either 1) a permanent 3 to 4 foot tall split rail fence, or 2) permanent planting of equal barrier value.

**90.55 Monitoring and Maintenance of Wetland Buffer Modifications:** Modification of a wetland buffer will require that the applicant submit a 5-year monitoring and maintenance plan consistent with the criteria found in 95.55 and which is prepared by a qualified professional and reviewed by the City's wetland consultant. The cost of the plan and the City's review shall be borne by the applicant.

**90.80 Streams.** No land surface modification may take place and no improvements may be located in a stream except as specifically provided in this Section.

**90.90 Stream Buffers.** No land surface modification may take place and no improvement may be located within the environmentally sensitive buffer for a stream, except as provided in this Section.

**95.52 Prohibited Vegetation.** Plants listed as prohibited in the Kirkland Plant List shall not be planted in the City.

**110.60.5 Street Trees.** All trees planted in the right-of-way must be approved as to species by the City. All trees must be two inches in diameter at the time of planting as measured using the standards of the American Association of Nurserymen with a canopy that starts at least six feet above finished grade and does not obstruct any adjoining sidewalks or driving lanes.

**115.25 Work Hours.** It is a violation of this Code to engage in any development activity or to operate any heavy equipment before 7:00 am. or after 8:00 pm Monday through Friday, or before 9:00 am or after 6:00 pm Saturday. No development activity or use of heavy equipment may occur on Sundays or on the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas Day. The applicant will be required to comply with these regulations and any violation of this section will result in enforcement action, unless written permission is obtained from the Planning official.

**115.40 Fence Location.** Fences over 6 feet in height may not be located in a required setback yard. A detached dwelling unit abutting a neighborhood access or collector street may not have a fence over 3.5 feet in height within the required front yard. No fence may be placed within a high waterline setback yard or within any portion of a north or south property line yard, which is coincident with the high waterline setback yard.

A detached dwelling unit may not have a fence over 3.5 feet in height within 3 feet of the property line abutting a principal or minor arterial except where the abutting arterial contains an improved landscape strip between the street and sidewalk. The area between the fence and property line shall be planted with vegetation and maintained by the property owner.

**115.42 Floor Area Ratio (F.A.R.) Limits.** Floor area for detached dwelling units is limited to a maximum floor area ratio in low density residential zones. See Use Zone charts for the maximum percentages allowed. This regulation does not apply within the disapproval jurisdiction of the Houghton Community Council.

**115.75.2 Fill Material.** All materials used as fill must be non-dissolving and non-decomposing. Fill material must not contain organic or inorganic material that would be detrimental to the water quality, or existing habitat, or create any other significant adverse impacts to the environment.

**115.90 Calculating Lot Coverage.** The total area of all structures and pavement and any other impervious surface on the subject property is limited to a maximum percentage of total lot area. See the Use Zone charts for maximum lot coverage percentages allowed. Section 115.90 lists exceptions to total lot coverage calculations. See Section 115.90 for a more detailed explanation of these exceptions.

**115.95 Noise Standards.** The City of Kirkland adopts by reference the Maximum Environmental Noise Levels established pursuant to the Noise Control Act of 1974, RCW 70.107. See Chapter 173-60 WAC. Any noise, which injures, endangers the comfort, repose, health or safety of persons, or in any way renders persons insecure in life, or in the use of property is a violation of this Code.

**115.115 Required Setback Yards.** This section establishes what structures, improvements and activities may be within required setback yards as established for each use in each zone.

**115.115.3.p HVAC and Similar Equipment:** These may be placed no closer than five feet of a side or rear property line, and shall not be located within a required front yard; provided, that HVAC equipment may be located in a storage shed approved pursuant to subsection (3)(m) of this section or a garage approved pursuant to subsection (3)(o)(2) of this section. All HVAC equipment shall be baffled, shielded, enclosed, or placed on the property in a manner that will ensure compliance with the noise provisions of KZC 115.95.

**115.115.5.a Driveway Width and Setbacks.** For a detached dwelling unit, a driveway and/or parking area shall not exceed 20 feet in width in any required front yard, and shall be separated from other hard surfaced areas located in the front yard by a 5-foot wide landscape strip. Driveways shall not be closer than 5 feet to any side property line unless certain standards are met.

**115.115.5.b Driveway Setbacks.** For attached and stacked dwelling units in residential zones, driveways shall have a minimum 5' setback from all property lines except for the portion of any driveway, which connects with an adjacent street. Vehicle parking areas shall have a minimum 20-foot setback from all front property lines and meet the minimum required setbacks from all other property lines for the use.

**145.22.2 Public Notice Signs.** Within seven (7) calendar days after the end of the 21-day period following the City's final decision on the permit, the applicant shall remove all public notice signs.

***Prior to issuance of a grading or building permit:***

**90.50 Wetland Buffer Fence.** Prior to development, the applicant shall install a six-foot high construction phase fence along the upland boundary of the wetland buffer with silt screen fabric installed per City standard. The fence shall remain upright in the approved location for the duration of development activities. Upon project completion, the applicant shall install between the upland boundary of all wetland buffers and the developed portion of the site, either 1) a permanent 3 to 4 foot tall split rail fence, or 2) permanent planting of equal barrier value.

**90.150 Natural Greenbelt Protective Easement.** The applicant shall submit for recording

a natural greenbelt protective easement, in a form acceptable to the City Attorney, for recording with King County.

**90.155 Liability.** The applicant shall enter into an agreement with the City which runs with the property, in a form acceptable to the City Attorney, indemnifying the City for any damage resulting from development activity on the subject property which is related to the physical condition of the stream, minor lake, or wetland.

**95.30(4) Tree Protection Techniques.** A description and location of tree protection measures during construction for trees to be retained must be shown on demolition and grading plans.

**95.34 Tree Protection.** Prior to development activity or initiating tree removal on the site, vegetated areas and individual trees to be preserved shall be protected from potentially damaging activities. Protection measures for trees to be retained shall include (1) placing no construction material or equipment within the protected area of any tree to be retained; (2) providing a visible temporary protective chain link fence at least 6 feet in height around the protected area of retained trees or groups of trees until the Planning Official authorizes their removal; (3) installing visible signs spaced no further apart than 15 feet along the protective fence stating "Tree Protection Area, Entrance Prohibited" with the City code enforcement phone number; (4) prohibiting excavation or compaction of earth or other damaging activities within the barriers unless approved by the Planning Official and supervised by a qualified professional; and (5) ensuring that approved landscaping in a protected zone shall be done with light machinery or by hand.

***Prior to Occupancy:***

**95.51.2.b Tree Maintenance.** For detached dwelling units, the applicant shall submit a 5-year tree maintenance agreement to the Planning Department to maintain all pre-existing trees designed for preservation and any supplemental trees required to be planted.

**Building Department Conditions:**

**Contact: Tom Jensen – tjensen@kirklandwa.gov**

1. Prior to issuance of Building, Demolition or Land Surface Modification permit applicant must submit a proposed rat baiting program for review and approval. Kirkland Municipal Ordinance 9.04.040
2. A demolition permit is required for removal of existing structures.
3. Plumbing meter and service line shall be sized in accordance with the current UPC. We are currently using the 2015 edition.
4. Building permits must comply with the International Building, Residential and Mechanical Codes and the Uniform Plumbing Code as adopted and amended by the State of Washington and the City of Kirkland. Kirkland currently has adopted the 2015 code editions.
5. Structures must comply with International Energy Conservation Code as adopted and amended by the State of Washington. We are currently using the 2015 code edition.
6. Kirkland reviews, issues and inspects all electrical permits in the city. Kirkland currently uses the 2014 Washington Cities Electrical Code chapters 1 and 3 as published by WABO. Permits submitted after June 30, 2017 shall comply with the 2017 code edition.
7. Structures must be designed for seismic design category D, wind speed of 110 miles per hour and exposure B.

**Fire Department Conditions:**

Fire has no specific comment. The Fire Department checks each single family permit for fire flow, hydrant proximity, access width and grade, and size. For this permit, all parameters meet minimum requirements. The fire department has no additional requirement or comments on this single family permit application.

Existing hydrants in the area are adequate to provide coverage for this project. The closest hydrant is already equipped with a 5" Storz fitting.

Fire flow in the area is approximately 1700 gpm, which is adequate for development.

**Public Works Department:**

Tuan Phan at 425.587.3843

1. All Work Must Meet Kirkland Standards: All work associated with this project, including street improvements and utility connections, must meet the City of Kirkland Public Works Standards and Policies. Purchase manual from Public Works or view on-line at [www.kirklandwa.gov/depart/Public\\_Works/DevelopmentServices/Pre-Approved\\_Plans.htm](http://www.kirklandwa.gov/depart/Public_Works/DevelopmentServices/Pre-Approved_Plans.htm)
2. Working Hours in Right-of-way: Working hours in arterial traffic lanes is 9 a.m. to 3:30 p.m. and 7:00 a.m. to 4:00 p.m. in all other classifications unless restricted by a special permit condition. No work in public rights-of-way are allowed on Saturday, Sunday, and holidays observed by the City of Kirkland.
3. Underground All Overhead Utility Lines: All new or existing overhead utility lines (power, phone, TV, etc) shall be placed underground from the building to the point of origin at the primary/distribution lines of the utility (overhead lines to secondary or service poles will not be allowed).
4. Install Erosion Control Prior to Construction: Erosion control measures approved by the Public Works Department must be installed and inspected prior to the commencement of any construction.
5. Mandatory TESC Material Stockpiling: In addition to the mandatory TESC materials installed at the time of grading, the owner/contractor shall stockpile the following materials prior to work startup:
6. Minimum of 6 straw bales or wattles, and 6 additional bales /wattles per additional acre disturbed.
7. Minimum 75 feet of filter fabric, and 75 feet per additional disturbed acre.
8. Minimum of 15 silt fence stakes, and 15 stakes per additional disturbed acre.
9. This material must be protected from the elements and readily available to the contractor, if installation of emergency erosion control measures becomes necessary. Also, if any of the stockpiled materials are used, they shall be replaced within 2 days.

10. Protect Adjacent Property: Adequate drainage protection must be provided for adjacent properties. Applicants must control development runoff to ensure activities will not cause nuisance or adverse impact to adjacent private and public property.
11. Erosion Control Inspections: Erosion and Sediment Control (ESC) Inspections Required: Approved ESC measures must be installed prior to commencement of construction, and periodic inspections will be conducted during the course of construction.
12. ESC Inspection #1 - Required prior to pouring concrete for foundation and footings.
13. ESC Inspection #2 - Required after foundation backfill, rough grading, and prior to subfloor framing inspection. Subfloor framing inspection will not be performed until this ESC inspection has been successfully completed.
14. ESC Inspection #3 - Required for final site stabilization. A final building department inspection and sign-off will not occur until the final ESC inspection has been fully completed.
15. Streets and Storm Drains shall be kept Clean: Contractor is responsible for keeping streets and/or storm drains clean at all times from mud and debris. Failure to prevent mud and debris from entering the street and/or public stormwater system will result in storm drain cleaning by a private vector truck and may result in monetary and/or civil penalties.
16. Cover All Exposed Soil: Construction drainage control shall be maintained by the developer and subject to periodic inspections. During the period from May 1 to September 30, all denuded soils must be covered within 7 days; between October 1 and April 30, all denuded soils must be covered within 12 hours. Additional erosion control measures may be required based on site and weather conditions. Exposed soils shall be stabilized at the end of the workday prior to a weekend, holiday, or predicted rain event.
17. Do Not Allow Saw-cutting Slurry to Enter the Storm Drain: The contractor must prevent discharge of saw-cutting slurry to the stormwater system. Saw-cutting slurry that enters the stormwater system must be removed immediately. Failure to remove slurry from the stormwater system will result in storm drain cleaning by a private vector truck and may result in monetary and/or civil penalties.
18. Construction IDDE Response: If your construction project discharges turbid or dirty water to the public storm system the City of Kirkland Storm Maintenance Division will be called to clean the public storm system. Your project will pay all costs associated with the clean-up including applicable fines per Section 15.52 of the Kirkland Municipal Code. A Final Inspection of your Project will not be granted until all costs associated with the clean-up, including fines, are paid to the City of Kirkland.
19. Permeable Pavement Testing: Prior to acceptance, the design engineer/geotechnical professional will perform an infiltration test on the permeable pavement, following the standard test method per ASTM C1701/C1701M-09. City staff must be present to observe the test method and result.
20. Protect Areas to be used for Infiltration: Areas to be used for infiltration or stormwater low impact development facilities must be protected from compaction and siltation during construction. Additional geotechnical verification during construction may be required.

21. No excavation or fill is authorized to encroach upon a neighboring property without explicit agreement by the adjoining property owner.
22. Permeable Paver Driveways shall be constructed in accordance with Public Works Pre-Approved Plans CK-L.09 and CK-L.10. Impervious check dams in the base course are required for slopes between 2 percent and 12 percent. Slope shall not exceed 12 percent. Refer to the Pre-Approved Plans for complete details.
23. New sidewalk located within the wetland buffer shall be constructed of pervious concrete. Pervious concrete sidewalk shall be in accordance with Public Works Pre-Approved Plan CK-L.06.

**AQUATICA**

Environmental Consulting, LLC  
PO Box 308  
Duvall, Washington 98019

October 19, 2015

AQ#15-260

City of Kirkland  
123 Fifth Avenue  
Kirkland, WA 98033

REFERENCE: 140 18<sup>th</sup> Avenue – Parcels 1245000-975, -980  
SUBJECT: Wetland Report

To Whom It May Concern:

This letter summarizes information regarding sensitive areas identified on and near the property located at 140 18<sup>th</sup> Avenue and the regulatory requirements for these features according to Chapter 90 of the Kirkland Zoning Code (KZC). This property has historically been composed of four individual lots, although my understanding is it was consolidated for taxing purposes into two lots with the above noted parcel numbers. The attached survey depicts four lots, although some other maps, including the City Sensitive Area map, show it as two parcels. Currently, one home is located on the south eastern corner of the property.

**REVIEW OF BACKGROUND MATERIALS**

Background material reviewed prior to my site visit included the City of Kirkland's Sensitive Areas Map, a stream report prepared for a nearby lot, and the Natural Resources Conservation Service (NRCS) soil survey. According to the City map, the property is located in the Forbes Creek Drainage Basin, designated as a primary drainage basin. The City map depicts a wetland on the northwestern corner of the site, and a stream originating from this wetland just north of the northern property (**Appendix A**). This stream has been previously classified as a Class B stream with perennial (year around) water flow. This stream was classified by Aquatica in June of 2012 for the Neupauer property, located just to the north on the same City block and reviewed and approved by the City (Aquatica June 2012). This stream reportedly flows year-around according to nearby residents. Due to the small size of the stream and relatively steep gradients located to the north, this stream is not used by salmonids.

The Natural Resources Conservation Service (NRCS) has mapped soil on the majority of the property as Alderwood/Arents complex, 6-15% slopes. The eastern edge of the property is classified as Indianola loamy fine sandy, 4-15% slopes (**Appendix A**). These are not listed as hydric soils, although it is not uncommon for hydric inclusions to be present that are not captured due to the scale of soil mapping.

### **WETLAND DELINEATION**

The wetland was delineated according to the Army Corps of Engineers 1987 Wetland Delineation Manual and the 2010 Regional Supplement for the Western Mountains, Valleys, and Coast Region. The wetland boundary was flagged with pink and black “wetland delineation” surveyors tape tied to vegetation and orange wire flags. Pairs of sample plots bracketing the wetland boundaries were established to aid in determining the location of the wetland boundaries and were also flagged on-site. Sample plot data forms and wetland rating forms are attached (**Appendix B**). **NOTE: in the lawn area there is a red wire flag marking the location of an underground nest of yellow jackets.**

The mapped wetland was found to be located across much of the western portion of the property and occupies over a half acre. It appears to extend off-site to the north, and while its precise off-site boundaries are not known, its overall size is likely between three quarters of an acre to one acre, based on the topography and vegetation off-site. Portions of the wetland had ponded water both at the time of the delineation and during an earlier site visit in the middle of a very hot and dry summer in July of 2015. Nearly all of the areas within the wetland boundary had a near surface high water table, with the only exception being near the wetland edge. Although there were areas of ponded water at the time of the delineation, these areas did not appear to have flowing water and the stream is assumed to originate just off-site to the north, perennially supported by the seemingly abundant year around ground water flow from this wetland. Soil in the interior of the wetland was a black (10YR 2/1) silt loam. Soil near the wetland edge was observed to be a very dark brown (10YR 2/2) with oxidized rhizomes present within five inches of the soil surface. In very obvious upland areas of the property what appeared to be concretions were present in the soil; these concretions are not believed to be reflective of a high water table, but are a relict feature of the parent material.

The wetland supports a mix of native and non-native vegetation. The wetland in the southwestern corner of the property is maintained lawn, vegetated by common lawn grasses and opportunistic emergent plants including soft rush (*Juncus effusus*), colonial bentgrass (*Agrostis capillaris*), creeping buttercup (*Ranunculus repens*), velvet grass (*Holcus lanatus*), and meadow blue grass (*Poa palustris*). The northwestern corner of the wetland supports a dense stand of cattails (*Typha latifolia*), and the northeastern portion of the wetland has a forested over story composed of Douglas fir (*Pseudotsuga menziesii*) growing on hummocks within the wetland, as well as Sitka spruce (*Picea sitchensis*), red alder (*Alnus rubra*), and black cottonwood (*Populus balsamifera*). Understory vegetation includes widespread patches of blackberry (*Rubus armeniacus*), nightshade (*Solanum dulcamara*), lady fern (*Athyrium filix-femina*), small-fruited bulrush (*Scirpus microcarpus*), and horsetail (*Equisetum arvensis*).



Photo 1. Area of wetland maintained as lawn in the southwest corner of the property. This area had a near water surface table in both July and October 2015.



