

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED RECORDING #20160802002115)

LOT 10, BLOCK 4, AVALON PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 49 OF PLATS, PAGE 64, IN KING COUNTY, WASHINGTON.

BASIS OF BEARINGS

PLAT MERIDIAN-HELD BEARING N 48°18'03" E BETWEEN EXISTING PLAT MONUMENTS AS SHOWN HEREON

REFERENCES

- RECORD OF SURVEY VOL. 98, PG 157, RECORDING NO.
- 2. PLAT OF AVALON PARK RECORDED IN VOL. 49 OF PLATS, PG. 64-65 IN KING COUNTY WASHINGTON

VERTICAL DATUM

NAVD88 PER GPS OBSERVATIONS

SURVEYOR'S NOTES

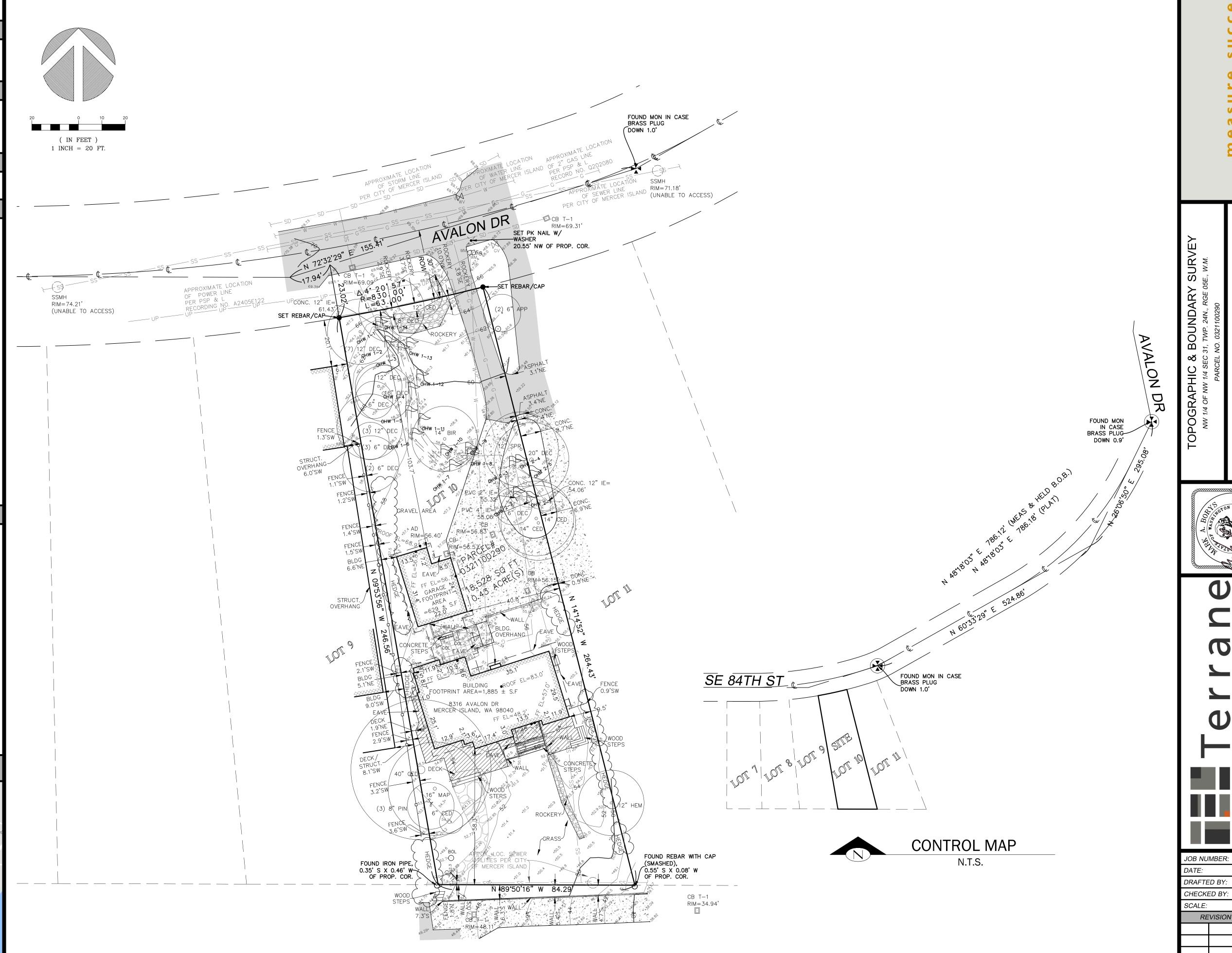
- THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN DECEMBER OF 2016. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
- 2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
- 3. BURIED UTILITIES SHOWN BASED ON RECORDS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE IN THE FIELD. TERRANE ASSUMES NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS OR ACCEPT RESPONSIBILITY FOR UNDERGROUND LINES WHICH ARE NOT MADE PUBLIC RECORD. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN CONTACT THE UTILITY OWNER/AGENCY. AS ALWAYS, CALL 1-800-424-5555 BEFORE CONSTRUCTION.
- 4. SUBJECT PROPERTY TAX PARCEL NO. 032110-0290
- 5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 18,528± S.F. (0.43± ACRES)- 18,779 PER KING COUNTY ASSESSOR'S
- 6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
- 7. INSTRUMENTATION FOR THIS SURVEY WAS A TRIMBLE ELECTRONIC DISTANCE MEASURING UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS STATE STANDARDS SET BY WAC 332-130-090.

