

Flood Management Area Permit Application – Response to MIS-16-02 Incomplete Letter

Date: April 27, 2016

**Owner/
Applicant:** Garrin & Cortney Royer
3050 Roxbury Drive
West Linn, OR 97968
E: goyer@redside.com
P: 503.816.7726

Architect: Scott | Edwards Architecture, LLP
2525 E. Burnside St.
Portland, OR 97214
Attn: Joe Broders
E: jbroders@seallp.com
P: 503.226.3617

Site Location: 5005 Mapleton Drive

Legal Description: Lot 21, Maple Grove
NE ¼ of Section 24, T.2S., R.1E., WM
City of West Linn, Clackamas Co., OR

Base Zoning: R-10

Comp Plan: Low-Density Residential

Applicable Ord: West Linn CDC Chapter 27 – Flood Management Areas

Narrative addressing incomplete items per MIS-16-02 incomplete letter

1. *27.060(G) requires all development designs in the 100 year floodplain to be stamped by a licensed PE per FEMA requirements.*

See stamped letter provided by SFA Design Group, Inc. drafted and stamped by Jeff Fitch, PE, P. Eng

2. *27.080(B) provide design stamped by a licensed PE that demonstrates compliance with these provisions. (The criteria states “or architect”; however, FEMA requires a PE stamp.)*

See “STRUCTURAL CALCUALTIONS Royer Residence Flood Access Requirements” attached provided by SFA Design Group, Inc. stamped by Jeff Fitch, PE, P. Eng

3. *A pre-development elevation certificate (for the footprint of the proposed house) stamped by a licensed PE must be provided.*

See Elevation Certificate Attached for existing residence located at 5005 Mapleton Drive. Per a discussion with Peter Spir the elevation certificate attached provides the required information for the floodway management permit.



SFA Design Group, LLC

STRUCTURAL | CIVIL | LAND USE PLANNING | SURVEYING

9020 SW Washington Square Dr., Suite 505 - Portland, OR 97223

1813 Rutan Dr., Suite C - Livermore, CA 94551

P: (503) 641-8311 F: (503) 643-7905

www.sfadg.com

April 27, 2016

Joe Broders
Scott Edwards Architects
2525 East Burnside Street
Portland, Oregon 97214

Re: Royer Residence
SFA Job #16-039


Joe:

After reviewing drawings provided by Scott Edwards Architects for the “Royer” residence SEA job number 15144, with revision 1 dated April 27, 2016, sheets A0.3, A0.4, and A1.1 show requirements for flood plain construction that are in accordance with our (SFA) calculations dated April 18, 2016.

If you have any questions, regarding the comments above, please call.

Sincerely,

SFA Design Group, Inc.


Jeff Fitch, P.E., P.Eng
Principal



EXPIRES: 12-31-17



SFA Design Group, LLC

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STRUCTURAL CALCULATIONS

Royer Residence Flood Access Requirements 5005 Maplton Dr., West Linn, OR 97068

Scott Edwards Architecture, LLP



EXPIRES: 12-31-17

LIMITATIONS

ENGINEER WAS RETAINED IN A LIMITED CAPACITY FOR THIS PROJECT. DESIGN IS BASED UPON INFORMATION PROVIDED BY THE CLIENT WHO IS SOLELY RESPONSIBLE FOR ACCURACY OF SAME. NO RESPONSIBILITY AND/OR LIABILITY IS ASSUMED BY, OR IS TO BE ASSIGNED TO THE ENGINEER FOR ITEMS BEYOND THAT SHOWN ON THESE SHEETS.