Photo 2. Surface ponding near the northern wetland edge, present in July and October 2015.



Photo 3. Forested portion of the wetland, generally with a weedy understory

Page 4 of 4  
October 19, 2015

### **WETLAND REGULATIONS (City of Kirkland)**

The wetland was rated according to Plate 26, as required by the Kirkland Zoning Code. Through this form, the wetland was determined to be a Type 2 wetland. According to the City of Kirkland Sensitive Areas map, KZC 90.30, this property is located in the Forbes Creek Drainage Basin, which is classified as a Primary Drainage Basin. Type 2 wetlands in a Primary drainage basin require a buffer width of 75 feet (KZC 90.45(1)). An additional 10-foot building setback from this buffer is also required (KZC 90.90(2)). The stream is located off-site and within the wetland boundary. Streams with perennial (year around) flow that are not used by salmonids are classified by KZC 90.30 as Class B streams. Class B streams located within Primary Drainage Basins required a buffer setback of 60 feet (KZC 90.90(1)). Since the wetland surrounds the stream and has a larger buffer, the wetland buffer completely encompasses any stream buffer.

The approximate locations of the wetland and buffer are depicted on Figure 1. The majority of the property is constrained by wetland and buffer. A reduction of the buffer by one-third (typically allowed with mitigation by the City), will likely not enable development of all of the lots. In particular, the northern lots will probably require a reasonable use exemption to be developed, which would be addressed during future permitting.

Prior to The Watershed Company's site visit, prior notification is requested so that I can accompany them on the site visit.

If you should have any questions, please contact me at 425-802-8988.

Sincerely,



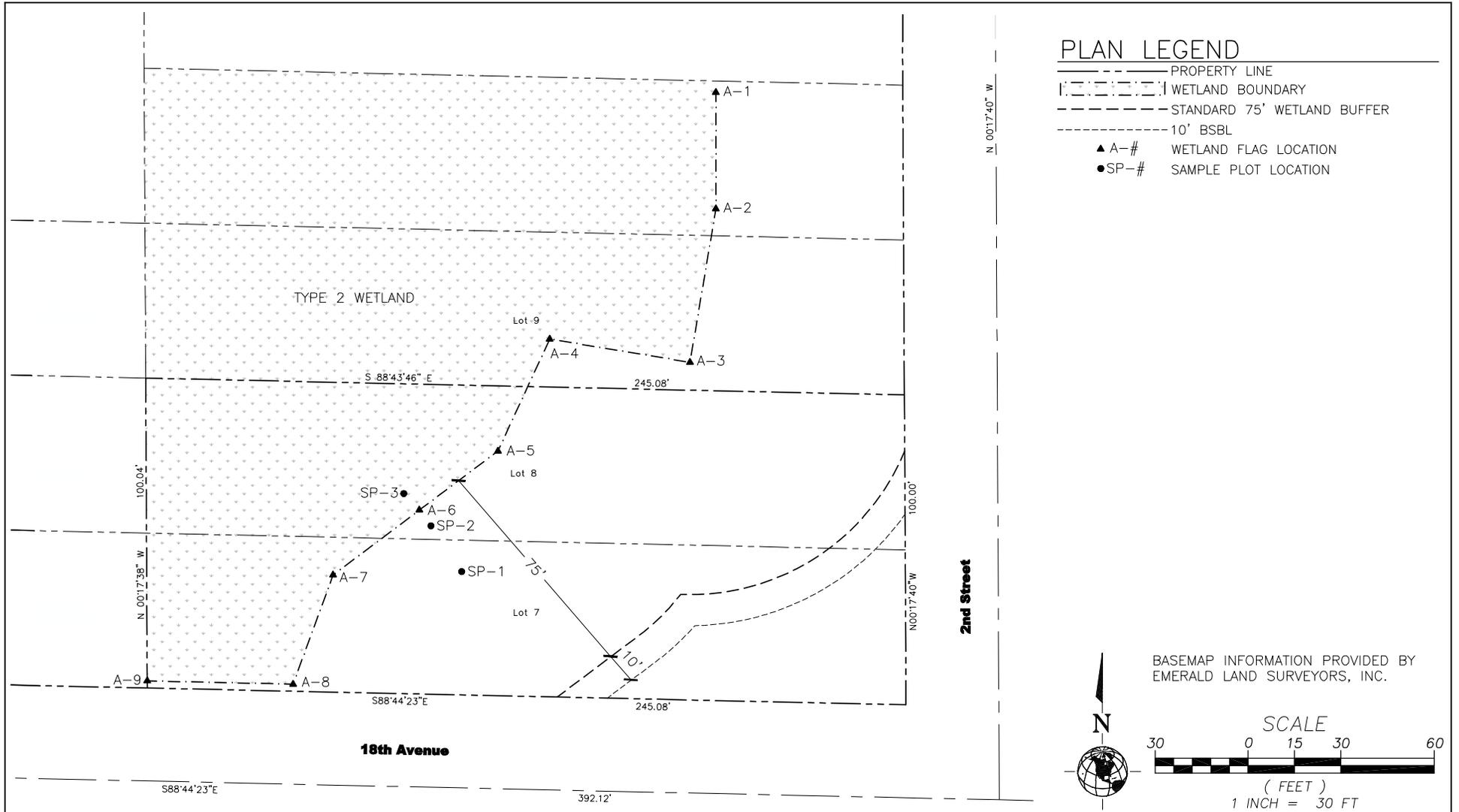
Teresa Opolka  
Wetland Ecologist, PWS

Attachments:

Figure 1: Wetland Survey

Appendix A: City wetland map and NRSC Soil Map

Appendix B: Wetland Sample Plot Data Forms and Wetland Rating Form



15-260.DWG

<b>AQUATICA</b> ENVIRONMENTAL CONSULTING, LLC		WETLAND MAP	
P.O. BOX 308 DUVALL, WA 98019		140 18TH AVE., KIRKLAND, WASHINGTON	
T 425.802.8988		DATE 10.19.15	
PROJECT NO.		15-260	
FIGURE 1		OF 1	
DRAWN BY KG	CHECKED BY TO		



## Appendix A

### City Wetland Map and NRCS Soil Map

Soil Map—King County Area, Washington  
(140 18th Avenue, Kirkland, Washington)



**Subject Parcels**

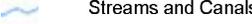
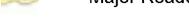
Map Scale: 1:1,700 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84



**MAP LEGEND**

- Area of Interest (AOI)**
  -  Area of Interest (AOI)
- Soils**
  -  Soil Map Unit Polygons
  -  Soil Map Unit Lines
  -  Soil Map Unit Points
- Special Point Features**
  -  Blowout
  -  Borrow Pit
  -  Clay Spot
  -  Closed Depression
  -  Gravel Pit
  -  Gravelly Spot
  -  Landfill
  -  Lava Flow
  -  Marsh or swamp
  -  Mine or Quarry
  -  Miscellaneous Water
  -  Perennial Water
  -  Rock Outcrop
  -  Saline Spot
  -  Sandy Spot
  -  Severely Eroded Spot
  -  Sinkhole
  -  Slide or Slip
  -  Sodic Spot
- Water Features**
  -  Spoil Area
  -  Stony Spot
  -  Very Stony Spot
  -  Wet Spot
  -  Other
  -  Special Line Features
  -  Streams and Canals
- Transportation**
  -  Rails
  -  Interstate Highways
  -  US Routes
  -  Major Roads
  -  Local Roads
- Background**
  -  Aerial Photography

**MAP INFORMATION**

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.  
Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: King County Area, Washington  
Survey Area Data: Version 10, Sep 30, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 31, 2013—Oct 6, 2013

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

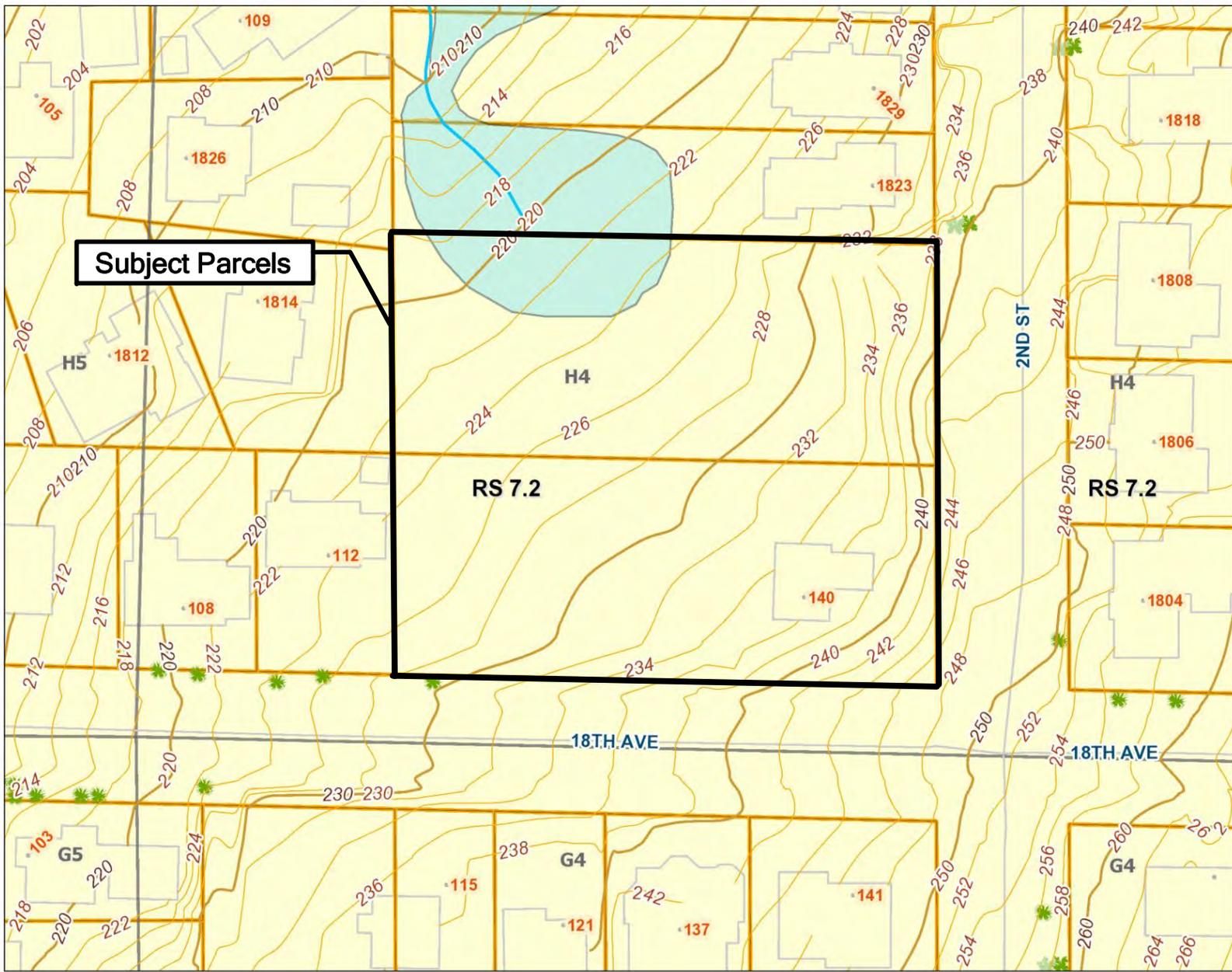
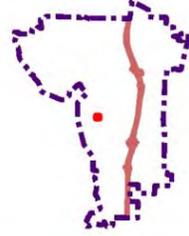
## Map Unit Legend

King County Area, Washington (WA633)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AmC	Arents, Alderwood material, 6 to 15 percent slopes	10.7	82.6%
InC	Indianola loamy fine sand, 4 to 15 percent slopes	2.2	17.4%
<b>Totals for Area of Interest</b>		<b>12.9</b>	<b>100.0%</b>



# 140 18th Ave Wetland Map

ATTACHMENT 4



### Legend

- Contours 10 Feet
- Contours 2 Feet
- Trees**
  - Group
  - Planting Space
  - Stump
  - Trees
- Streams**
  - Open
  - Pipe
- Wind Exposure Zone**
  - Exposure D Zone
  - Exposure C Zone
- Restoration Management Unit
- Floodplain
- Landslide**
  - High
  - Moderate
- Wetlands
- Seismic
- Address
- City Limits
- Cross Kirkland Corridor
- Regional Rail Corridor
- Streets

1: 798



### Notes

Youngs/Neubert

0.0 0 0.01 0.0 Miles

NAD\_1983\_StatePlane\_Washington\_North\_FIPS\_4601\_Feet

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## Appendix B

### Wetland Rating Forms and Wetland Sample Plot Forms

**Plate 26 WETLAND FIELD DATA FORM**

(Note: Applicable to Chapter 90 KZC, but not Chapter 83 KZC)



**WETLAND FIELD DATA FORM**

BEGIN BY CHECKING ANY OF THE FOLLOWING (a. – e.) THAT APPLY:

- a. The wetland is contiguous to Lake Washington;
- b. The wetland contains at least 1/4 acre of organic soils, such as peat bogs or mucky soils;
- c. The wetland is equal to or greater than 10 acres in size and having three or more wetland classes, as defined by the U.S. Fish & Wildlife Service (Cowardin et al., 1979), one of which is open water;
- d. The wetland has significant habitat value to state or federally listed threatened or endangered wildlife species; or
- e. The wetland contains state or federally listed threatened or endangered plant species.

IF ANY OF THE CRITERIA LISTED ABOVE ARE MET, THEN THE WETLAND IS CONSIDERED TO BE TYPE 1. IF THAT IS THE CASE, PLEASE CONTINUE TO COMPLETE THE ENTIRE FORM, BUT DO NOT ASSIGN POINTS.

IF THE WETLAND DOES NOT MEET THE CRITERIA LISTED ABOVE FOR TYPE 1, COMPLETE THE ENTIRE FORM, USING THE ASSIGNED POINTS TO DETERMINE IF IT IS A TYPE 2 OR TYPE 3 WETLAND.

Type 2 wetlands typically have at least two wetland vegetation classes, are at least partially surrounded by buffers of native vegetation, connected by surface water flow (perennial or intermittent) to other wetlands or streams, and contain or are associated with forested habitat.

**1. Total wetland area**

Estimate <u>wetland</u> area and score from choices	Acres		Point Value	Points
	>20.00	=	6	
	10-19.99	=	5	
	5-9.99	=	4	
	1-4.99	=	3	

$$0.1-0.99 = 2$$

$$<0.1 = 1$$

**2. Wetland classes: Determine the number of wetland classes that qualify, and score according to the table.**

	# of Classes	=	Point
<b>Open Water:</b> if the area of open water is >1/3 acre or >10% of the total wetland area	1	=	1
<b>Aquatic Beds:</b> if the area of aquatic beds is >10% of the open water area or >1/2 acre	2	=	3
<b>Emergent:</b> if the area of emergent class is >1/2 acre or >10% of the total wetland area	3	=	5
<b>Scrub-Shrub:</b> if the area of scrub-shrub class is >1/2 acre or >10% of the total wetland area	4	=	7
<b>Forested:</b> if the area of forested class is >1/2 acre or >10% of the total wetland area	5	=	10

**3. Plant species diversity.**

For all wetland classes which qualified in 2 above, count the number of different plant species and score according to the table below. You do not have to name them.

e.g., if a wetland has an aquatic bed class with 3 species, and emergent class with 4 species and a scrub-shrub class with 2 species, you would circle 2, 2, and 1 in the second column (below).

Class	# of Species	=	Point Value	Class	# of Species	=	Point Value
Aquatic Bed	1-2	=	1	Scrub-Shrub	1-2	=	1
	3	=	2		3-4	=	2
	>3	=	3		>4	=	3
Emergent	1-2	=	1	Forested	1-2	=	1
	3-4	=	2		3-4	=	2
	>4	=	3		>4	=	3

**4. Structural diversity.**

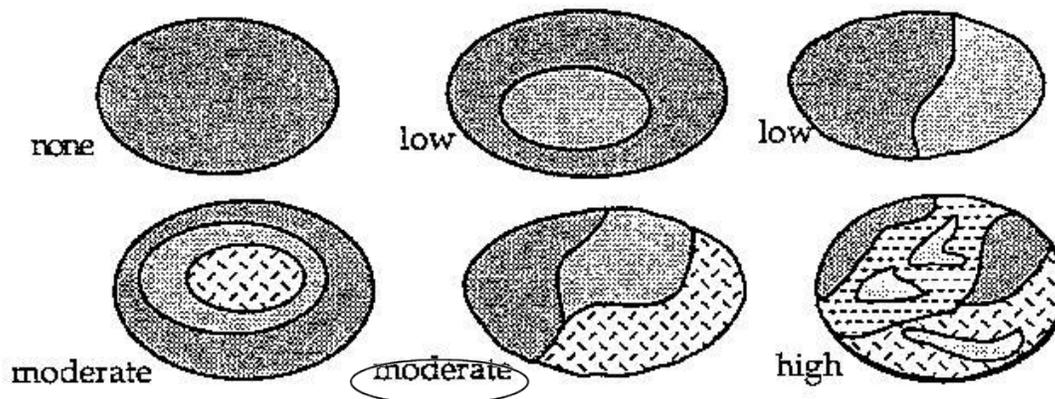
If the wetland has a forested class, add 1 point for each of the following attributes present:

- Trees >50' tall = 1
- Trees 20' to 49' tall = 1
- shrubs = 1
- Herbaceous ground cover = 1

**5. Interspection between wetland classes.**

Decide from the diagrams below whether interspection between wetland classes is high, moderate, low or none

- 3 = High
- 2 = Moderate
- 1 = Low
- 0 = None



**6. Habitat features**

- Add points associated with each habitat feature listed: = 3
- Is there evidence of current use by beavers? = 2
- Is a heron rookery located within 300'? = 1
- Are raptor nest(s) located within 300'? = 1
- Are there at least 2 standing dead trees (snags) per acre?2 = 1
- Are there any other perches (wires, poles, or posts)? = 1
- Are there at least 3 downed logs per acre? = 1

**7. Connection to streams**

- Is the wetland connected at any time of the year via surface water? (score one answer only)
- Is the wetland connected at any time of the year via surface water?