LEGEND

[+]	AREA DRAIN		MONUMENT IN CASE (FOUND)
	ASPHALT SURFACE		PAVER SURFACE
	FLAGSTONE SURFACE	P□	POWER METER
BOL ()	BOLLARD	—— UP ——	POWER LINE (UNDERGROUND)
	BUILDING CENTERLINE ROW	[+]	AREA DRAIN
>	CULVERT	0	REBAR AS NOTED (FOUND)
	CONCRETE SURFACE	•	REBAR & CAP (SET)
	CONCRETE WALL		ROCKERY
	CONTOUR (MAJOR)	—— SS ——	SEWER LINE
—— 102 ——	CONTOUR (MINOR)		SEWER MAINTENANCE
	DECK		STORM CATCH BASIN
─◆	DITCH (FLOWLINE)	—— SD ——	STORM DRAIN LINE
××	FENCE LINE (CHAIN LINK)	SIZE TYPE (o)	TREE (AS NOTED)
	FENCE LINE (WOOD)	—— W ——	WATER LINE
—— G ——	GAS LINE	WM □	WATER METER
G 🗆	GAS METER	w∨⋈	WATER VALVE
GV	GAS VALVE	O_{HB}	HOSEBIB
	GRAVEL SURFACE	\triangleright	WETLAND FLAG
•	NAIL AS NOTED)HEDGE ROW