Project No. 16-039

April 18, 2016



Project

ROYER RESIDENCE

Date

4/18/16

Subject

NUMBER OF REQ'D FLOOD ACCESS & SIZE

By

KT

SIZE OF SUBTERRANEAN BASEMENT AREA = 2260 ft²

REQ'D AREA OF OPENINGS = 1 sq in PER 1 sq ft

WEST VIRGINIA CODE 22.080

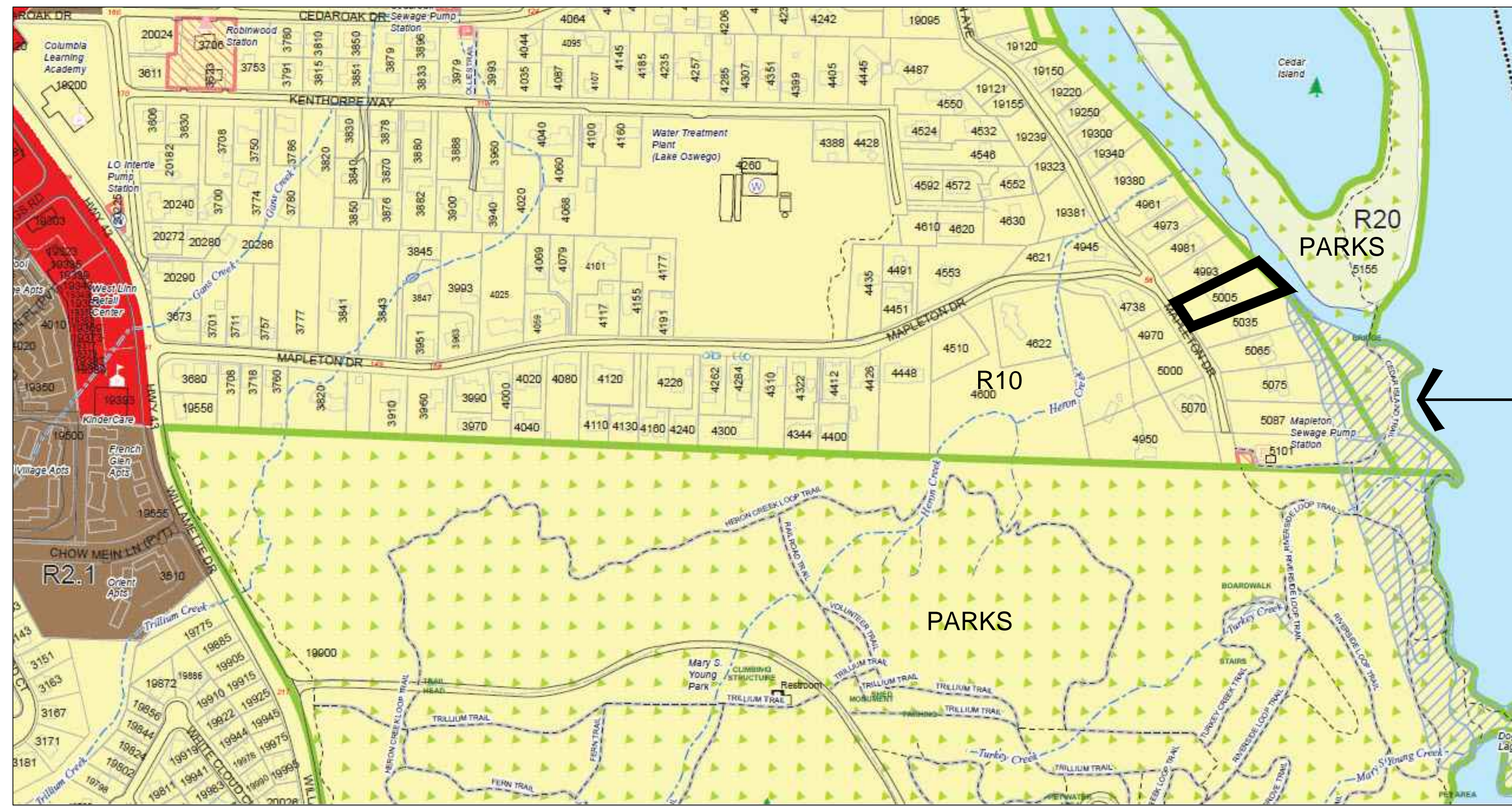
THEREFORE 2260 in² OF OPENINGS REQ'D

OPENINGS SHALL BE 6" W x 30" TALL WITH ONE OPENING 2'-0" W x 30" DP

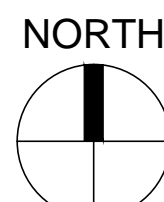
24" x 30" = 720 in² ⇒ 2260 in² - 720 in² = 1540 in²