To a perennial stream or a seasonal stream *with* fish = 5

To a seasonal stream *without* fish = 3

Is not connected to any stream = 0

**8. Buffers**

*Step 1:* Estimate (to the nearest 5%) the percentage of each buffer or land-use type (below) that adjoins the wetland boundary. Then multiply these percentages by the factor(s) below and enter result in the column to the right.

	% of Buffer	Step 1	Width Factor	Step 2
Roads, buildings or parking lots	% X 0 =	10	= 1	10
Lawn, grazed pasture, vineyards or annual crops	% X 1 =	60	= 2	120
Ungrazed grassland or orchards	% X 2 =		=	
Open water or native grasslands	% X 3 =		=	
Forest or shrub	% X 4 =	30	= 2	60
			Add buffer total	190

*Step 2:* Multiply result(s) of step 1:  
 By 1 if buffer width is 25-50'  
 By 2 if buffer width is 50-100'  
 By 3 if buffer width is >100'

Enter results and add subscores

*Step 3:* Score points according to the following table:

Buffer Total  
 900-1200 = 4  
 600-899 = 3  
 300-599 = 2  
 100-299 = 1

**9. Connection to other habitat areas:**

Is there a riparian corridor to other wetlands within 0.25 of a mile, or a corridor >100' wide with good forest or shrub cover to any other habitat area? = 5

Is there a narrow corridor <100' wide with good cover or a wide corridor >100' wide with low cover to any other habitat area? = 3

Is there a narrow corridor <100' wide with low cover or a significant habitat area within 0.25 mile but no corridor? = 1

Is the wetland and buffer completely isolated by development and/or cultivated agricultural land? = 0

#### 10. Scoring

Add the scores to get a total: 32

Question: Is the total greater than or equal to 22 points?

Answer:

Yes = Type 2

No = Type 3

(Ord. 3834 § 3, 2002)

**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: 140 18th Avenue City/County: Kirkland / King Sampling Date: 10/13/15  
 Applicant/Owner: DC Granger Inc. State: WA Sampling Point: SP# 1  
 Investigator(s): T. Opalka Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): LS  
 Subregion (LRR): A Lat: / Long: / Datum: /  
 Soil Map Unit Name: Arents gravelly sandy loam NWI classification: upland loam  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? N Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? N (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>		
Remarks: <u>Obvious upland plot</u>			

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30' dia</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (AB)
1. <u>Pseudotsuga menziesii</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	
2. _____				
30 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiplier: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Shrub/Strat. (Plot size: <u>6' Rad</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Cornus cornuta</u>	<u>100</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Rubus armeniacus</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Ilex cornuta (holly)</u>	<u>40</u>	<u>Y</u>	<u>NL</u>	
100 = Total Cover				
Herb Stratum (Plot size: <u>6' dia</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Hedera helix</u>	<u>10</u>	<u>Y</u>	<u>NL</u>	
10 = Total Cover				
Woody Vine Stratum (Plot size: <u>6' dia</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Rubus ursinus</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
10 = Total Cover				
% Bare Ground in Herb Stratum <u>40</u>				
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>				
Remarks: _____				

**SOIL**

Sampling Point: SP#1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
D-18"	10YR 9/3	95						Few concretions, no Redox features

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histic (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Restrictive Layer (if present):		
Type: _____	Depth (inches): _____	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

**HYDROLOGY**

Wetland Hydrology Indicators:

<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA-1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: 140 18th Avenue City/County: Kirkland / King Sampling Date: 10/13/15  
 Applicant/Owner: DC Granger Inc. State: WA Sampling Point: SP# 2  
 Investigator(s): T. Opalka Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 5  
 Subregion (LRR): A Lat: / Long: / Datum: /  
 Soil Map Unit Name: Arents gravelly sandy loam NWI classification: UPL Forest  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? N Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? N (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>		
Remarks: <u>close to Wetland Edge</u>			

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30' Dia.</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
<u>0</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>16' Rad.</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
<u>0</u> = Total Cover			
Herb Stratum (Plot size: <u>6' dia.</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Agrostis capillaris</u>	<u>45</u>	<u>Y</u>	<u>FAC</u>
2. <u>Festuca rubra</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>
3. <u>Taraxacum officinale</u>	<u>5</u>	<u>N</u>	<u>FAC</u>
4. <u>MOSS</u>	<u>10</u>	<u>N</u>	<u>NL</u>
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
<u>100</u> = Total Cover			
Woody Vine Stratum (Plot size: <u>30' Dia.</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
<u>0</u> = Total Cover			
% Bare Ground in Herb Stratum <u>0</u>			
Remarks: _____			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is >3.0

4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)

5 - Wetland Non-Vascular Plants

Problematic Hydrophytic Vegetation (Explain)

Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No \_\_\_\_\_

**SOIL**

Sampling Point: Spot 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-12	10YR3/2	100	8					
12-20	10YR4/2	98	10YR7/6	2	C	M	Sandy ↓	gravelly loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)
- Histosol (A1)
  - Histic Epipedon (A2)
  - Black Histic (A3)
  - Hydrogen Sulfide (A4)
  - Depleted Below Dark Surface (A11)
  - Thick Dark Surface (A12)
  - Sandy Mucky Mineral (S1)
  - Sandy Gleyed Matrix (S4)
  - Sandy Redox (S5)
  - Stripped Matrix (S6)
  - Loamy Mucky Mineral (F1) (except MLRA 1)
  - Loamy Gleyed Matrix (F2)
  - Depleted Matrix (F3)
  - Redox Dark Surface (F8)
  - Depleted Dark Surface (F7)
  - Redox Depressions (F8)
- Indicators for Problematic Hydric Soils<sup>3</sup>:
- 2 cm Muck (A10)
  - Red Parent Material (TF2)
  - Very Shallow Dark Surface (TF12)
  - Other (Explain in Remarks)
- <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):  
 Type: \_\_\_\_\_  
 Depth (Inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:  
 Redoxomorphic features just below 12". Located near wetland edge

**HYDROLOGY**

- Wetland Hydrology Indicators:
- Primary Indicators (minimum of one required; check all that apply)
- Surface Water (A1)
  - High Water Table (A2)
  - Saturation (A3)
  - Water Marks (B1)
  - Sediment Deposits (B2)
  - Drift Deposits (B3)
  - Algal Mat or Crust (B4)
  - Iron Deposits (B5)
  - Surface Soil Cracks (B6)
  - Inundation Visible on Aerial Imagery (B7)
  - Sparsely Vegetated Concave Surface (B8)
  - Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
  - Salt Crust (B11)
  - Aquatic Invertebrates (B13)
  - Hydrogen Sulfide Odor (C1)
  - Oxidized Rhizospheres along Living Roots (C3)
  - Presence of Reduced Iron (C4)
  - Recent Iron Reduction in Tilled Soils (C6)
  - Stunted or Stressed Plants (D1) (LRR A)
  - Other (Explain in Remarks)
- Secondary Indicators (2 or more required)
- Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
  - Drainage Patterns (B10)
  - Dry-Season Water Table (C2)
  - Saturation Visible on Aerial Imagery (C9)
  - Geomorphic Position (D2)
  - Shallow Aquitard (D3)
  - FAC-Neutral Test (D5)
  - Raised Ant Mounds (D6) (LRR A)
  - Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No  Depth (Inches): \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No  Depth (Inches): \_\_\_\_\_

Saturation Present? (includes capillary fringe) Yes \_\_\_\_\_ No  Depth (Inches): \_\_\_\_\_

Wetland Hydrology Present? Yes \_\_\_\_\_ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: 140 18th Avenue City/County: Kirkland / King Sampling Date: 10/13/15  
 Applicant/Owner: DC Granger Inc. State: WA Sampling Point: SP#3  
 Investigator(s): T. Opalka Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): concave Slope (%): ≤5  
 Subregion (LRR): A Lat: / Long: / Datum: /  
 Soil Map Unit Name: Arents gravelly sandy loam NWI classification: PEM1  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (if no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? N Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? N (if needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <u>Wetland</u>	

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30' dia</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:
Seeding/Shrub Stratum (Plot size: <u>6' Rad</u> ) <u>Ø</u> = Total Cover				Total % Cover of: _____ Multiplied by: _____
1. _____	_____	_____	_____	OBL species _____ x 1 = _____
2. _____	_____	_____	_____	FACW species _____ x 2 = _____
3. _____	_____	_____	_____	FAC species _____ x 3 = _____
4. _____	_____	_____	_____	FACU species _____ x 4 = _____
5. _____	_____	_____	_____	UPL species _____ x 5 = _____
Herb Stratum (Plot size: <u>6' Rad</u> ) <u>Ø</u> = Total Cover				Column Totals: _____ (A) _____ (B)
1. <u>Poa palustris</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	Prevalence Index = B/A = _____
2. <u>Agrostis capillaris</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators:
3. <u>Aster rubra</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	1 - Rapid Test for Hydrophytic Vegetation
4. <u>Holcus lanatus</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is ≥50%
5. <u>Carex sp.</u>	<u>1</u>	<u>N</u>	<u>OBL</u>	3 - Prevalence Index is ≥3.0 <sup>1</sup>
6. _____	_____	_____	_____	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
7. _____	_____	_____	_____	5 - Wetland Non-Vascular Plants <sup>1</sup>
8. _____	_____	_____	_____	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
9. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
10. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
11. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: <u>6' dia</u> ) <u>Ø</u> = Total Cover				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
% Bare Ground in Herb Stratum <u>Ø</u>				
Remarks: _____				

SOIL

Sampling Point: Spot 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
D-4	10YR2/2	100	0				Sandy loam	
4-20	10YR2/2	95	10YR3/6	5	C	PL	↓	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histic (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (Includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>5"</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:





February 23, 2016

Sean LeRoy  
City of Kirkland  
123 5<sup>th</sup> Avenue  
Kirkland, WA 98033

## **Re: Kirkland Medici Property Wetland Delineation Review**

The Watershed Company Reference Number: 140622.55

Dear Sean:

This letter represents our peer review of the wetland delineation study recently completed for the property located at 140 18<sup>th</sup> Avenue in Kirkland (*140 18<sup>th</sup> Avenue – Parcels 1245000-975, -980 Wetland Report*. Aquatica Environmental Consulting, LLC. October 19, 2015) (Aquatica Study). The approximately 1.1-acre property encompasses two parcels #124500-0975 & -0980 per Kirkland GIS maps (Kirkland Maps). King County iMAP depicts the subject property as encompassing four parcels (#124500-0975, -0977, -0980, & -0981).

### **Background Review**

Both Aquatica and Kirkland Maps depict a wetland on the subject property. Kirkland Maps also depicts a stream located within the wetland beginning off-site on the adjacent property to the north. The Aquatica Study mapped the wetland, Wetland A, as encompassing the northwest half of the subject property. Aquatica also determined Wetland A is a Type 2 wetland, per the City of Kirkland Wetland Field Data Form (wetland rating form), scoring a total of 32 points. The stream was not separately delineated, as it originates off-site on the adjacent property to the north, and the wetland and its buffer are more encumbering. The off-site stream was previously delineated by The Watershed Company and can be referenced in the report, *“Madison Property 1922 1<sup>st</sup> Street – Stream and Wetland Delineation Study*. The Watershed Company. January 15, 2016). That study confirmed that the offsite stream is a perennial stream that does not contain salmonid fish. It was determined that natural downstream fish barriers (steep gradient) and the relatively small stream size preclude salmonid fish use in the stream.

### **Review**

The Aquatica Study is thorough and well-written, accurately reflecting the existing site conditions and regulatory summary. The delineated wetland boundary and classification were reviewed on February 11, 2016. We agree with the delineated wetland boundary, as all of the boundary flag locations were found to be accurate. We also agree with the classification of

Wetland A as a Type 2 wetland; however, two minor scoring discrepancies were noted that should be addressed to maintain consistency:

- Question #6 – Habitat features: The only habitat features the Aquatica Study noted was “at least 2 standing dead trees (snags) per acre.” There are also “at least 3 downed logs per acre.” The logs may not have been present at the time of the Aquatica Study in October 2015. They appear to have recently fallen from trees along the perimeter of the wetland near 18<sup>th</sup> Avenue. Regardless, the existing condition includes these habitat features, and they should be accounted for on the wetland rating form. This change will add one additional point to the total score.
- Question #9 – Connection to other habitat areas: Aquatica noted there is a “riparian corridor to other wetlands within 0.25 of a mile, or a corridor >100’ wide with good forest or shrub cover to any other habitat area.” There is a small riparian corridor, although it does not lead to any other wetlands or other habitat areas. The corridor is broken approximately 425 feet north of the subject property where the stream flows through a culvert beneath 19<sup>th</sup> Avenue. In the absence of a riparian or forested corridor, the most-applicable option is “a narrow corridor <100 feet wide with low cover or a significant habitat area within 0.25 mile but no corridor.” This change will reduce the point allocation for this question from five points to one point.
- After incorporating the above changes, the total score for Wetland A should be reduced from 32 points to 28 points. This change does not affect the classification of Wetland A as a Type 2 wetland.

The City is in the process of revising its critical areas code (Chapter 90) and will likely be adopting the *Western Washington Wetland Rating System 2014 Update* (Washington Department of Ecology, January 2015) (Ecology Rating System) as the official wetland rating system for wetlands in Kirkland. We recommend completion of the 2014 Ecology Rating System to ensure that the appropriate rating system is prepared when building permit applications are submitted.

Please call if you have any questions or if we can provide you with any additional information.

Sincerely,



Ryan Kahlo, PWS  
Ecologist

Sean Leroy  
Kirkland Planning

Dear Sean,

It is important to me to know that the stream on the Medici-Granger Wetland Buffer Reduction will be protected. I understand that the stream originates from springs in that area and produces clean clear water that then goes into Forbes Creek, and on into Lake Washington. As stewards of our waterways and swimmers in Lake Washington, We have a duty to protect the cleanliness of our precious water.

Many Thanks,

Chris Conrad  
[chrisconrad1@juno.com](mailto:chrisconrad1@juno.com)

---

**From:** Alan Johnston [[mailto:alan\\_h\\_johnston@hotmail.com](mailto:alan_h_johnston@hotmail.com)]  
**Sent:** Tuesday, September 13, 2016 3:27 PM  
**To:** Sean LeRoy  
**Subject:** Permit Number **SAR16-01958** (Medici-Granger Wetland Buffer Reduction)

Dear Mr. Leroy,

I am writing regarding the subject permit. I am a Kirkland homeowner, residing at 1948 1st Street. The proposed development is in an area close to the spring of a stream that flows through our neighborhood and through my back yard. I am opposed to this development if there is a possibility that the proposed buffer reduction will affect the waters that flow in that stream. I want to be assured that this development will not result in construction chemicals, residue or other polluting substances being added to the stream, and that the flow of the stream, in general, will continue to be protected.

Sincerely,  
Alan H. Johnston  
Retired Boeing Structural Analysis Engineer  
[alan\\_h\\_johnston@hotmail.com](mailto:alan_h_johnston@hotmail.com)

---

Hello Sean

My name is Blair Erbstoeszter and I live at 1823 2<sup>nd</sup> St in Kirkland and I am writing regarding permit # **SAR16-01958**.

I have the following comments and concerns about the proposed development at 1805, 2<sup>nd</sup> Street:

1. Proposed Sidewalks:
  - a. I welcome the sidewalks and the safety that they will bring, but want to make sure that potential water issues are mitigated (just the resurfacing of the streets last year caused significant water to flow into our garage and drainage system when the fall rains came). Much of the street run-off will now flow down the street instead of into the empty lots as it currently does during heavy rains.
2. Proposed Wetland Buffer Reduction:
  - a. We have streams and wildlife in our back yard as a result of the current water table, vegetation and overall ecosystem.
  - b. Our home requires a sump-pump due to water flow under our home (likely originating in a spring/aquifer located in the wetlands in question). Any changes to the south of us will affect the water table could impact our home and possible water ingress.
  - c. In 2011, we were unable to change our wetland buffer setback as part of our home remodel (BLD11-0087) and as a result incurred some additional costs due to being required to have an irregular-shaped deck.

Thank you for your time and consideration of these matters.

Blair Erbstoesz 425-213-7398

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**From:** Diane Lynch [<mailto:deedeelynych@yahoo.com>]  
**Sent:** Thursday, September 01, 2016 6:16 PM  
**To:** Sean LeRoy  
**Subject:** Medici-Granger Wetland Buffer Reduction, Case No. **SAR16-01958**

I live at 1843 2nd St. and have the stream running across my property and am wondering what impact this will have on my property. I would like to be informed of the impact.

I would like to be informed of the public hearing so that I can have a say in the outcome of this proposal. It seems that developers can get anything they want approved to the detriment of the home owner.