TOPOGRAPHIC & BOUNDARY SURVEY

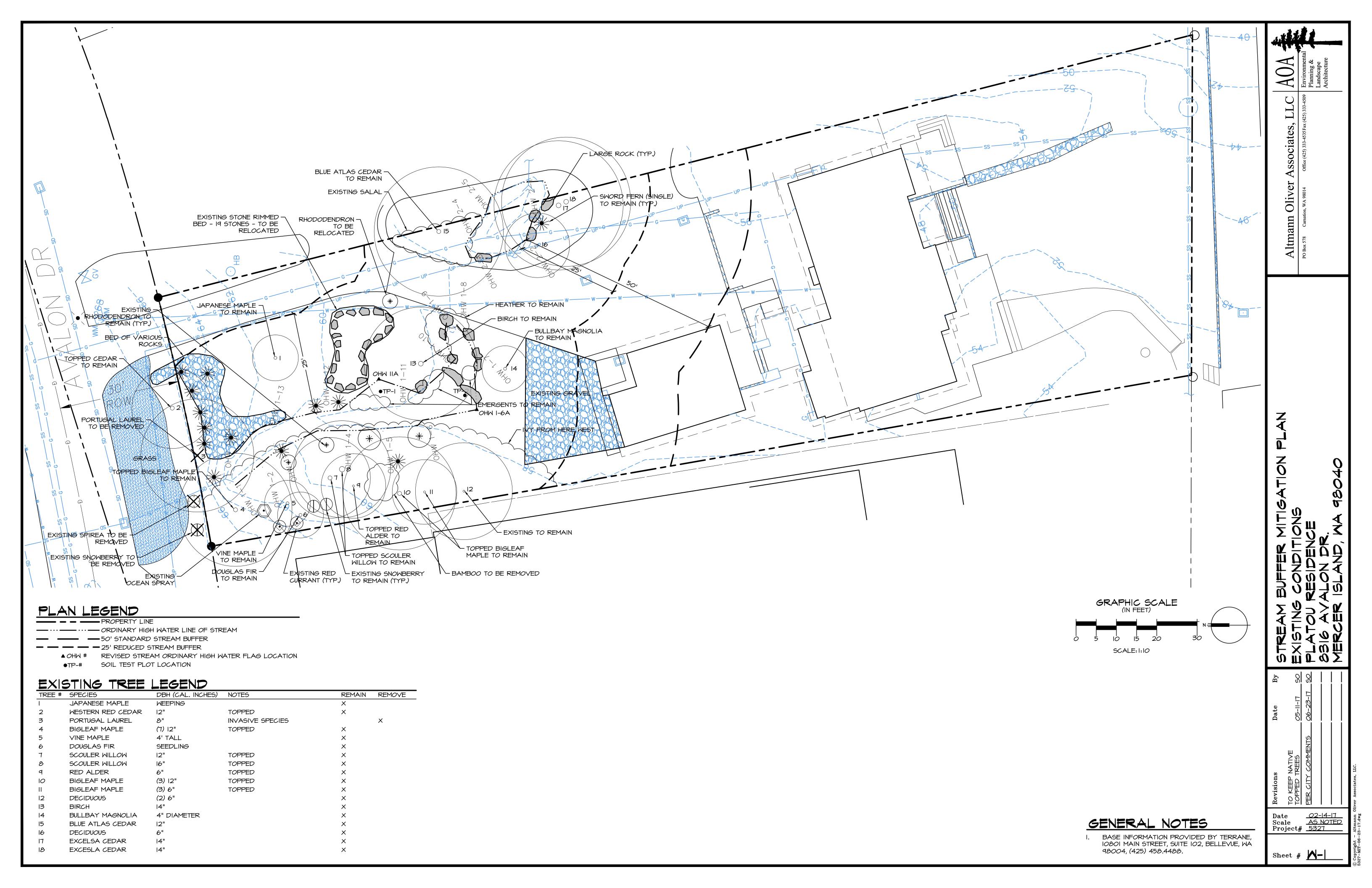


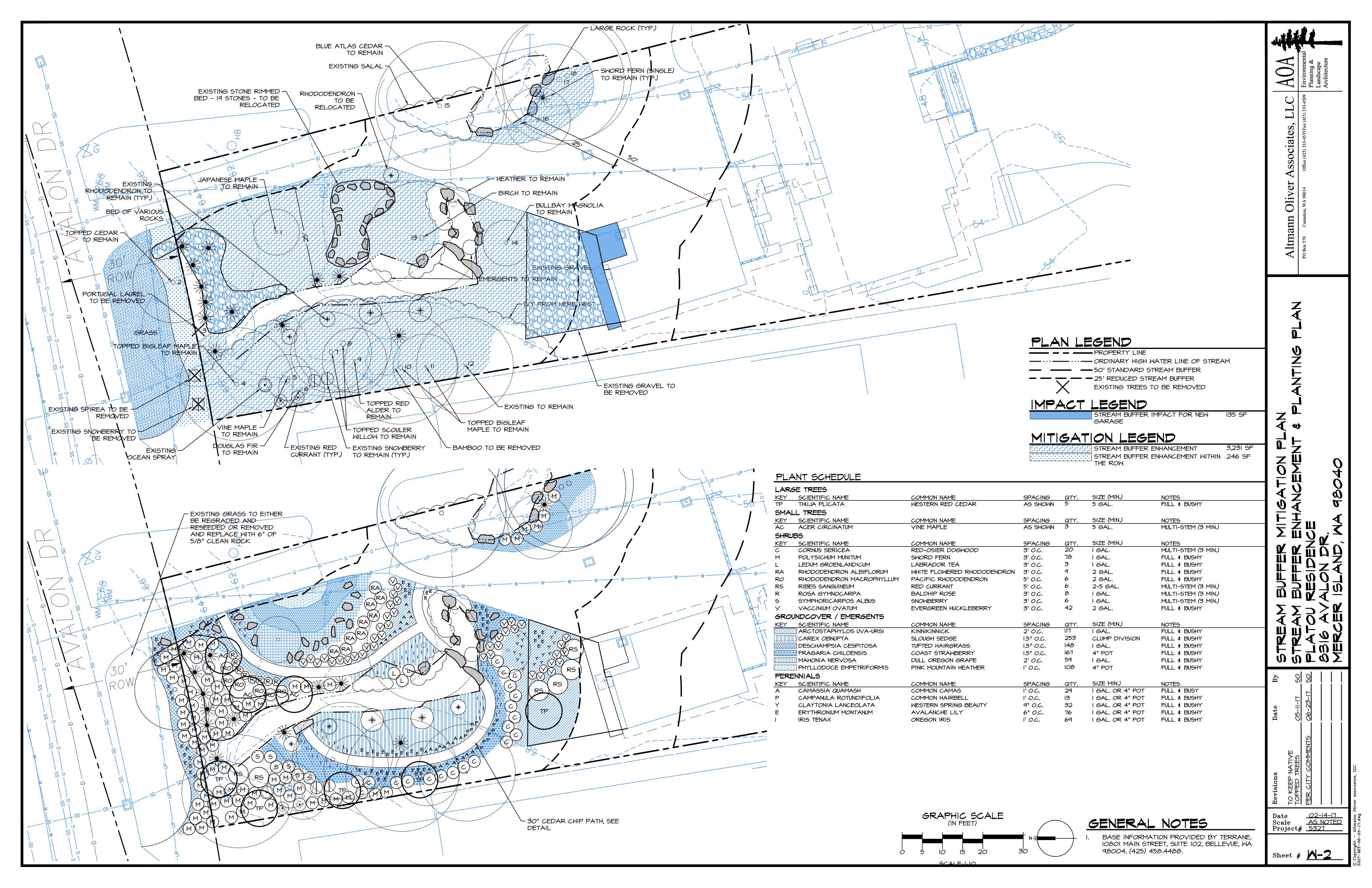
12/16/16

IDV-PSC MAB/TMM

REVISION HISTORY

SHEET NUMBER





CONSTRUCTION SPECIFICATIONS

- . CONTRACTOR INFORMATION. WHEN IT IS AVAILABLE, CONTACT INFORMATION SHALL BE PROVIDED TO THE CITY OF MERCER ISLAND THAT INCLUDES NAMES, ADDRESSES AND PHONE NUMBERS OF PERSONS/FIRMS THAT WILL BE RESPONSIBLE FOR INSTALLING REQUIRED PLANTS AND PERFORMING REQUIRED MAINTENANCE.
- 2. CONTRACTOR'S QUALIFICATIONS. ALL WORK SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR REGISTERED IN THE STATE OF WASHINGTON. CONTRACTOR MUST BE EXPERIENCED IN MITIGATION AND RESTORATION WORK. THE CONTRACTOR SHALL PROVIDE THAT THERE IS ONE PERSON ON THE SITE AT ALL TIMES DURING WORK AND INSTALLATION WHO IS THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE BEST METHODS FOR THEIR INSTALLATION, AND WHO SHALL DIRECT ALL WORK BEING PERFORMED UNDER THESE SPECIFICATIONS. THIS PERSON SHALL HAVE A MINIMUM OF FIVE (5) YEARS EXPERIENCE INSTALLING NATIVE PLANT MATERIALS FOR WETLAND MITIGATION OR RESTORATION PROJECTS, UNLESS OTHERWISE ALLOWED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST AND/OR THE CITY OF MERCER ISLAND.