Thank you for your consideration

Diane Lynch

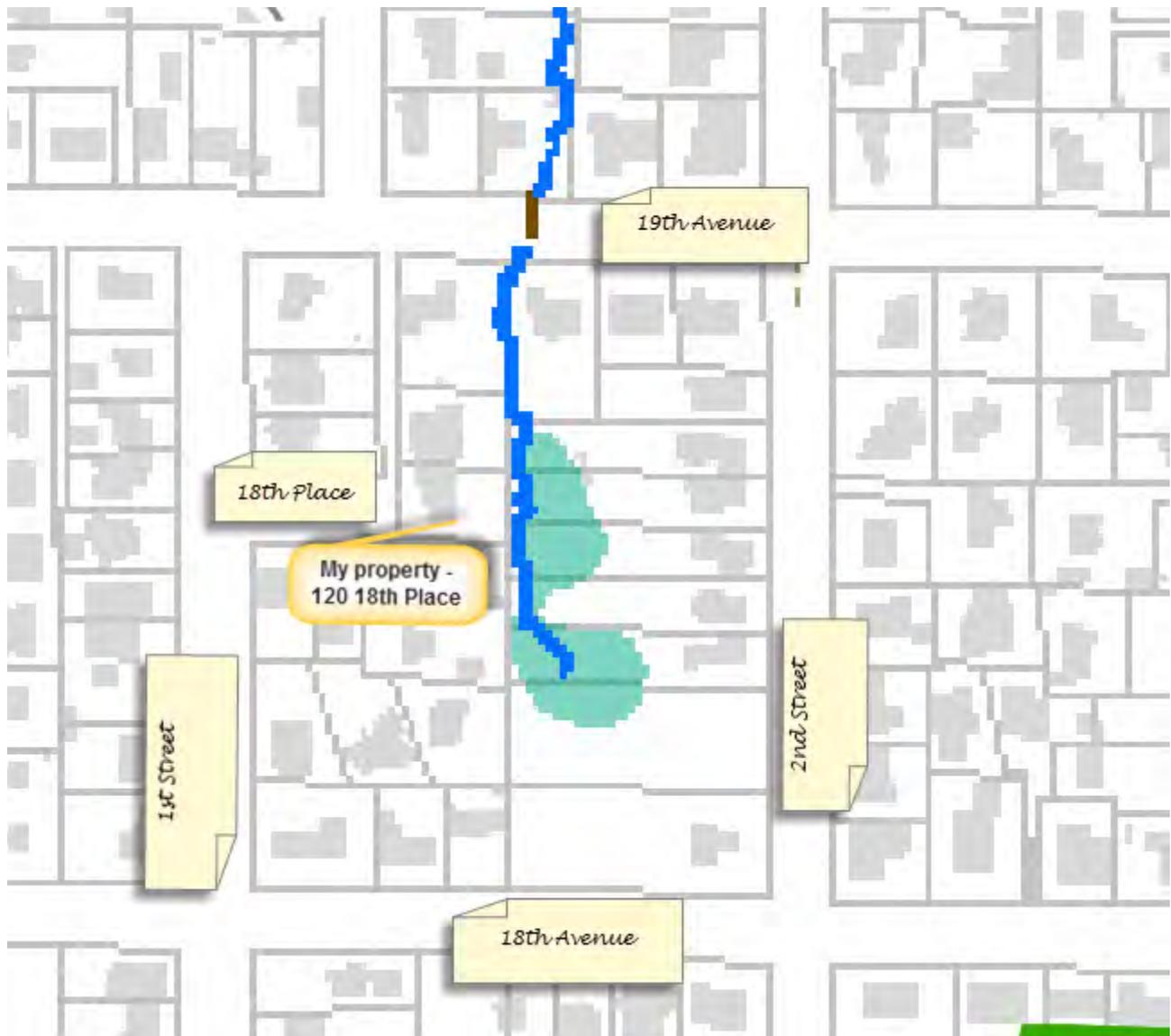
---

Hello Sean. I am responding to the mailed Notice of Application I received regarding the "Medici-Granger Wetland Buffer Reduction, Case SAR16-01958".

I wish to find out more information about the request since my home lies nearby and directly downstream of this subject wetland area in the Forbes Creek #3 drainage sub-basin. In order to help understand the permit issues, I do have a few questions for you:

1. I am in possession of the City of Kirkland "Streams, Wetlands and Wildlife Study (The Watershed Company July 1998)". Is there a more recent comprehensive wetland and stream study for the City (specifically the Forbes Creek basin)?
2. When I went to *mybuildingpermit.com* as directed in your mailed Notice of Application, I entered the permit number SAR16-01958 and was directed to a page that identified a property owner named Guy R. Nuebert addressed to 130 18<sup>th</sup> Avenue (*page attached*). Just to understand clearly: is the applicant a *Schuyler Tutt* requesting a wetland buffer reduction in the area of what would be best described (but not yet addressed) as 1805 2<sup>nd</sup> Street? I am trying to reconcile the information I found re Mr. Nuebert and his site address listed in your permit # page on *mybuildingpermit.com* and that information you listed in the mailed Notice flyer re Schuyler Tutt at Location: 1805 2nd Street. Should I presume the S. Tutt is not the current property owner but rather the applicant for some potential development or ???... I apologize for being confused, but the information I have gathered from your resources is unclear.
3. When I went to the King County Parcel Viewer for the Property records for the subject property as identified on the mailed Notice of Application, the site address associated listed it as **140** 18<sup>th</sup> Avenue, not **130** 18<sup>th</sup> Avenue as listed in your *mybuildingpermit.com* page (*also attached herein*). Which address number is correct?
4. I understand that the staff report and recommendation will be prepared prior to the Hearing Examiner's Public Hearing. I would like to request a copy of the staff report and recommendations. Please direct me to when and how I may be able to obtain or view such reports.
5. The mailed Notice of Application identifies a requested geotechnical report pertinent to the application as well as the evaluation of existing environmental documents (Wetland Studies) that evaluate the proposal. In support of my review of the project issues and potential impacts, I wish to view both reports when available. Please direct me on when and how I may be able to view such reports

I did find a City Sensitive Area map online titled **2016 City ESA map**. I have made notations onto a screen grab of a portion of this area:



With this communication and enclosed comments, I am requesting to be considered a *Party of Record* on the project application proposal. I look forward to hearing from you (and I am more than willing to visit you at City Hall planning counter to better understand the issues of this proposal).

Thank you,

Eric Jensen  
(206) 898-1843  
120 18<sup>th</sup> Place  
Kirkland WA 98033  
[echristopher22@gmail.com](mailto:echristopher22@gmail.com)

*Eric Jensen*  
 Public Infrastructure/Parks Project Manager II  
**King County**  
 Housing & Community Development Program  
 (206) 263-9093 office  
 (206) 296-0229 fax



Please consider the environment before printing this e-mail.

To: Sean LeRoy

From: de Looze & Gateva

Address: 1814 1<sup>st</sup> street Kirkland WA

Email: [rgateva@hotmail.com](mailto:rgateva@hotmail.com); [rodelooze@hotmail.com](mailto:rodelooze@hotmail.com)

Ref: SAR16-00862/00833/00832/01958

Hi Sean,

This email is regarding the Lot 4 medici-granger reasonable use exception and medici-granger wetland buffer reduction Ref: SAR16-00862/00833/00832/**01958**.

We are writhing this email in order to get be added to the distribution list related to this notice of applications and be able to follow the progress.

As we are a direct neighbor West of the 3 lots of the applications. We have big concerns related to the amount of water flow and changes in the flow patterns that may impact our property as a result of building the lots. The concern is based on the fact that we already have a challenge with the water run off from the wet land. Additional amount would negatively impact our property & house structure.

We would like to follow the process on these applications and get assurance that the city diligently will mandate the builder of these 4 applications to preserve the wetland and in addition build the proper water run off system that do not add additional water load to the current properties of the neighbors downhill /west of the lots .We trust your judgment and hope you will mandate whatever needed structures to be provided for that such as properly sized detention pipes with connection to main sewer lines etc.

Thank you in advance,

Ralitsa Gateva & Robin de Looze

---

**From:** [streetj111@frontier.com](mailto:streetj111@frontier.com)  
**Date:** September 5, 2016 at 6:12:05 PM PDT  
**To:** [steroy@kirklandwa.gov](mailto:steroy@kirklandwa.gov)  
**Subject:** Notice of application SAR16-01958

Dear Sean LeRoy,

RE: permit number **SAR16-01958**, SAR16-00832,Sar16-00833, SAR16-00862  
 Buffer reduction of type 2 wetland

I live on 2nd Street where there are 4 lots proposed on the corner of 18th Ave and 2nd Street. I am very concerned about what the impact will be on the year round stream that originates on this lot area. I would like to see this stream protected for the local wildlife and future generations in Kirkland to enjoy the benefit of living near a year round stream. I'm not sure what the reduction in a buffer zone will do to the stream? Have you conducted any environmental reviews on your proposal? I would like to know more about this plan. Please inform me of the hearing.

Sincerely,  
 Christine Houden  
 1846 2nd Street  
 Kirkland Wa 98033

[streetj111@frontier.com](mailto:streetj111@frontier.com)

---

**From:** Bill Gehring [<mailto:bjgehring2@msn.com>]  
**Sent:** Wednesday, August 31, 2016 2:46 PM  
**To:** Sean LeRoy  
**Subject:** Permits on Second Street

Hello, Sean. We have just learned of the applications for wetland buffer reduction and height increases for lots on 2nd Street.

We would like more information but would like to register our opposition. First, for permit **SAR16-01958**, We strongly feel that there should not be any buffer reduction for the wetland. We are on the creek at 129 19th Ave, have seen our neighbor comply with buffer requirements and would not like them to be decreased for anyone, possibly negatively affecting the stream.

For permits SAR16-00832, SAR16-00833 and SAR16-00862, we object to any house height above what is the maximum in the neighborhood. The existence of oversized houses in Kirkland is detrimental to the character of Kirkland. We also object to having houses closer to the street than what is already permitted.

Until we receive more information, and possibly after, this will be the comment that we submit.

Thank you,

Bill Gehring and Judy Gehring  
129 19th Ave  
Kirkland, 98033  
[bjgehring2@msn.com](mailto:bjgehring2@msn.com)

---

**From:** Street, John [<mailto:StreetJ@LanePowell.com>]  
**Sent:** Friday, August 26, 2016 1:51 PM  
**To:** Sean LeRoy  
**Cc:** Street, John  
**Subject:** Medici - Granger Permits SAR16's - 01958, 00832, 00833, 00862

Dear Mr. LeRoy,

I am writing to inquire about and express concerns about the Medici - Granger Permits **SAR16's - 01958, 00832, 00833, 00862**.

My wife and I own a home near the proposed building sites. We enjoy the wooded and natural environment in the area and the wildlife the environment sustains.

The most distinctive feature of the nearby environment is the stream that starts as a spring within the lots being evaluated for building under the aforementioned permits. In the nearly 20 years that we have lived in our home, that stream has never ceased to flow. It is an important environmental asset. It is with this in mind that I question what will be allowed under the permits.

#### **Variances in general**

My first question is why should any variances be granted at all? Without the variances could no homes be built or would they just be smaller?

#### **Wetland buffer**

What is the normal wetland buffer? What is the reduction that is being proposed?

Has there been a wetland or hydrological study of the site? May I please have a copy if there is one? Is there an evaluation of possible detrimental effects to the stream that might be caused by the proposed development? If so, please send a copy of that document as well.

Will any physical barrier, such as a fence, be required around the remaining wetland so that it is not disturbed in the future? It seems that there could be encroachment after the initial project is complete if there is not a barrier.

**Site planning**

It appears that the permits envision developing the four lots separately. Could the lots be developed collectively in such a manner that four homes could still be accommodated but with less impact on the wetland? It seems like other sites in Kirkland have been developed collectively. For instance, the four homes located at 1006 State Street South were built on a reduced footprint.

One of the notice signs has a site map that appears to represent trees, the stream and other features. It is small and hard to read, especially since it is posted high off the ground. Could I please have an electronic copy?

**Conclusion**

I appreciate the opportunity to comment on these projects. I would be happy to discuss my questions and concerns over the phone or in person at your convenience if you prefer that to writing.

Best regards,

John S. Street  
1846 2<sup>nd</sup> Street  
Kirkland, WA 98033

Cell: 206.223.7974  
E-mail: [streetj@lanepowell.com](mailto:streetj@lanepowell.com)

Medici – Granger permits SAR16

John Street  
206.223.7974

***Wetland Mitigation Plan***

***140 18th Avenue, Kirkland, Washington  
Kirkland, Washington***

*Prepared For:*

DC Granger, Inc.  
4014 Aurora Ave N, Suite B  
Seattle, Washington 98103

*Prepared By:*

Aquatica Environmental Consulting, LLC  
PO Box 308  
Duvall, Washington 98019

April 6, 2016 (Rev. July 28, 2016)

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## 1.0 INTRODUCTION

This Wetland Mitigation Plan has been prepared to identify proposed impacts to sensitive areas and describe compensatory mitigation requirements for construction of four single family homes on four existing lots. The subject property is located at 140 18<sup>th</sup> Avenue in Kirkland, Washington (**Figure 1**). This report has been prepared for submittal to the City of Kirkland according to the City of Kirkland Zoning Code (KZC) Chapter 90.05.

## 2.0 CRITICAL AREAS and EXISTING CONDITIONS

One wetland was delineated on the property and described in a report prepared by Aquatica Environmental Consulting, LLC, dated October 19, 2015 and subsequently approved by the City. The wetland was determined to be a Type 2 wetland according the City's rating form, Plate 26. According to the City of Kirkland Sensitive Areas map, KZC 90.30, this property is located in the Forbes Creek Drainage Basin, which is classified as a Primary Drainage Basin. Type 2 wetlands in a Primary drainage basin require a buffer width of 75 feet (KZC 90.45(1)). An additional 10-foot building setback from this buffer is also required (KZC 90.90(2)). The stream is located off-site to the north and within the wetland boundary. Streams with perennial (year around) flow that are not used by salmonids are classified by KZC 90.30 as Class B streams. Class B streams located within Primary Drainage Basins required a buffer setback of 60 feet (KZC 90.90(1)). Since the wetland surrounds the stream and has a larger buffer, the wetland buffer completely encompasses any stream buffer.

The mapped wetland is located across much of the western portion of the property and occupies over a half acre. It appears to extend off-site to the north, and while its precise off-site boundaries are not known, its overall size is likely between three quarters of an acre to one acre, based on the topography and vegetation off-site. Portions of the wetland had ponded water both at the time of the delineation and during an earlier site visit in the middle of a very hot and dry summer in July of 2015. Nearly all of the areas within the wetland boundary had a near surface high water table, with the only exception being near the wetland edge. Although there were areas of ponded water at the time of the delineation, these areas did not appear to have flowing water and the stream is assumed to originate just off-site to the north, perennially supported by the seemingly abundant year around ground water flow from this wetland. Soil in the interior of the wetland was a black (10YR 2/1) silt loam.

The wetland supports a mix of native and non-native vegetation. The wetland in the southwestern corner of the property is maintained lawn, vegetated by common lawn grasses and opportunistic emergent plants including soft rush (*Juncus effusus*), colonial bentgrass (*Agrostis capillaris*), creeping buttercup (*Ranunculus repens*), velvet grass (*Holcus lanatus*), and meadow blue grass (*Poa palustris*). The northwestern corner of the wetland supports blackberry (*Rubus laciniatus*) and cattails (*Typha latifolia*), and the northeastern portion of the wetland has a forested over story composed of Douglas fir (*Pseudotsuga menziesii*) growing on hummocks within the wetland, as well as Sitka spruce (*Picea sitchensis*), red alder (*Alnus rubra*), and black cottonwood (*Populus balsamifera*). Understory vegetation includes widespread patches of blackberry (*Rubus armeniacus*), nightshade (*Solanum dulcamara*), lady fern (*Athyrium filix-femina*), small-fruited bulrush (*Scirpus microcarpus*), and horsetail (*Equisetum arvensis*).



**Photo 1.** Northwestern corner of the wetland, with last year's cattails and abundant blackberry



**Photo 2.** Wetland lawn with dense blackberries to the north

### **Wetland Buffer**

The wetland buffer is presently partially developed. There is an existing single family home in the buffer, a large paved parking/driveway, shed and masonry garage type building in the buffer. Remaining undeveloped portions of the wetland buffer is forested with native trees, however the understory of the buffer is very degraded, much of it dominated by aggressive native vegetation.

English ivy is also abundant, which left uncontrolled will eventually kill trees. There is also some debris and trash present in the buffer. The buffer also extends into the right-of-way east of Lots 3 and 4 (and a small part of Lot 2). Buffer conditions are shown in the photos below.



**Photo 3.** English Ivy in the Buffer



**Photo 4.** English Ivy enveloping a masonry building located in the wetland buffer about five feet from the wetland boundary on Lot 4.



**Photo 5.** Right-of-way east of Lot 3 in the wetland buffer has a substrate composed of old road fill and is vegetated with one non-native tree, Himalayan blackberry mixed with native shrubs and an understory sparsely vegetated with ivy.



**Photo 6.** Right-of-way east of Lot 4 in the wetland buffer includes two big leaf maples, with the understory either sparsely vegetated or dominated by English ivy and blackberry

### 3.0 PROPOSED PROJECT and REGULATORY REQUIREMENTS

An existing older house is located in the southeastern corner of the property on part of the two southern lots (Lots 1 and 2). The two northern lots (Lots 3 and 4) have a dilapidated shed and a masonry outbuilding which is located about five feet from the wetland buffer (**Photo 4**, above). The existing house, other structures, as well as garbage and debris are proposed to be removed and new houses are proposed on each lot (**Figure 3**). The majority of Lot 1 is constrained by wetland, buffer or the required yard setbacks from the street. About 500 sf in an awkward shape is outside of buffers and setbacks. Application of the standard buffer reductions (one third possible reduction with enhancement) would create sufficient space for home construction that would allow economically viable use of Lot 1 without a reasonable use exception.

The wetland and buffer extends across almost all of Lot 2, and across the entirety of the northern Lots 3 and 4 and a portion of the the right-of-way east of these lots. Application of the requirements of Chapter 90 of the KZC would preclude reasonable use of Lots 2, 3, and 4, as there is either minimal or no square footage outside of the existing wetland buffer to construct a house on these lots. Application of the standard buffer reductions (one third possible reduction with enhancement) also would not create sufficient space for home construction that would allow economically viable use of the property. The applicant is proposing less than 3,000 square feet (sf) of site disturbance on Lots 2, 3, and 4 and will avoid impacts to the wetlands. For these three lots, the applicant is requesting the project be considered through the Administrative Alternative Reasonable Use Process (KZC 90.140 (3)).

The project proposes to reduce the wetland buffer on Lot one through utilizing the allowed one-third buffer reduction, resulting in approximately 2,268 sf of buffer reduction. Site disturbance will be limited to 3,000 sf each on Lots 2, 3, and 4 utilizing the reasonable use process. Buffer disturbance in the right-of-way includes 428 sf of impacts for the driveways of Lots 3 and 4. An additional 810 sf of buffer in the right-of-way will be disturbed not by site improvements, but from fragmentation and isolation from the remainder of the wetland and buffer.

#### 3.1 Submittal Requirements Reasonable Use

Submittal requirements for a reasonable use exception included under KZC90.140(4(a-h)) include (a) *a delineation of the wetland and preparation of supporting information*. This has been completed and was submitted earlier this year to the City as noted under **Section 2.0**, above. Additional information regarding submittal requirements (b-g) is addressed in the following section for Lots 2, 3 and 4. Lot 1 does not require a reasonable use exception and is addressed in **Section 3.2**.

(b) *There is no other reasonable use for the subject parcels that will have less impact on the sensitive area and buffer*. The three lots (Lots 2 through 4) proposed for development through the reasonable use provisions are all, or nearly all constrained by buffer and there is no possibility for development without substantially building within the buffer. The area outside of the wetland, which is all, or nearly all buffer is approximately 50 feet wide and 60 feet deep. With added side and front yard setbacks, plus a small setback from the wetland, a house with a small footprint is all that is feasible to construct on these lots. Part of the existing house is on Lot 2, and this disturbed area would be utilized for construction of a new home on this lot.

With the mitigation that is proposed (**Section 4.0**), lost functions and values due to buffer disturbance will be restored.

Much of the wetland and the buffer that surround the existing house are degraded. Over 11,000 sf of wetland and buffer are currently mowed lawn. The wetland and buffer that surrounds the existing house are degraded. All areas within about sixty feet or more of this house are vegetated either with lawn grasses or invasive weeds in the understory. The buffers on these lots contain some trees, although the understory is vegetated densely with invasive weeds.

*(c) Through careful site planning, the proposed house footprints were designed so that they would have the least practicable impact on sensitive areas.* To prevent wetland impacts, the applicant is requesting to utilize the allowed 50% reduction in the front yard setback, reducing it from 20 feet to 10 feet and pursuing an increase by five feet of the height of the proposed homes (KZC 90.140(6)). These reductions in yard setbacks and increase in height are needed due the highly constrained circumstances of these lots and the elevation changes between the street and wetland. There is a 12 foot elevation change between the front and back of the buildable areas on Lots 2, 3 and 4. There is a limit to the 12 percent maximum slope for permeable pavers to be used for the driveways. With these constraints, it is not possible to construct two story houses on these lots and provide driveway access without the height increases. If the houses could be moved further west, towards the wetlands, the height increase would not be necessary as a driveway with a lesser slope could be constructed, but then there would be direct wetland fill. Through reducing the yard setbacks and efficiently constructing the houses on two levels by increasing the height limits, the house foot prints environmental impacts are minimized as much as possible. Due to the very small area outside of the wetland, there are no additional site planning options available that would avoid direct wetland fill if these allowances are not granted.

There is more area outside of the wetland (although still buffer) on Lot 2 available, compared to Lots 3 and 4, and on this Lot the proposed house has been sited further away from the majority of the wetland. On this lot, the proposed house is nearly 75 from wetland *on this lot*. If not for the wetland that arcs to the east on Lot 3, this lot would have been developable by utilizing the standard 1/3 buffer reduction. As a result, much of the buffer on Lot 2 will not be impacted, except positively through enhancement.

Further reduction in the size of the house footprints is not feasible for the applicant due to the economic impact reducing the scale of the house would create. The house sizes as proposed will fit into the existing neighborhood, which predominantly has homes of an equivalent size or larger than what is being proposed. The proposal is also similar in size, scale and impact as other legally established developments in the immediate vicinity. The existing house, as well as properties to the north and west were constructed immediately adjacent to wetland/stream areas.

The existing development on the site will be removed, including the parking, house, masonry building, along with other structures and debris. The masonry building is located about five feet from the wetland boundary. A demolition plan is included on Sheet 2 of the civil drawings with specifications included to protect the wetland during removal. These include silt fencing, a construction fence with screening to prevent any large or windblown debris from falling into the

wetland, and provisions to dispose of the buildings and contents off-site in an appropriate dump site.

Construction staging will be carefully managed to prevent unintended fill, material stockpiling and soil compaction in the wetland areas that would result from intrusion into the wetland. Six-foot high chain link construction fencing will be constructed adjacent to the limits of the house footprint. Material stockpiling as needed will occur on adjacent lots and construction will be staggered, if necessary to accommodate any grading and materials stockpiling to avoid direct wetland impacts. Due to the limited area on-site, stockpiling of materials will be kept to a minimum and will be largely stored off-site until needed.

*(d) The location of proposed development on the property has some disturbances present.*

Development on Lots 1 and 2 will occur at least partially in the location of the existing house and large concrete driveway foot print. On Lots 3 and 4, there is an old shed and a large masonry building, as well as a dense carpet of English ivy (**Photos 3 and 4**). The right-of-way on Lots 3 and 4, a portion of which is buffer, is also disturbed. This area is composed of old road fill and also has an abundance of weeds. The masonry building on Lot 4 is about five feet from the wetland boundary and is in the general area of the proposed house on this lot.

*(e) Protective measures to prevent damage to the wetland will include a silt fence and construction fencing around the edge of the disturbance area. There are no fish in the stream that drains from the wetland, although fish are present further downstream. Earth moving activities, such as demolition of the existing house and excavation for the foundation of the new house will occur outside of the rainy season to avoid any water quality impacts. However, since there is a large area of vegetated wetland between the proposed development area and the stream, any siltation or water quality impacts are unlikely.*

*(f and g) The ecological impact of the project is expected to not have negative impacts on wetland functions and values. While a small area of buffer will be disturbed, a large area of degraded wetland will be restored, including returning a large area of lawn to native habitat. Mitigation actions are further discussed in **Section 4.0**.*

### **3.2 Submittal Requirements Standard One-Third Buffer Reduction (Lot 1)**

The proposed project includes removal of the existing house and construction of a new home on the eastern portion of Lot 1. It is not feasible to construct a new house and avoid buffer impacts due to the existing buffer width, building setback, and side and front yard setbacks (**Figure 2**). With these setbacks, approximately 500 sf is unencumbered by buffer in an odd shape, most of which is only ten feet wide. For these reasons, the applicant is requesting a one-third reduction of the standard buffer to accommodate a new residence on Lot 1.

**1. It is consistent with *Kirkland's Streams, Wetlands, And Wildlife Study (The Watershed Company, 1998)* and the *Kirkland Sensitive Areas Regulatory Recommendations Report (Adolfson Associates, Inc., 1998)*.**

As stated in The Watershed Company report, primary functions of wetlands located in urban basins include water quality maintenance and flood/stormwater conveyance. The Watershed

report also notes that protection and enhancement of urban wetlands and buffers is needed. The proposed project will address these items as needed. The on-site wetland and buffer are substantially degraded. Development is largely occurring in an area of existing disturbance, either the existing house location or surrounding improvements. The remaining buffer and wetland is largely either lawn or has a weedy understory. This project proposes to protect and restore the remaining degraded wetland and buffer. The enhanced buffer and wetland will eventually provide additional wildlife habitat as vegetation grows and matures (see Question 3 for additional information).

Recommendations in the Adolfsen report relevant to this project include limiting the reduction of wetland buffers by one-third and requiring enhancement of the remaining buffer. The project will not reduce the buffer by more than a third and is enhancing the remaining buffer and is therefore, consistent with this report.

## **2. It will not adversely affect water quality**

The project is not expected to adversely impact the water quality maintenance functions of the wetlands and buffers. Water quality maintenance on this site occurs through the uptake of nutrients by plant roots. The wetland and buffer is presently vegetated, and will be vegetated post-construction. A significant amount of invasive plant removal is proposed, however vegetation will be replaced through native plantings. Removing the existing lawn and replacing it with native shrubs will also aid in improving the water quality in the wetland and downstream, as fertilizer and herbicides are often applied and leach from the site. The developed portions of the site will have minimal landscaping due to the small lots, which will not result in a significant source pollutants that often result from landscaped areas.

## **3. It will not adversely affect fish, wildlife, or their habitat.**

The mitigation project is expected to increase the value of the property for wildlife. Habitat features including snags, logs, and brush piles will be incorporated into the wetland and buffer. Over 8,000 sf of area that is present lawn will be planted with trees, shrubs, and groundcover plants, which will significantly increase the vegetation structure and diversity. Through planting a variety of native plants, eventually shrub and forested habitat will be created, resulting in cover and shelter for wildlife where there is presently lawn. The plants will also produce berries and seeds, which will result in a food source for wildlife. The addition of snags, logs, and brush piles will also diversify the available habitat, providing locations for nesting, feeding, and shelter for birds and amphibians. The project is expected to have a positive effect on wildlife and their habitat. While fish are present further down in the watershed, no fish are present close to the proposed house location. As noted above in the section describing water quality impacts, no adverse effect to fish is expected from construction of the project.

## **4. It will not have an adverse effect on drainage and/or storm water detention capabilities.**

The increase in impervious surfaces that the project will create is relatively small in relation to the size of the lots, the vast majority of which will remain undeveloped and vegetated. Pervious pavers are proposed to limit driveway runoff. Roof runoff is proposed to be discharged from two different locations to disperse it and promote infiltration into the soil and is not expected to leave

the property as surface runoff. Due to the physical properties of the site and the limited nature of the proposed development, no effect on either wetland groundwater recharge or stormwater drainage is expected.

**5. It will not lead to unstable earth conditions or create an erosion hazard.**

The project area is relatively flat and vegetated and the risk of unstable earth conditions and erosion is minimal. As the vegetation planted in the buffer becomes established, the plants will provide further erosion control through root systems that are more expansive than the roots of the existing blackberries. In addition, the project will adhere to best management practices such as the installation of a silt fence at the buffer edge.

**6. It will not be materially detrimental to any other property or the City as a whole.**

The proposed buffer reduction and enhancement is a minor project with minor impacts. Impacts will be fully mitigated through buffer enhancement. Overall the project will improve the wetland and buffer, and therefore will not cause any detrimental effects to the City or other properties.

**7. Fill material does not contain organic or inorganic material that would be detrimental to water quality or to fish, wildlife, or their habitat.**

Fill material will not contain potentially harmful organic or inorganic material. Fill material will be clean and will come from an approved source.

**8. All exposed areas are stabilized with vegetation normally associated with native wetland buffers, as appropriate.**

As described in Section 4.2 the vegetation proposed to be installed in the enhancement area will be native the lowland Puget Sound. The species were selected based on their ability to thrive in the soil and light conditions present on the site. Species proposed to be planted in the enhancement area are present in undisturbed areas on adjacent properties.

**9. There is no practicable or feasible alternative development proposal that results in less impact to the buffer.**

The proposed alterations to the wetland buffer represent the least damaging practicable alternative, as determined by evaluating the environmental impacts and the ability of the project to perform its intended purpose. The reduced buffer was necessary to provide sufficient area to construct a modestly sized house. The foot print of the house is only approximately 1,700 square feet and has been designed in a long narrow manner to conform to the shape of the lot constrained by the buffer and yard setbacks. The house is proposed to be constructed in the area of existing development to further minimize impacts. Since the majority of the wetland buffer in the building location is already developed or otherwise degraded, the reduction of the buffer with enhancement will not adversely impact the wetland buffer.

## 10. The project will demonstrate that it will not adversely affect wetland functions and values.

The functions and values that wetlands and buffers provide include a) water quality maintenance, b) stormwater storage and conveyance, c) ground water recharge, d) providing wildlife habitat, and e) aesthetic and other functions valued by humans. Details regarding how the project will not adversely affect these functions are described/and or referenced below.

- a). Water Quality Function. This was described above in Question 2.
- b). Stormwater Storage. This was described above in Question 4.
- c). Ground Water Recharge. This was also addressed above in Question 4.
- d). Wildlife Habitat. This was described above in Question 3.

e). Social Functions. The mitigation project is expected to increase the appearance of the buffer. The wetland is degraded and has an abundance of non-native, unattractive, weedy vegetation. After enhancement with native plants, the wetland and remaining buffer will be more aesthetically pleasing. The native plants will include native deciduous and evergreen plants, many of which will produce flowers and colorful berries. Signage and fencing will serve to educate the adjacent land owners of the presence of a wetland and buffer.

## 4.0 MITIGATION

Total buffer disturbance is estimated at 12,194 sf. The majority of the remaining property will be enhanced. Approximately 25,661 sf of wetland and 8,347 sf of buffer will be enhanced to compensate for buffer disturbance. Enhancement will include removing dense invasive plants present across the remaining wetland and buffer and installation of native plantings throughout both the wetland and buffer (**Figures 5 and 6**). Included in these numbers is restoring 8,000 sf of mowed lawn to a forested or scrub shrub habitat.

### 4.1 Goal, Objectives, and Performance Standards

The following goal, objectives, and performance standards have been established to evaluate and ensure success of the enhancement project.

#### **Goal:**

Mitigate for buffer disturbance by enhancing the remaining degraded wetland and buffer. The wetland and buffer enhancement area will be planted with trees and shrubs to eventually create a forested area in the existing lawn and a more diverse and less weedy wetland.

**Objective A:** Increase the woody species diversity in the enhancement area.

*Performance Standard A: Any plants that die the first year after planting shall be replaced to ensure 100% survival at the end of the first year. For years two through five, at least 5 native woody species shall be present in the existing forested area, and at least 9 native woody species shall be present in the existing lawn and blackberry areas.*

**Objective B:** Increase the woody coverage in the enhancement area through planting native shrub and tree species.

*Performance Standard B:* Woody coverage (sapling and shrub cover) will be at least 60% by the end of the third year after planting and at least 80% cover by the end of the fifth year after planting. Cover may be composed of both planted and native volunteer species. Cover will not be measured in the forested area, which already has nearly 100% woody coverage. In the forested area success will be based on survival and invasive coverage.

**Objective C:** Remove invasive plants and maintain at no more than 10% cover in the enhancement areas.

*Performance Standard C:* After construction and following every monitoring event for a period of five years, exotic and invasive plant species will be maintained at levels below 10% total cover in the mitigation areas. These species include those listed on the King County Noxious Weed List.

#### 4.2 Wetland and Buffer Enhancement

An abundance of invasive weeds are present on the property within the areas proposed for enhancement (**Figure 4**). Himalayan blackberry is present across much of the wetland and buffer, as well as other invasive plants including English ivy, laurel, holly, and nightshade. Prior to planting, these species shall be cut down, their roots shall be grubbed out, and all live plant parts removed from the site. The cut stumps of holly and laurel shall be treated with herbicide by a licensed applicator to prevent resprouting. Heavy equipment shall not be used in the wetland and work must be done by hand due to fragile wet soils. Repeated site visits to grub invasive species, will be necessary. Existing lawn areas shall be sheet mulched with cardboard topped with a coarse mulch to suppress weeds and prevent herbaceous plant material from competing with planted species. Lawn areas devoid of woody vegetation will be planted with native deciduous and evergreen trees and shrubs (**Figure 6**).

The existing forested area will have shade tolerant conifers, shrubs and groundcover species planted in the understory. Due to the existing patchy vegetation, plant layout in these areas must be conducted by a biologist prior to planting. There is a portion of the forested wetland that is vegetated with desirable trees, few shrubs, and a fairly dense herbaceous layer of *Scirpus microcarpus*, a desirable obligate emergent wetland plant. In these areas, there are patches of invasive plants directly beneath the exiting trees. These invasive plants will be removed and native plants installed in their place. Several additional trees will be proposed and patches of shrubs will also be installed in select locations that appear vulnerable to invasive plant intrusion. However, the proposed planting density is somewhat sparse in this area to prevent outcompeting or complete shading of the bulrush. This somewhat open forest with the dense bulrush is a desirable feature that is a somewhat unique habitat type and should not be significantly altered. This area is shown in the photo below.



Forested wetland with bulrush in the understory

The plant species depicted on the mitigation plan were chosen for a variety of qualities, including: adaptation to specific water regimes, value to wildlife, pattern of growth (structural diversity), and aesthetic values. Plants proposed to be installed include those native to the lowlands of western Washington. Plant materials may consist of a combination of bare-root shrubs (during the dormant season) and container plants.

### **Habitat Features**

Habitat features including snags, brush piles and large woody debris will be placed in the enhancement areas. Dead and dying trees identified to be a potential hazard by the project arborist are planned to be transformed into wildlife snags. These are noted on **Figure 3**. Logs from snag creation and from trees removed in the development areas shall be preserved on-site and placed where noted in the final mitigation plan. Larger logs will provide refuge for small mammals or amphibians while contributing to the soil as they decay. Brush piles provide cover for small mammals, as well as birds (such as juncos, wrens and sparrows), which are particularly attracted to them. See **Figure 5** for locations and **Figure 8** for specifications.

### **4.3 Temporary Irrigation System**

An above ground temporary irrigation must be installed to provide irrigation to upland portions of the mitigation plantings during the dry season. While many wetlands do go dry during the summer months, this wetland was observed to have a water table just inches below the surface or had ponded water at the end of the summer of 2015, an exceptionally dry summer. Irrigation is therefor not proposed in the wetland areas. Irrigation of a perennially wet area that has proven to be wet even at the end of a very dry summer is a waste of both money and natural resources (water). Irrigation shall be provided in the buffer areas. At a minimum, the system must be operational for the first year following installation. If a significant number of plants die, replacement plantings must also be irrigated for their first year following installation. Mitigation

areas shall be irrigated between June 15 (or earlier if needed) and October 15. The irrigation system shall be programmed to provide 1" of water per week.