- 3. TRAIL AND STEPS TO BE FIELD LOCATED BY AOA PRIOR TO CLEARING. LANDSCAPE CONTRACTOR TO VERIFY THE AMOUNT OF STEPS AND WALLS BASED ON ACTUAL GRADES (PLAN IS APPROXIMATE ONLY).
- BASED ON ACTUAL GRADES (PLAN IS APPROXIMATE ONLY). 1. ALL PLANTS SHOULD BE INSTALLED BETWEEN DECEMBER IST AND MARCH 15TH, UNLESS SUPPLEMENTAL IRRIGATION IS PROVIDED.
- 5. INTERMEDIATE INSPECTIONS. ALL PLANTS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE DESIGNER AND/OR WETLAND BIOLOGIST PRIOR TO INSTALLATION. CONDITION OF ROOTS OF A RANDOM SAMPLE OF PLANTS WILL BE INSPECTED, AS WELL AS ALL ABOVEGROUND GROWTH ON ALL PLANTS. ROOTS OF ANY BARE ROOT PLANTS, IF PERMITTED FOR USE, WILL BE INSPECTED. PLANT MATERIAL MAY BE APPROVED AT THE SOURCE, AT THE DISCRETION OF THE LANDSCAPE DESIGNER AND THE WETLAND BIOLOGIST, BUT ALL MATERIAL MUST BE RE-INSPECTED AND APPROVED ON THE SITE PRIOR TO INSTALLATION. PLANT LOCATIONS SHALL ALSO BE INSPECTED AND APPROVED PRIOR TO PLANTING.
- 6. PRIOR TO INSTALLATION OF PLANT MATERIAL, THE PLANTING AREAS WILL BE LAID OUT BASED ON THE PLANTING PLAN, AND ALL HIMALAYAN BLACKBERRY, ENGLISH IVY OR OTHER INVASIVE PLANT SPECIES LOCATED IN THE PLANTING AREAS WILL BE REMOVED BY HAND. NO HERBICIDES OR
- PESTICIDES SHOULD BE USED WITHIN THE ENHANCEMENT AREA. AOA SHALL REVIEW INVASIVE REMOVAL PRIOR TO PLANTING.

 7. ALL PLANTS SHALL BE PIT-PLANTED IN PLANTING PITS EXCAVATED 2X THE DIAMETER OF THE PLANT. PITS SHALL BE BACKFILLED WITH A 30/10 MIX OF STEERCO TO NATIVE SOIL. PITS SHALL BE AMENDED WITH A HYDRATED SOIL POLYMER (INSTALLED AT RATES PER MANUFACTURER'S SPECIFICATIONS). PLANTS SHALL BE INSTALLED 3" HIGH AND SURFACED MULCHED TO A DEPTH OF 3" WITH PACIFIC GARDEN MULCH PLACED.
- SPECIFICATIONS). PLANTS SHALL BE INSTALLED 3" HIGH AND SURFACED MULCHED TO A DEPTH OF 3" WITH PACIFIC GARDEN MULCH PLACED CONTINUOUSLY THROUGHOUT THE PLANTING BED.

 8. ON STEEP SLOPES, I/2" BIODEGRADABLE JUTE MESH SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS UPON COMPLETION OF INVASIVE
- THROUGH THE MESH MY CUTTING A LARGE X AT EACH PLANT LOCATION. AOA TO REVIEW PLANT LAYOUT PRIOR TO INSTALLATION. PACIFIC GARDEN MULCH SHALL BE PLACED OVER JUTE.