## 5.0 MONITORING PROGRAM

Performance monitoring of the mitigation areas will be conducted by a qualified biologist for a period of five years. Monitoring will include assessments of vegetation and wildlife usage, maintenance needs, as well as photo documentation. The results of each monitoring event will be summarized in a report to be submitted to the City. Maintenance reviews will be conducted by a biologist during the spring of each year with monitoring occurring in the fall. A report summarizing both the spring maintenance review and the fall monitoring event will be submitted to the City following the fall monitoring event.

### 5.1 Vegetation

The growth and survival of the vegetation will be evaluated during monitoring events. The percent invasive coverage and survival of planted species will be estimated throughout the entire site. Woody cover will be estimated in the areas that currently lack existing canopy coverage of native vegetation.

### 5.2 Reports

Monitoring reports will include a summary of woody and invasive coverage as well as survival rates of planted material. Observations of wildlife usage will also be noted, such as actual sightings, tracks, songs, calls, or scat. Photographs of the mitigation area will also be included with the report.

Reports will be submitted to the City according to the schedule presented in **Table 1**. If the performance standards for the project are met (**Section 4.1**), monitoring will cease after the fifth year, post-construction.

**Table 1: Projected Calendar for Performance Monitoring**

Year	Date*	Maintenance Review	Performance Monitoring	Report Due to City
1	Spring	X		
	Fall	X	X	X
2	Spring	X		
	Fall	X	X	X
3	Spring	X		
	Fall	X	X	X
4	Spring	X		
	Fall	X	X	X
5	Spring	X		
	Fall	X	X	X*

\*Request project approval from the City (presumes performance criteria are met).

### 5.3 MAINTENANCE (M) and CONTINGENCY (C)

Maintenance will be performed regularly to address any conditions that could jeopardize the success of the mitigation areas. During maintenance reviews by the wetland biologist (schedule

shown in **Table 1**), any maintenance items requiring attention will be identified and reported to the property owner.

Established performance standards for the project will be compared to the monitoring results to judge the success of the mitigation project. If there is a significant problem with the mitigation achieving its performance standards, the Bond-holder shall work with the City to develop a Contingency Plan. Contingency plans can include, but are not limited to: additional plant installation, erosion control, and plant substitutions of type, size, quantity, and location. Such contingency Plan shall be submitted to the City along with annual monitoring reports.

Contingency and maintenance items may include many of the items listed below and would be implemented if performance standards are not met. Maintenance and remedial action on the site will be implemented immediately upon completion of the monitoring event (unless otherwise specifically indicated below).

- During year one, replace all dead plant material. (M)
- Water all plantings at a rate of 1" of water at least every week between June 15 – September 15 during the first year after installation, and for the first year after any replacement plantings. (C & M)
- Replace dead plants with the same species or a substitute species that meets the goal and objectives of the mitigation plan, subject to the approval of the wetland biologist. (C)
- Re-plant area after reason for failure has been identified (e.g., moisture regime, poor plant stock, disease, shade/sun conditions, wildlife damage, etc.). (C)
- Weed trees and shrubs to the drip line, by hand. Maintain mulch rings around trees and shrubs at a depth of 3 inches. Weeding of mulch rings should occur twice per year until shrubs have become established. Do not use mechanized devices, herbicides, or pesticides adjacent to installed plant material.
- Due to the abundance of invasive weeds on the property, removal of invasive species throughout the site should occur regularly during the growing season. It is anticipated that during the first year, weeding will be required monthly from April through September. If weeding is thoroughly addressed during the first year, weeding may only be necessary during the spring and fall during subsequent years of the monitoring period. Specific maintenance needs will be summarized for the property owner during the spring maintenance review by the wetland biologist. All non-native vegetation must be removed and dumped off site. (M)
- Clean up trash and other debris. (M)
- Selectively thin volunteer species (such as alder) to prevent domination by a single species. (M)

## 6.0 PERFORMANCE GUARANTEES

A maintenance/monitoring bond or other acceptable surety device equal to 125% of the estimated installation, maintenance, monitoring, and contingency costs for the five-year monitoring period shall be posted with the City prior to finalization of the building permit. The bond may be released in partial amounts at the reasonable discretion of the City. Partial release of the bonding obligation would be in proportion to work successfully completed over the five-year monitoring period.

## 7.0 REFERENCES

Adolfson Associates, Inc. 1998. *City of Kirkland Sensitive Areas Recommendations Report*. August.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service, Department of the Interior. FWSOBS-70/31.

Hitchcock, C.L., and A. Cronquist. 1973. *Flora of the Pacific Northwest*. University of Washington Press. 730 pp.

Kirkland, City of. Kirkland Zoning Code.

The Watershed Company. 1998. *Kirkland's Streams, Wetlands, and Wildlife Study*. July.

**APPENDIX A**

**Bond Quantity Worksheet**





King County

### Critical Areas Mitigation Bond Quantity Worksheet

Project Name: 140 18th Avenue Date: 6/30/2016 Prepared by: T.Opolka  
 Applicant: DC Granger  
 Location: 140 18th Avenue

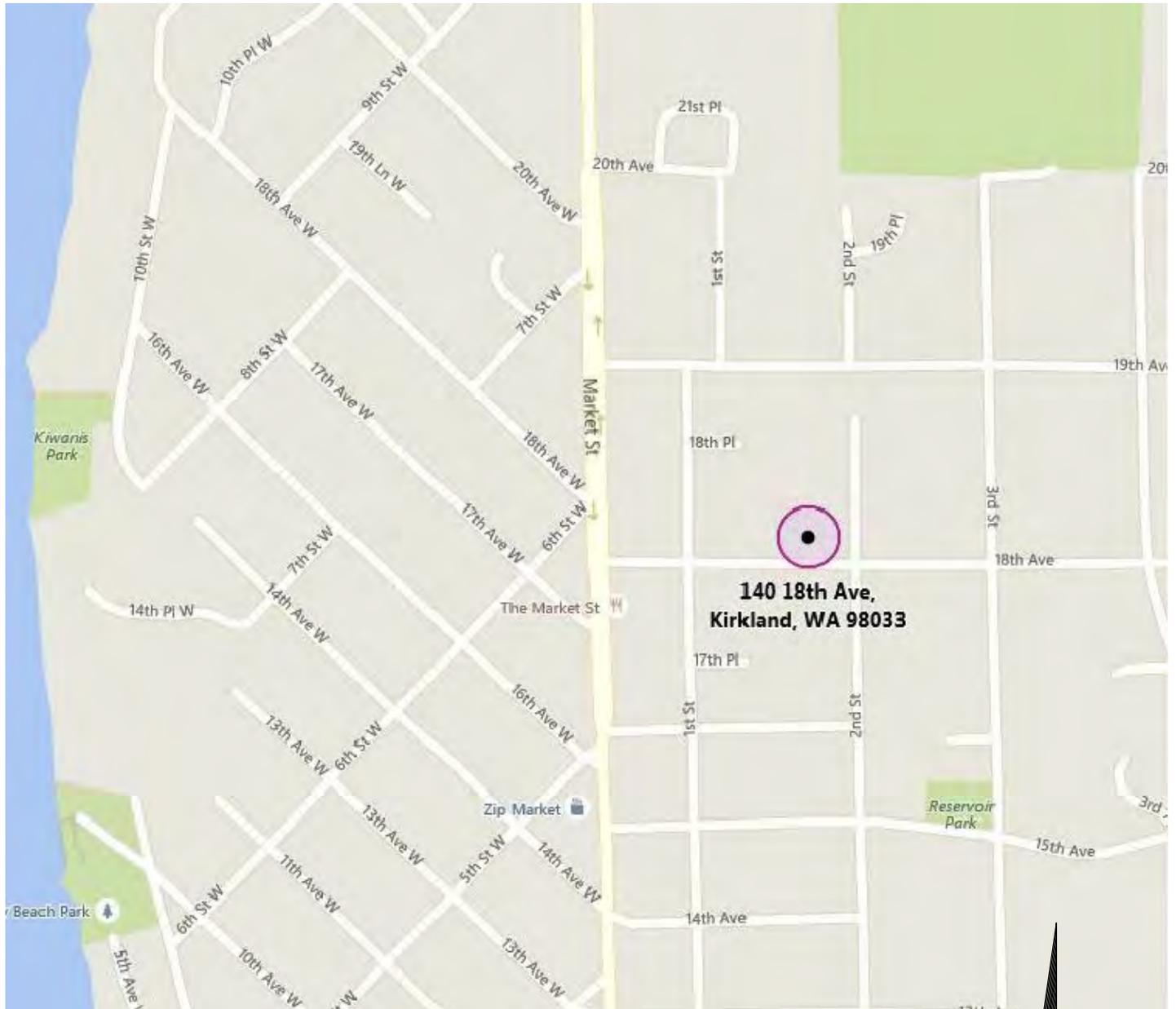
PLANT MATERIALS*						
Type	Unit Price	Unit	Quantity	Description	Cost	
PLANTS: Potted, 4" diameter, medium	\$5 00	Each	0 00		\$ -	
PLANTS: Container, 1 gallon, medium soil	\$11 50	Each	1360 00		\$ 15,640.00	
PLANTS: Container, 2 gallon, medium soil	\$20 00	Each	0 00		\$ -	
PLANTS: Container, 5 gallon, medium soil	\$36 00	Each			\$ -	
PLANTS: Seeding, by hand	\$0 50	SY	0 00		\$ -	
PLANTS: Slips (willow, red-osier)	\$2 00	Each			\$ -	
PLANTS: Stakes (willow)	\$2 00	Each	116 00		\$ 232.00	
PLANTS: Stakes (willow)	\$2 00	Each			\$ -	
					\$ -	
					\$ -	
* All costs include installation					<b>TOTAL</b>	<b>\$ 15,872.00</b>

INSTALLATION COSTS ( LABOR, EQUIPMENT, & OVERHEAD)						
Type	Unit Price	Unit	Quantity	Description	Cost	
wood chips	\$37 88	CY	270 00		\$ 10,227.60	
Decompacting till/hardpan, medium, to 6" depth	\$1 57	CY			\$ -	
Decompacting till/hardpan, medium, to 12" depth	\$1 57	CY			\$ -	
Hydroseeding	\$0 51	SY			\$ -	
Labor, general (landscaping)	\$40 00	HR	48 00		\$ 1,920.00	
Labor, general (construction)	\$40 00	HR	0 00		\$ -	
Labor: Consultant, supervising	\$55 00	HR	8 00		\$ 440.00	
Labor: Consultant, on-site re-design	\$95 00	HR			\$ -	
Rental of decompacting machinery & operator	\$70 00	HR			\$ -	
Sand, coarse builder's, delivered and spread	\$42 00	CY			\$ -	
Staking material (set per tree)	\$7 00	Each			\$ -	
Surveying, line & grade	\$250 00	HR			\$ -	
Surveying, topographical	\$250 00	HR			\$ -	
Watering, 1" of water, 50' soaker hose	\$3 62	MSF			\$ -	
Irrigation - temporary	\$3,000 00	Acre	0 20		\$ 600.00	
Irrigation - buried	\$4,500 00	Acre			\$ -	
Tilling topsoil, disk harrow, 20hp tractor, 4" x 6" deep	\$1 02	SY			\$ -	
					\$ -	
					\$ -	
* All costs include installation					<b>TOTAL</b>	<b>\$ 13,187.60</b>

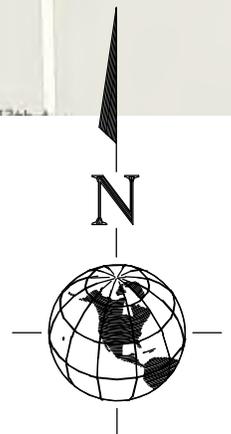
HABITAT STRUCTURES*						
ITEMS	Unit Cost	Unit	Quantity	Description	Cost	
Fascines (willow)	\$ 2.00	Each			\$ -	
Logs, (cedar), w/ root wads, 16"-24" diam., 30' long	\$1,000 00	Each	0 00	(on-site)	\$ -	
Logs (cedar) w/o root wads, 16"-24" diam., 30'	\$400 00	Each	0 00		\$ -	
Logs, w/o root wads, 16"-24" diam., 30' long	\$245 00	Each	0 00		\$ -	
Logs w/ root wads, 16"-24" diam., 30' long	\$460 00	Each	0 00		\$ -	
Rocks, one-man	\$60 00	Each			\$ -	
Rocks, two-man	\$120 00	Each			\$ -	
Root wads	\$163 00	Each			\$ -	
Spawning gravel, type A	\$22 00	CY			\$ -	
Weir - log	\$1,500 00	Each			\$ -	
Weir - adjustable	\$2,000 00	Each			\$ -	
brush piles - obtained off-site	\$40 00	Each	0 00		\$ -	
Snags - anchored	\$400 00	Each			\$ -	
Snags - on site	\$50 00	Each		(on-site)	\$ -	
Snags - imported	\$800 00	Each			\$ -	
					\$ -	
					\$ -	
* All costs include delivery					<b>TOTAL</b>	<b>\$ -</b>

EROSION CONTROL					
ITEMS	Unit Cost	Unit	Quantity	Description	Cost
Backfill and Compaction-embankment	\$ 4.89	CY			\$ -
Crushed surfacing, 1 1/4" minus	\$30 00	CY			\$ -





SOURCE: BING MAPS



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# AQUATICA

ENVIRONMENTAL CONSULTING, LLC

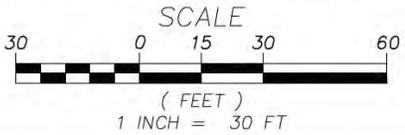
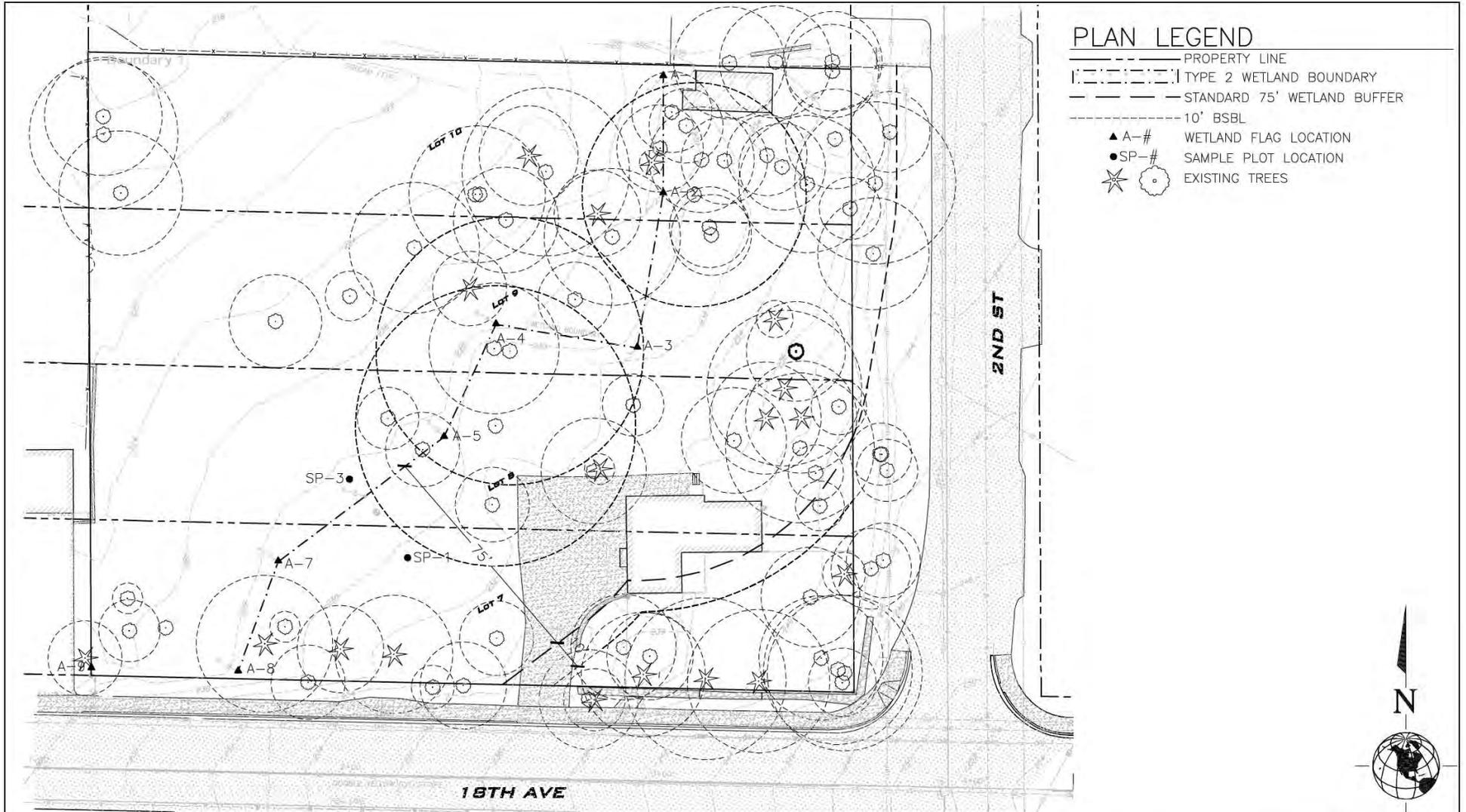
P.O. BOX 308  
DUVALL, WA 98019