REMOVAL AND INSTALLATION OF TREES AND PRIOR TO INSTALLATION OF SHRUBS AND GROUNDCOVER. THESE PLANTS SHALL BE INSTALLED

- 9. ALL PLANTS SHALL BE NURSERY GROWN (IN WESTERN WA OR OR) FOR AT LEAST I YEAR FROM PURCHASE DATE, FREE FROM DISEASE OR PESTS, WELL-ROOTED, BUT NOT ROOT-BOUND AND TRUE TO SPECIES.
- 10. PLANT LAYOUT SHALL BE APPROVED BY AOA PRIOR TO INSTALLATION AND APPROVED UPON COMPLETION OF PLANTING.
- II. UPON COMPLETION OF PLANTING, ALL PLANTS SHALL BE THOROUGHLY WATERED.
- 12. UPON APPROVAL OF PLANTING INSTALLATION BY AOA, THE CITY OF MERCER ISLAND WILL BE NOTIFIED TO CONDUCT A SITE REVIEW FOR FINAL APPROVAL OF CONSTRUCTION.
- 13. MAINTENANCE SHALL BE REQUIRED IN ACCORDANCE WITH THE CITY OF MERCER ISLAND SENSITIVE AREAS MITIGATION GUIDELINES AND APPROVED PLANS.
- 14. ALL PLANTS SHALL BE HAND-WATERED, AS NECESSARY DURING THE FIRST TWO DRY SEASONS. BETWEEN JUNE 15 OCTOBER 31. FLOW SHOULD ENSURE COMPLETE SATURATION OF THE ROOT ZONE.
- 15. MAINTENANCE SHALL BE IMPLEMENTED ON A REGULAR BASIS ACCORDING TO THE SCHEDULE BELOW.

ANNUAL MAINTENANCE SCHEDULE

ANNUAL MAINTENANCE SCHEDULE												
MAINTENANCE ITEM	7	F	М	Α	М	L	L	Α	5	0	N	D
WATERING - YEARS I \$ 2							8	8	8	8		
WEED CONTROL			ı		ı		ı					
GENERAL MAINT.			ı		1		ı					

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

MAINTENANCE & MONITORING PLAN

I.O PROPOSED BUFFER MITIGATION

Due to the degraded condition of the existing buffer, the proposed project would utilize mitigation option 19.07.070.B.2.b.iii to allow for a buffer reduction from 50 to 25 feet minimum to accommodate the minor expansion. Under the proposed project, all of the degraded vegetated portions of the watercourse buffer would be enhanced by the removal of invasive weeds and re-planting a variety of native tree, shrub, and groundcover species.

As part of the enhancement measures, a small, 30" wide cedar chip path is proposed to be located in the buffer for maintenance access to the plantings and passive access to the stream by the property owners. A rock bridge already exists and will be used for trail access across the stream. Allowing the property owners specific access points into the buffer allows better success of maintenance of the plantings overtime, ease in invasive removal and creates a connection to the stream as a part of the larger property thus increasing stewardship of the stream and the buffer.

The proposed plantings have been designed to increase the plant species and structural diversity within the buffer and to provide physical and visual screening to the watercourse from the residence. Increasing the plant species and structural diversity within the buffer would also increase the wildlife habitat of the area over current conditions.

I.I Goal, Objective, and Performance Standard for Enhancement Area

The primary goal of the enhancement plan is to restore the watercourse buffer with native vegetation. To meet this goal, the following objectives and performance standards have been incorporated into the design of the plan:

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

Performance Standard: At the end of the five-year monitoring period, the enhancement area will contain at least fifteen native plant species. In addition, there will be 100% survival of all woody planted species throughout the enhancement area at the end of the first year of planting. Following Years 2 through 5, success will be based on an 80% survival rate.

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

Performance Standard: After installation and at the end of the fifth year after planting, exotic and invasive plant species will be maintained at levels below 10% total cover in all planted areas. These species include, but are not limited to, Himalayan and evergreen blackberry, reed canarygrass, purple loosestrife, morning glory, Japanese knotweed, English ivy, hedge bindweed, English holly, and creeping nightshade.

1.2 Monitoring Methodology

The monitoring program will be conducted for a period of five years, with annual reports submitted to the City of Mercer Island.