T 425.802.8988

## LOCATION MAP 140 18TH AVE. KIRKLAND, WASHINGTON

DRAWN BY KG	CHECKED BY TO
SCALE NTS	DATE 07.28.16
PROJECT NO.	15-260
FIGURE 1	OF 8



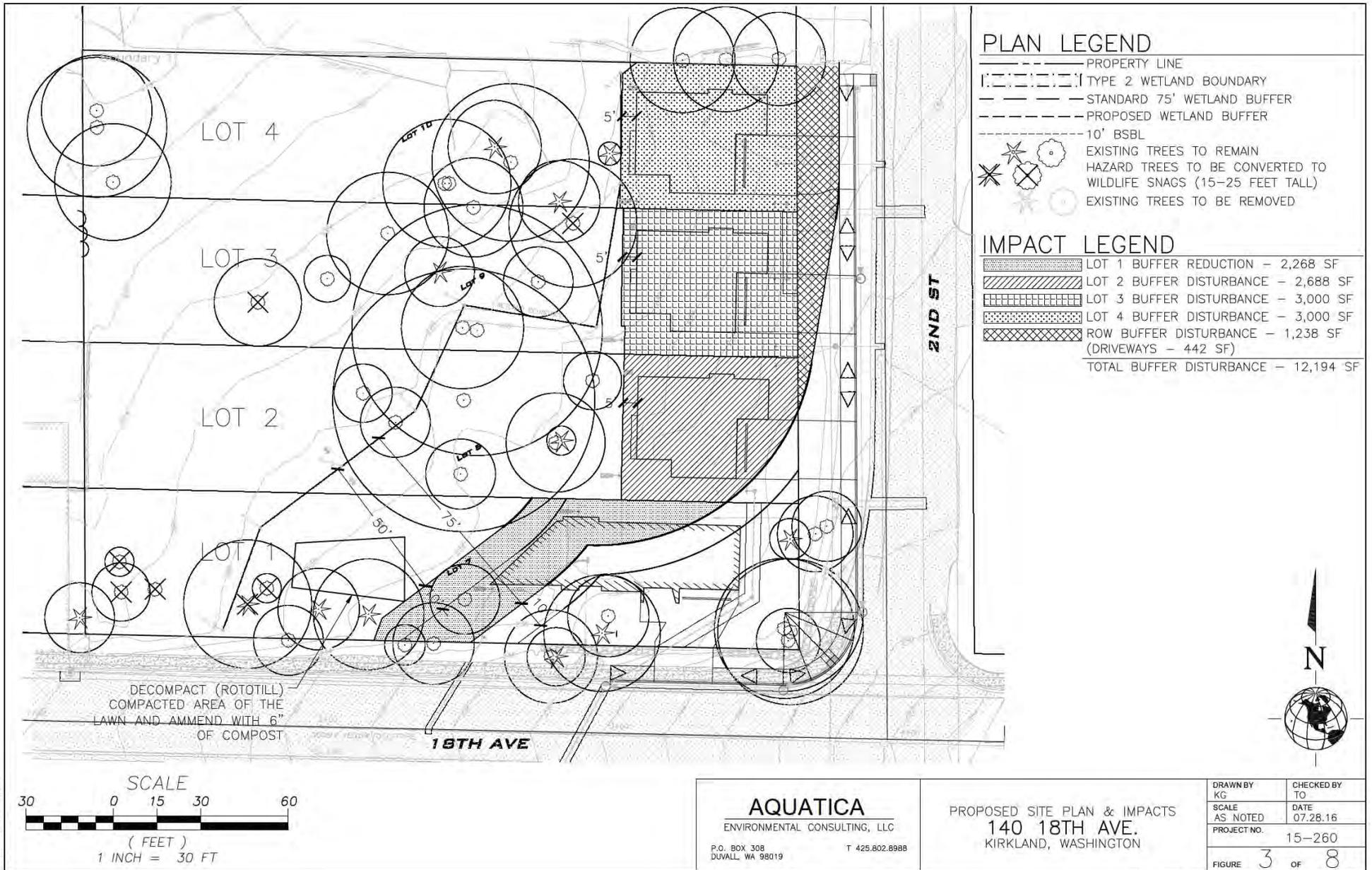


**AQUATICA**  
 ENVIRONMENTAL CONSULTING, LLC  
 P.O. BOX 308  
 DUVALL, WA 98019  
 T 425.802.8988

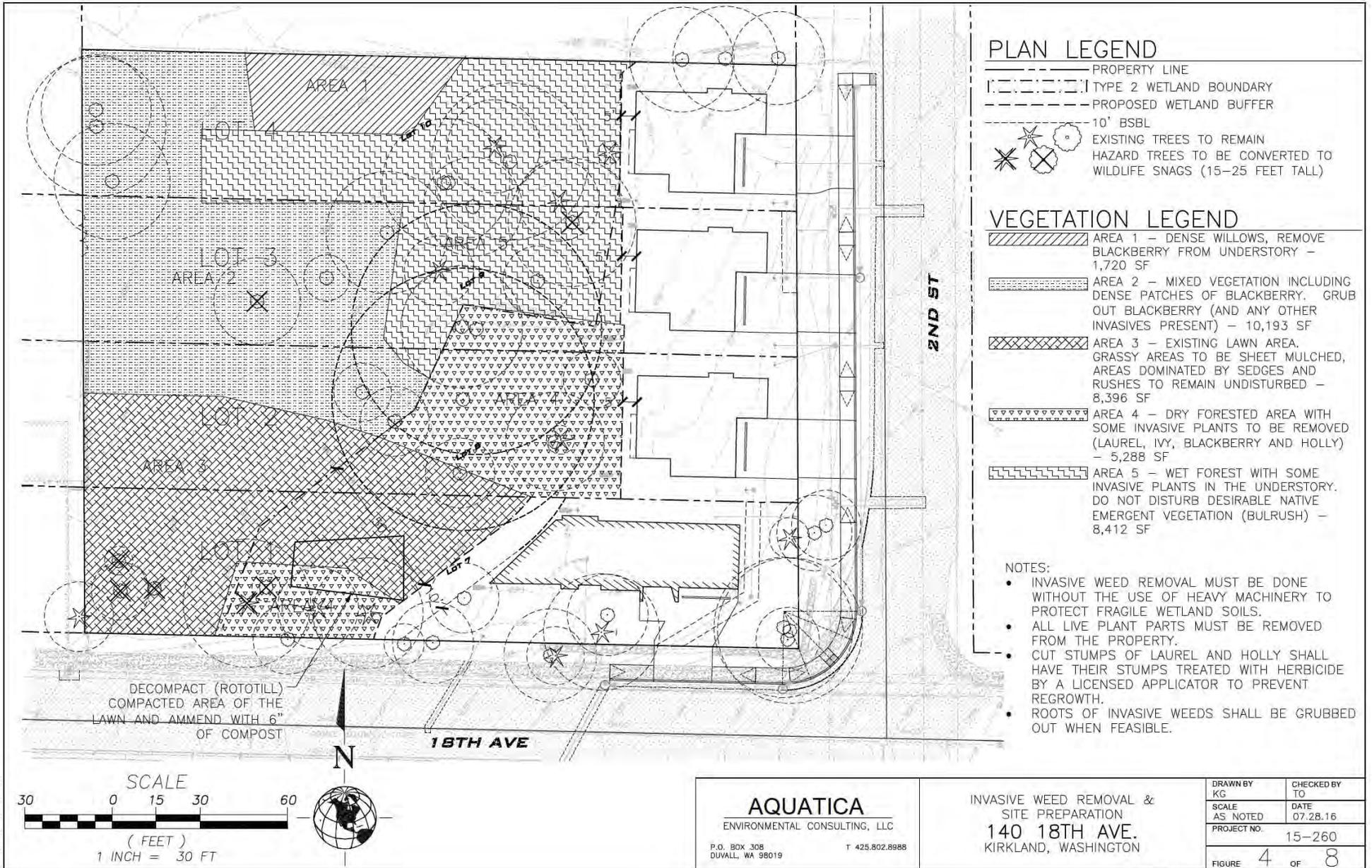
EXISTING CONDITIONS  
 140 18TH AVE.  
 KIRKLAND, WASHINGTON

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SCALE AS NOTED	DATE 07.28.16
PROJECT NO. 15-260	
FIGURE 2	OF 8

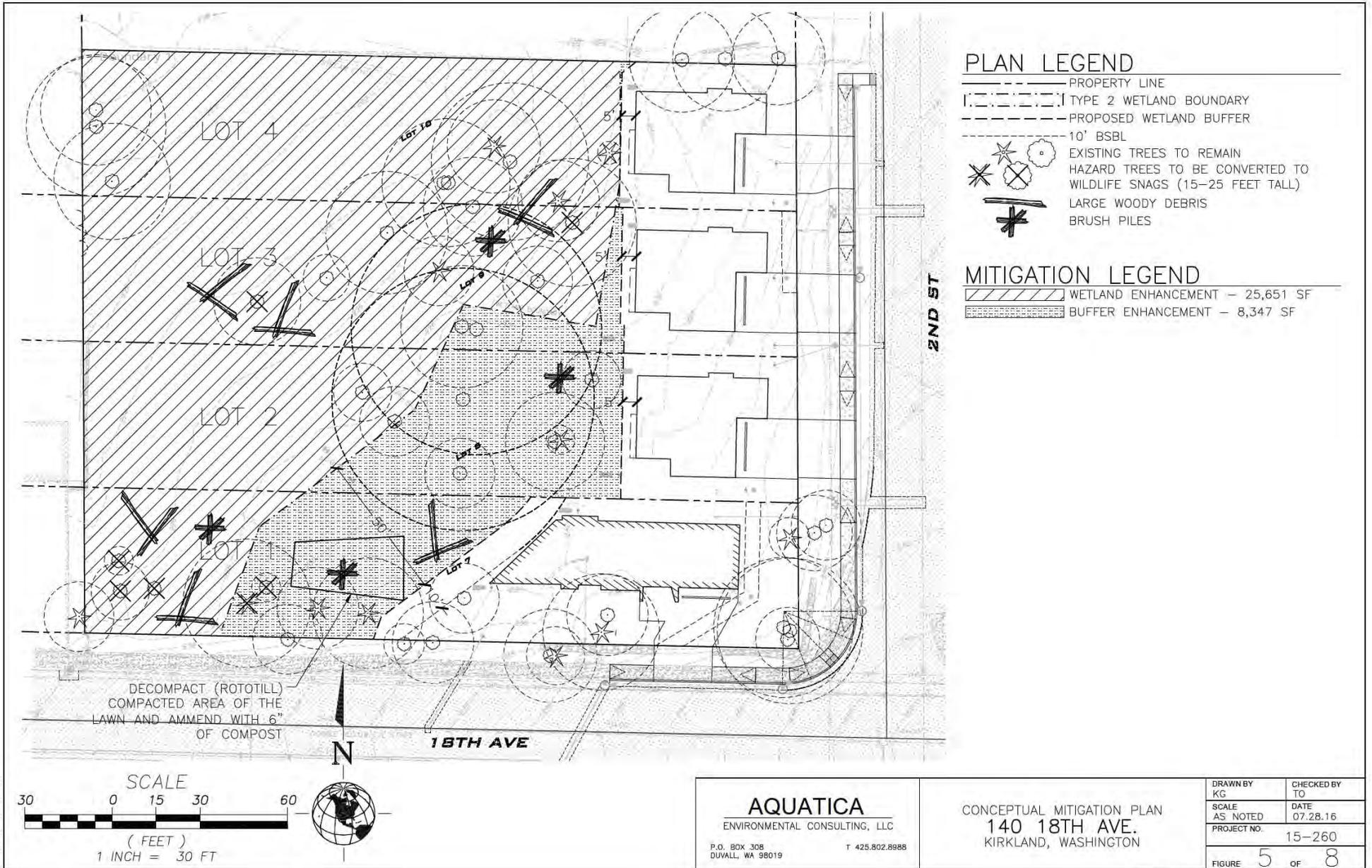
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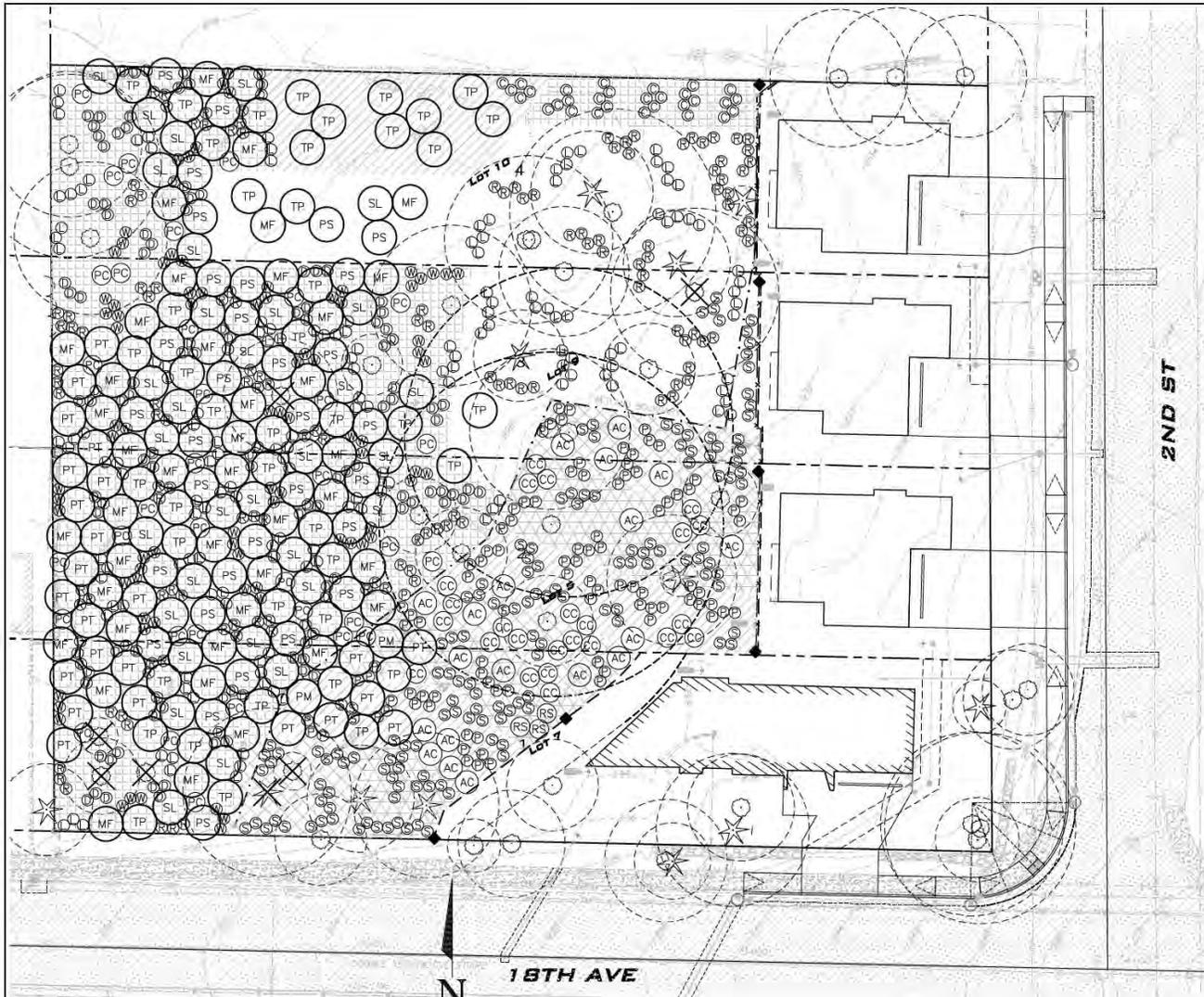
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### PLAN LEGEND

- PROPERTY LINE
- - - - - TYPE 2 WETLAND BOUNDARY
- - - - - PROPOSED WETLAND BUFFER
- - - - - 10' BSBL
- ★ ○ EXISTING TREES TO REMAIN
- ○ EXISTING TREES DRIPLINE
- ★ ⊗ EXISTING TREES TO REMAIN AS WILDLIFE SNAGS (15-25 FEET TALL)
- x - x - x SPLIT-RAIL FENCE ALONG PROPOSED BUFFER BOUNDARY
- ◆ NGPA SIGN (50' O.C. SPACING)

### PLANT LIST (SEE FIGURE 8 FOR COMPLETE SCHEDULE)

TREES		
KEY	SCIENTIFIC NAME	COMMON NAME
MF	MALUS FUSCA	WESTERN CRABAPPLE
PS	PICEA SITCHENSIS	SITKA SPRUCE
PT	POPULUS TREMULOIDES	QUAKING ASPEN
PM	PSEUDOTSUGA MENZIESII	DOUGLAS FIR
SL	SALIX LASIANDRA	PACIFIC WILLOW
TP	THUJA PLICATA	WESTERN RED CEDAR

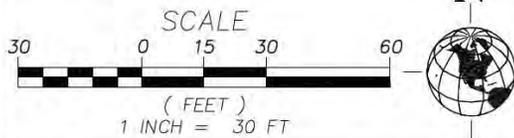
  

SHRUBS		
KEY	SCIENTIFIC NAME	COMMON NAME
AC	ACER CIRCINATUM	VINE MAPLE
C	CORNUS SERICEA	RED-OSIER DOGWOOD
CC	CORYLUS CORNUTA	WESTERN HAZELNUT
L	LONICERA INVOLUCRATA	BLACK TWIN-BERRY
PC	PHYSOCARPUS CAPITATUS	PACIFIC NINEBARK
RS	RIBES SANGUINEUM	RED CURRANT
P	RUBUS PARVIFLORUS	THIMBLEBERRY
R	RUBUS SPECTABILIS	SALMONBERRY
W	SALIX SITCHENSIS	SITKA WILLOW
D	SPIRAEA DOUGLASII	DOUGLAS SPIRAEA
S	SYMPHORICARPOS ALBUS	SNOWBERRY

HERBS		
KEY	SCIENTIFIC NAME	COMMON NAME
▨	ATHYRIUM FILIX-FEMINA	LADY FERN
▨	MAHONIA NERVOSA	DULL OREGON GRAPE
▨	POLYSTICHUM MUNITUM	SWORD FERN
▨	WETLAND MIX*	

\*WETLAND MIX CONSISTS OF LADY FERN, SLOUGH SEDGE AND SKUNK CABBAGE - SEE PLANT SCHEDULE ON FIGURE 8.