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

2.0 MAINTENANCE PLAN

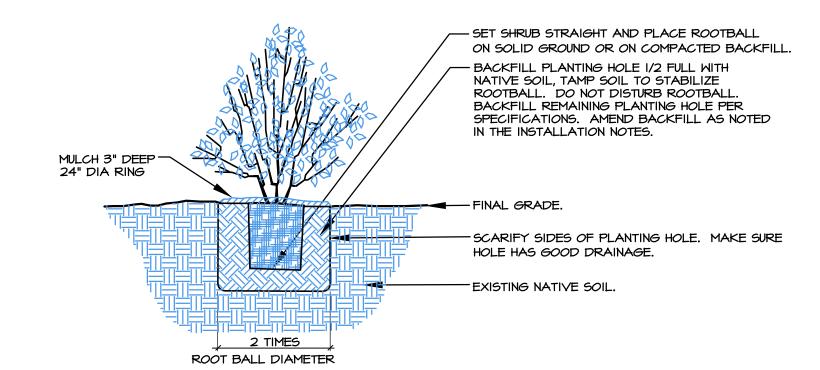
Maintenance will be conducted on a routine, year round basis. Additional maintenance needs will be identified and addressed following a twice-yearly maintenance review. Contingency measures and remedial action on the site shall be implemented on an as-needed basis at the direction of the consultant or the owner. Tall grasses and weeds shall be removed at the base of plants to prevent engulfment. Weed control should be performed by hand removal.

3.0 CONTINGENCY PLAN

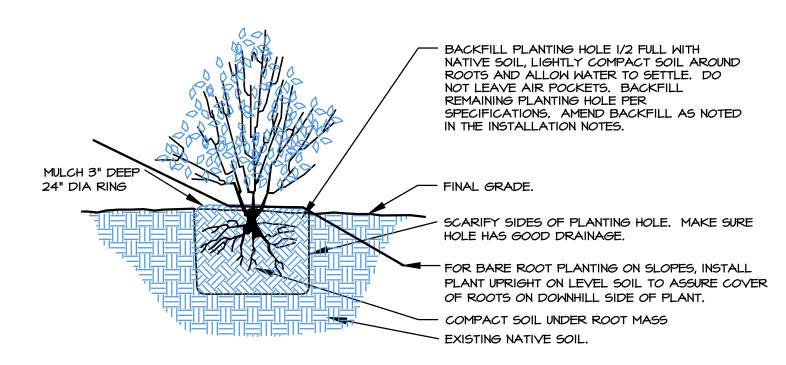
All dead plants will be replaced with the same species or an approved substitute species that meets the goal of the enhancement plan. Plant material shall meet the same specifications as originally-installed material. Replanting will not occur until after reason for failure has been identified (e.g.,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

.O AS-BUILT PLA

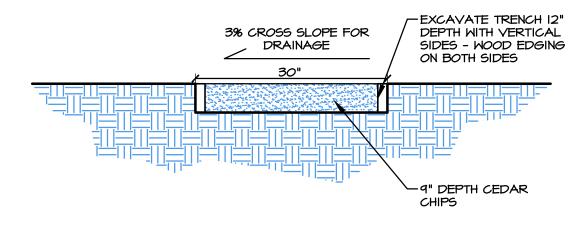
4.0 AS-BUILT PLAN
Following completion of construction activities, an as-built plan for the enhancement area will be provided to the City of Mercer Island. The plan will identify and describe any changes in relation to the original approved plan.



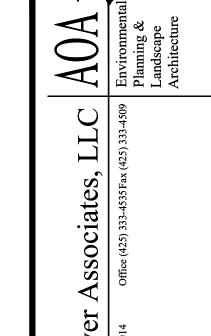




2 BARE-ROOT PLANTING DETAIL (TYP.)
SCALE: NTS



(3) CEDAR CHIP TRAIL DETAIL
SCALE: NTS



Altmann Oliver Associa
PO Box 578 Carnation, WA 98014 Office (425) 333-4

STREAM BUFFER MITIOATION FLA
SPECIFICATIONS & DETAILS
PLATOU RESIDENCE
BOSIO AVALON DR.
AND MA 400.40

TO KEEP NATIVE

TOPPED TREES

PER CITY COMMENTS

06-23-IT

Date O2-14-17
Scale AS NOTED
Project# 5327

Sheet # **M-3**