15-260-07-26-16.DWG



<b>AQUATICA</b>		DRAWN BY KG	CHECKED BY TO
ENVIRONMENTAL CONSULTING, LLC			
P.O. BOX 308 DUWALL, WA 98019		T 425.802.8988	
PLANTING PLAN 140 18TH AVE. KIRKLAND, WASHINGTON		SCALE AS NOTED	
PROJECT NO.		DATE 07.28.16	
FIGURE 6 OF 8		PROJECT NO. 15-260	

**PLANT SCHEDULE**

**TREES**

KEY	SCIENTIFIC NAME	COMMON NAME	QTY.	SIZE (MIN.)	DENSITY	NOTES
MF	MALUS FUSCA	WESTERN CRABAPPLE	41	1 GAL.	9' O.C.	FULL & BUSHY
PS	PICEA SITCHENSIS	SITKA SPRUCE	32	1 GAL.	9' O.C.	FULL & BUSHY
PT	POPULUS TREMULOIDES	QUAKING ASPEN	24	1 GAL.	9' O.C.	FULL & BUSHY
PM	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	2	1 GAL.	9' O.C.	FULL & BUSHY
SL	SALIX LASIANDRA	PACIFIC WILLOW	32	4' CUTTING	9' O.C.	1/2" DIA., BARK INTACT
TP	THUJA PLICATA	WESTERN RED CEDAR	43	1 GAL.	9' O.C.	FULL & BUSHY

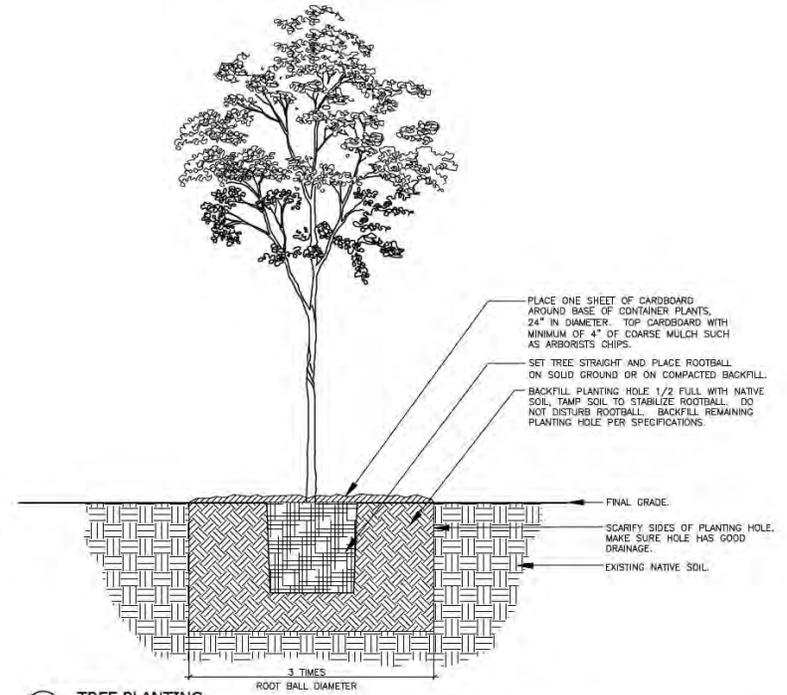
**SHRUBS**

KEY	SCIENTIFIC NAME	COMMON NAME	QTY.	SIZE (MIN.)	DENSITY	NOTES
AC	ACER CIRCINATUM	VINE MAPLE	19	1 GAL.	6' O.C.	MULTI-STEM (3 MIN.)
C	CORNUS SERICEA	RED-OSIER DOGWOOD	30	1 GAL.	6' O.C.	MULTI-STEM (3 MIN.)
CC	CORYLUS CORNUTA	WESTERN HAZELNUT	24	1 GAL.	6' O.C.	MULTI-STEM (3 MIN.)
L	LONICERA INVOLUCRATA	BLACK TWIN-BERRY	160	1 GAL.	6' O.C.	MULTI-STEM (3 MIN.)
PC	PHYSOCARPUS CAPITATUS	PACIFIC NINEBARK	34	1 GAL.	6' O.C.	MULTI-STEM (3 MIN.)
RS	RIBES SANGUINEUM	RED CURRANT	3	1 GAL.	6' O.C.	MULTI-STEM (3 MIN.)
P	RUBUS PARVIFLORUS	THIMBLEBERRY	94	1 GAL.	6' O.C.	FULL & BUSHY
R	RUBUS SPECTABILIS	SALMONBERRY	136	1 GAL.	6' O.C.	MULTI-STEM (3 MIN.)
W	SALIX SITCHENSIS	SITKA WILLOW	84	4' CUTTING	6' O.C.	1/2" DIA., BARK INTACT
D	SPIRAEA DOUGLASII	DOUGLAS SPIRAEA	122	1 GAL.	6' O.C.	MULTI-STEM (3 MIN.)
S	SYMPHORICARPOS ALBUS	SNOWBERRY	146	1 GAL.	6' O.C.	MULTI-STEM (3 MIN.)

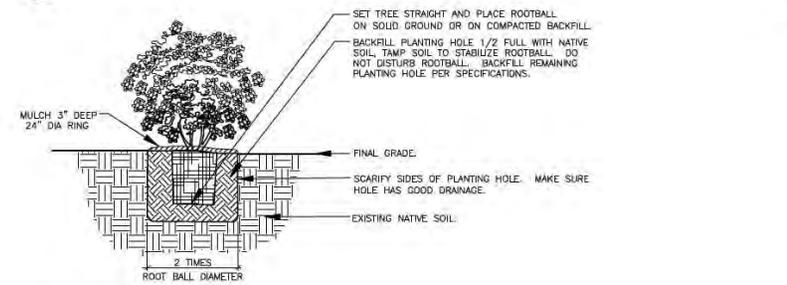
**HERBS**

KEY	SCIENTIFIC NAME	COMMON NAME	QTY.	SIZE (MIN.)	DENSITY*	NOTES
	ATHYRIUM FILIX-FEMINA	LADY FERN	100	1 GAL.		FULL & BUSHY
	MAHONIA NERVOSA	DULL OREGON GRAPE	100	1 GAL.		FULL & BUSHY
	POLYSTICHUM MUNIUM	SWORD FERN	100	1 GAL.		FULL & BUSHY
	WETLAND MIX (1/3 ATHYRIUM FILIX-FEMINA, 1/3 CAREX OBNUPTA & 1/3 LYSICHTUM AMERICANUM)	1/3 LADY FERN, 1/3 SLOUGH SEDGE & 1/3 SKUNK CABBAGE	50	1 GAL.		FULL & BUSHY

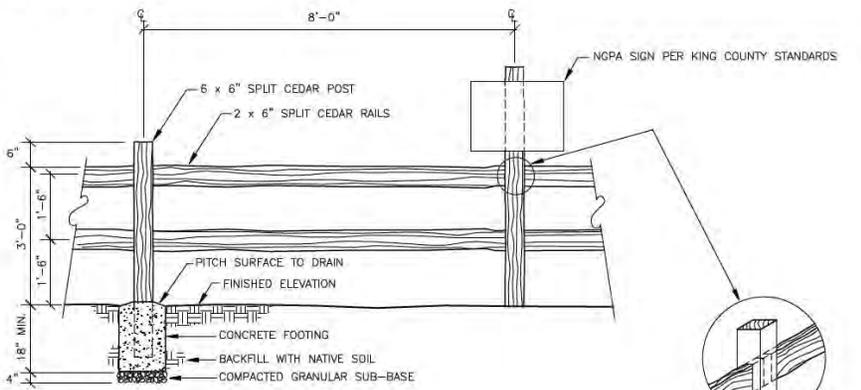
\*TO BE FIELD LOCATED BY BIOLOGIST



2 TREE PLANTING Scale: NTS



3 SHRUB PLANTING Scale: NTS



1 SPLIT-RAIL FENCE WITH NGPA SIGNS Scale: NTS

15-280-07-28-16.DWG

<b>AQUATICA</b> ENVIRONMENTAL CONSULTING, LLC P.O. BOX 308 DUVALL, WA 98019 T 425.802.8988	PLANT SCHEDULE & DETAILS 140 18TH AVE. KIRKLAND, WASHINGTON		DRAWN BY KG	CHECKED BY TO	
			SCALE AS NOTED	DATE 07.28.16	
			PROJECT NO. 15-260		
			FIGURE 7	OF 8	



November 22, 2016

Sean LeRoy  
City of Kirkland Planning and Community Development  
123 – 5<sup>th</sup> Avenue  
Kirkland, WA 98125

**Re: Revised Reasonable Use Exception and Mitigation Plan Review  
Medici Project, 401 18<sup>th</sup> Avenue**

Dear Sean:

This letter presents the findings of an environmental review of the revised Reasonable Use Exception and wetland and wetland buffer mitigation plan for the above mentioned property. Documents reviewed include an Aquatica Environmental Consulting (Aquatica) June 30, 2016 report, attached to which are 11X17 format conceptual mitigation plans and a bond quantity worksheet.

**Findings**

Demolition and removal of the buildings, their contents and other trash is now more clearly specified. However, these costs are not included in the bond estimate.

As mentioned before, an area of moss and grass is found just west of the paved driveway. This appears to be an old parking area, which will need to be de-compacted and amended for best growing conditions. Also a corner of the existing driveway is within the buffer enhancement area. No decompaction provisions have been added for either area, and the cost has not been included in the bond estimate.

The bond estimate does not include costs for woody debris and brush piles shown on mitigation plan sheet 5. The sheet has a note indicating the logs and brush are “on-site” but there is no charge for moving them into position. The monitoring estimate should use 11 site visits instead of 5 to cover twice-annual monitoring plus the as-built documentation. This is a large residential mitigation site with almost 1500 plants. The maintenance effort of only 14 hours per year is too low.

The prior review contained the following comment, which has not been addressed: *No stormwater plans were reviewed for this project. The lot at 112 18<sup>th</sup> Avenue has what appear to be drainage improvements along the common property line. If the new development will concentrate and discharge stormwater to the wetland, it may cause problems for neighboring properties to the west. The addition of stormwater should be designed to prevent additional water from reaching these neighboring lots.*

Medici Revised Mitigation Review  
S. LeRoy, City of Kirkland Planning  
November 22, 2016  
Page 2

Please call if you have any questions or if I can provide you with any additional information.

Sincerely,

A handwritten signature in blue ink that reads "Hugh Mortensen". The signature is written in a cursive style with a large initial "H" and a long, sweeping underline.

Hugh Mortensen, PWS  
President



## SAVE HARMLESS AGREEMENT - WETLAND

The undersigned, being all of the owners of the hereinafter described real property, hereby agree to indemnify, defend, and save harmless the City of Kirkland, its officers and employees from any claim, real or imaginary, filed against the City of Kirkland, its officers, or employees, alleging damage or injury caused by fault on the part of the undersigned, their employees or agents, and/or the City of Kirkland, its officers, or employees and arising out of maintenance, flooding, damming or enlargement of the wetland existing on the hereinafter described real property; provided, however, this agreement shall not include damage resulting from the sole fault of the City of Kirkland, its officers, or employees. Fault as herein used shall have the same meaning as set forth in RCW 4.22.01. This Agreement shall also include all reasonable cost and expense, including attorney's fees, incurred by the City of Kirkland in investigation and/or defense of any such claim.

This Agreement shall be binding upon the heirs, successors, and assigns of the parties hereto and shall run with the land.

The real property subject to this Agreement is situated in Kirkland, King County, Washington, and described as follows:

DATED at Kirkland, Washington, this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

**(Sign in blue ink)**

**(Individuals Only)**

OWNER(S) OF REAL PROPERTY (INCLUDING SPOUSE)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**(Individuals Only)**

STATE OF WASHINGTON )

) SS.

County of King )

On this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared \_\_\_\_\_ and \_\_\_\_\_

\_\_\_\_\_ to me known to be the individual(s) described herein and who executed the Save Harmless Agreement for a Wetland and acknowledged that \_\_\_\_\_ signed the same as \_\_\_\_\_ free and voluntary act and deed, for the uses and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year first above written.

\_\_\_\_\_  
Notary's Signature

\_\_\_\_\_  
Print Notary's Name  
Notary Public in and for the State of Washington,  
Residing at: \_\_\_\_\_  
My commission expires: \_\_\_\_\_



**(Corporations Only)**

OWNER(S) OF REAL PROPERTY

\_\_\_\_\_  
(Name of Corporation)

\_\_\_\_\_  
By President

\_\_\_\_\_  
By Secretary

**(Corporations Only)**

STATE OF WASHINGTON }  
County of King } SS.

On this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared \_\_\_\_\_ and \_\_\_\_\_

\_\_\_\_\_ to me, known to be the President and Secretary, respectively, of \_\_\_\_\_, the corporation that executed the Save Harmless Agreement for a Wetland and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth, and on oath stated that they were authorized to sign said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year first above written.

\_\_\_\_\_  
Notary's Signature

\_\_\_\_\_  
Print Notary's Name  
Notary Public in and for the State of Washington,  
Residing at: \_\_\_\_\_  
My commission expires: \_\_\_\_\_

## NATURAL GREENBELT PROTECTIVE EASEMENT

---

**Grantor:** \_\_\_\_\_, owner of the hereinafter described real property, hereby grants to

**Grantee:** The City of Kirkland, a municipal corporation.

A natural greenbelt protective easement over and across the following described real property to wit ("Easement Area"):

No tree trimming, tree topping, tree cutting, tree removal, shrub or brush-cutting or removal of native vegetation, application of pesticides, herbicides, or fertilizers; construction; clearing; or alteration activities shall occur within the Easement Area without prior written approval from the City of Kirkland. Application for such written approval to be made to the Kirkland Department of Planning and Community Development who may require inspection of the premises before issuance of the written approval and following completion of the activities. Any person conducting or authorizing such activity in violation of this paragraph or the terms of any written approval issued pursuant hereto, shall be subject to the enforcement provisions of Chapter 170, Ordinance 3719, the Kirkland Zoning Code. In such event, the Kirkland Department of Planning and Community Development may also require within the immediate vicinity of any damaged or fallen vegetation, restoration of the affected area by planting replacement trees and other vegetation as required in applicable sections of the Kirkland Zoning Code. The Department also may require that the damaged or fallen vegetation be removed.

It is the responsibility of the property owner to maintain critical areas and their buffers by removing non-native, invasive, and noxious plants in a manner that will not harm critical areas or their buffers and in accordance with Kirkland Zoning Code requirements for trees and other vegetation within critical areas and critical area buffers.

The City shall have a license to enter the Easement Area (and the property if necessary for access to the Easement Area) for the purpose of monitoring compliance with the terms of this easement.

Development outside of this Natural Greenbelt Protective Easement may be limited by codified standards, permit conditions, or movement of the critical area.

Each of the undersigned owners agree to defend, pay, and save harmless the City of Kirkland, its officers, agents, and employees from any and all claims of every nature whatsoever, real or imaginary, which may be made against the City, its officers, agents, or employees for any damage to property or injury to any person arising out of the existence of said Natural Greenbelt Protective Easement over said owner's property or the actions of the undersigned owners in carrying out the responsibilities under this agreement, including all costs and expenses, and recover attorney's fees as may be incurred by the City of Kirkland in defense thereof; excepting therefrom only such claims as may arise solely out of the negligence of the City of Kirkland, its officers, agents, or employees.

This easement is given to satisfy a condition of the development permit approved by the City of Kirkland under Kirkland File/Permit No. \_\_\_\_\_, for construction of \_\_\_\_\_ upon the following described real property:

This easement shall be binding upon the parties hereto, their successors and assigns, and shall run with the land.

DATED at Kirkland, Washington, this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

**(Sign in blue ink)**

**(Individuals Only)**

OWNER(S) OF REAL PROPERTY (INCLUDING SPOUSE)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**(Individuals Only)**

STATE OF WASHINGTON )

) SS.

County of King )

On this \_\_\_\_ day of \_\_\_\_\_/\_\_\_\_\_, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared \_\_\_\_\_ and \_\_\_\_\_

\_\_\_\_\_ to me known to be the individual(s) described herein and who executed the Natural Greenbelt Protective Easement and acknowledged that \_\_\_\_\_ signed the same as \_\_\_\_\_ free and voluntary act and deed, for the uses and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year first above written.

\_\_\_\_\_  
Notary's Signature

\_\_\_\_\_  
Print Notary's Name  
Notary Public in and for the State of Washington,  
Residing at: \_\_\_\_\_  
My commission expires: \_\_\_\_\_



**(Corporations Only)**

OWNER(S) OF REAL PROPERTY

\_\_\_\_\_  
(Name of Corporation)

\_\_\_\_\_  
By President

\_\_\_\_\_  
By Secretary

**(Corporations Only)**

STATE OF WASHINGTON }  
County of King } SS.

On this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared \_\_\_\_\_ and \_\_\_\_\_ to me, known to be the President and Secretary, respectively, of \_\_\_\_\_, the corporation that executed the Natural Greenbelt Protective Easement and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth, and on oath stated that they were authorized to sign said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year first above written.

\_\_\_\_\_  
Notary's Signature

\_\_\_\_\_  
Print Notary's Name  
Notary Public in and for the State of Washington,  
Residing at: \_\_\_\_\_  
My commission expires: \_\_\_\_\_