6" x 30" = 180 in² ⇒ 1540 in² / 180 in² = 8.5 ⇒ USE 9 OPENING

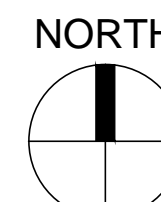
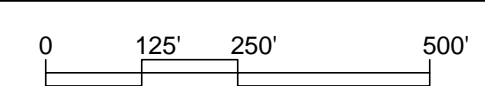
⇒ USE 1 OPENING 2'-0" W x 30" DP + 9 OPENINGS 6" W x 30" DP



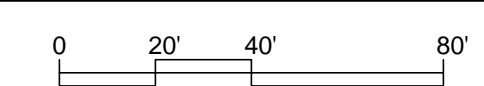
WETLANDS INVENTORY (HATCHED)



1 WEST LINN ZONING MAP - 8/2015



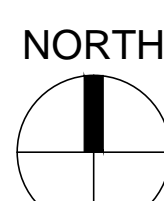
2 AERIAL PHOTO



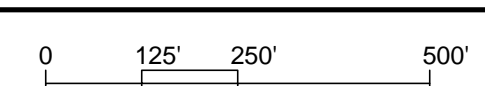
FLOODWAY AREAS IN ZONE AE

1% (100 YR) SPECIAL FLOOD HAZARD AREA
 ZONE AE - BASE FLOOD ELEVATION DETERMINED (BFE 46.0')

.2% (500 YR) SPECIAL FLOOD HAZARD AREA



1 FIRM MAP 41005C0019D - CLACKAMAS COUNTY, OR



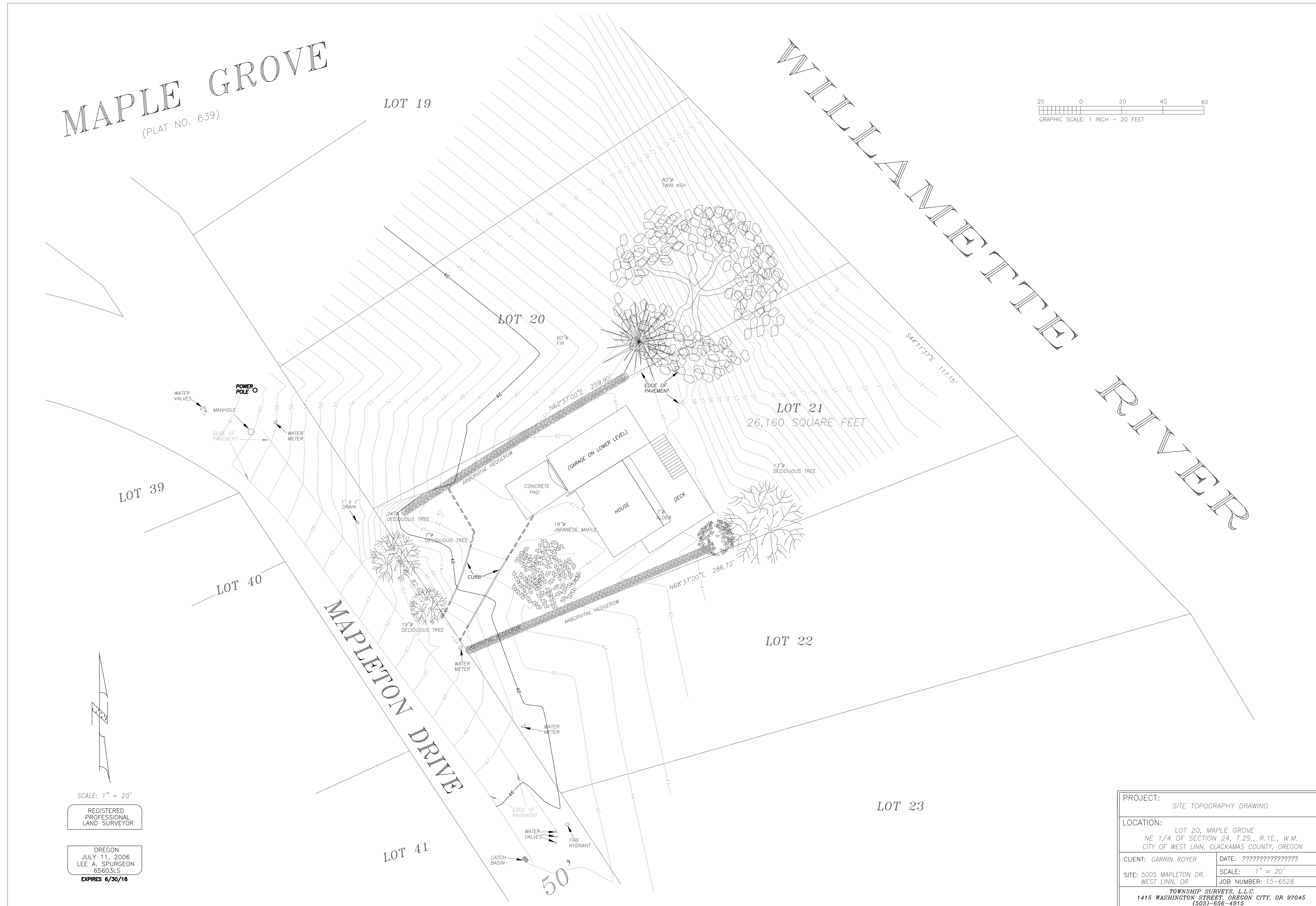
Drawing:

VICINITY MAPS

Job No: 15144
 Date: 03/22/2016
 Drawn By:
 Checked By:
 Sheet No:

**ROYER
 RESIDENCE**

5005 MAPLETON DR.
 WEST LINN, OR



SCALE: 1" = 20'

REGISTERED
 PROFESSIONAL
 LAND SURVEYOR

OREGON
 JULY 11, 2006
 LEE A. SPURGEON
 6560313
 EXPIRES 6/30/16

PROJECT: SITE TOPOGRAPHY DRAWING	
LOCATION: LOT 20, MAPLE GROVE NE 1/4 OF SECTION 24, T.2S., R.1E., W.M. CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON	
CLIENT: GARRIN ROYER	DATE: ????????????????
SITE: 5005 MAPLETON DR. WEST LINN, OR	SCALE: 1" = 20' JOB NUMBER: 15-6528
TOWNSHIP SURVEYS, L.L.C. 1415 WASHINGTON STREET, OREGON CITY, OR 97045 (503)-656-4916	

Drawing:

TOPO SURVEY

Job No: 15144

Date: 03/22/2016

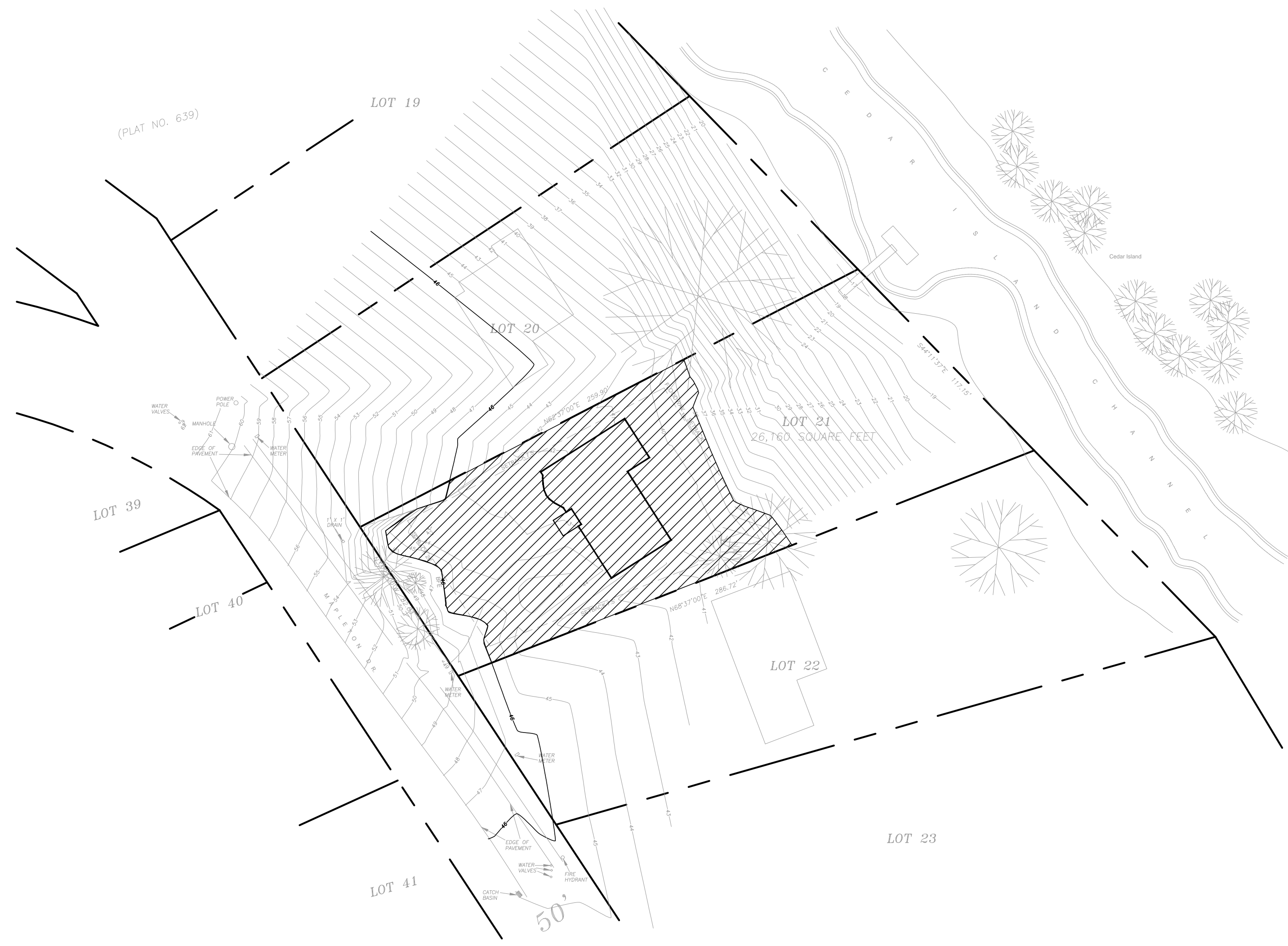
Drawn By: -

Checked By: -

Sheet No:

ROYER RESIDENCE

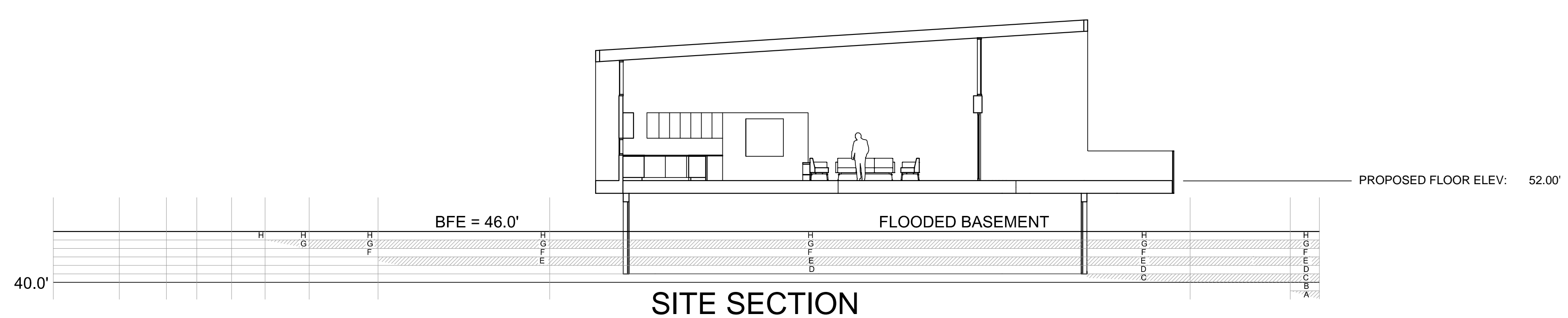
5005 MAPLETON DR.
 WEST LINN, OR



1 FLOOD MANAGEMENT PLAN - EXISTING
 1" = 40'-0"



2 FLOOD MANAGEMENT PLAN - PROPOSED
 1" = 40'-0"



SITE SECTION

FLOOD VOLUME TABULATION: (BY 1' CONTOUR INTERVALS) EXISTING GRADING

	Elevation	Square Footage	Volume @ .5 (CF)	Volume @ 1.0 (CF)	VT (CF)
A	38-39	545.00	272.50		
B	39-40	1082.00	541.00	545.00	1086.00
C	40-41	2010.00	1005.00	1627.00	2632.00
D	41-42	934.00	467.00	3637.00	4104.00
E	42-43	2217.00 (2)	857.00	4571.00	5428.00
F	43-44	4563.00	1148.00 (1)	6788.00	7936.00
G	44-45	1730.00	865.00	11351.00	12216.00
H	45-46	661.00	330.50	13081.00	13411.50
					46813.50

(1) ADJUSTED TO ELIMINATE BASEMENT AREA WHERE NO SLOPE EXISTS
 (2) ADJUSTED TO INCLUDE .25% OF BASEMENT AREA FOR SLAB ELEVATION BELOW 43'

PROPOSED GRADING

	Elevation	Square Footage	Volume @ .5 (CF)	Volume @ 1.0 (CF)	VT (CF)
A	38-39	545.00	272.50		
B	39-40	992.00	496.00	545.00	1041.00
C	40-41	1352.00	676.00	1537.00	2213.00
D	41-42	4637.00	1210.00 (1)	2889.00	4099.00
E	42-43	1544.00	772.00	7526.00	8298.00
F	43-44	1556.00	778.00	9070.00	9848.00
G	44-45	662.00	331.00	10626.00	10957.00
H	45-46	735.00	367.50	11288.00	11655.50
					48111.50

PROPOSED EXCEEDS EXISTING

LEGEND:

- 46 ——— EXISTING GRADE CONTOURS
- BFE ——— BASE FLOOD ELEVATION
- 46 ——— NEW GRADE CONTOURS
- [Hatched Box] FLOOD WAY VOLUMINS BETWEEN ELEVATION 38 (NO DISTURBANCE) AND ELEVATION 46 (BASE FLOOD ELEVATION) SEE TABULATION
- [Hatched Box] INCLUDES FULL FLOODED BASEMENT

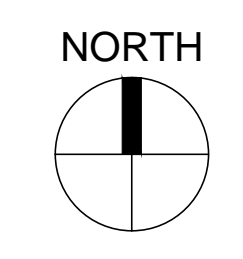
BASIC ZONING INFO:

SETBACKS: F: 20'
 S: 7.5'
 R: 20' SUPERCEDED BY FLOODWAY

FLOODWAY SETBACK: 35' RIVERWARD OF EXISTING HOUSE EAST WALL

MAX. HEIGHT 35' (EL 43' + 35' = EL 78' RIDGE MAX.)
 MAX. LOT COVERAGE 35% (8,196 SF)
 MAX. FAR 45% (11,772 SF)

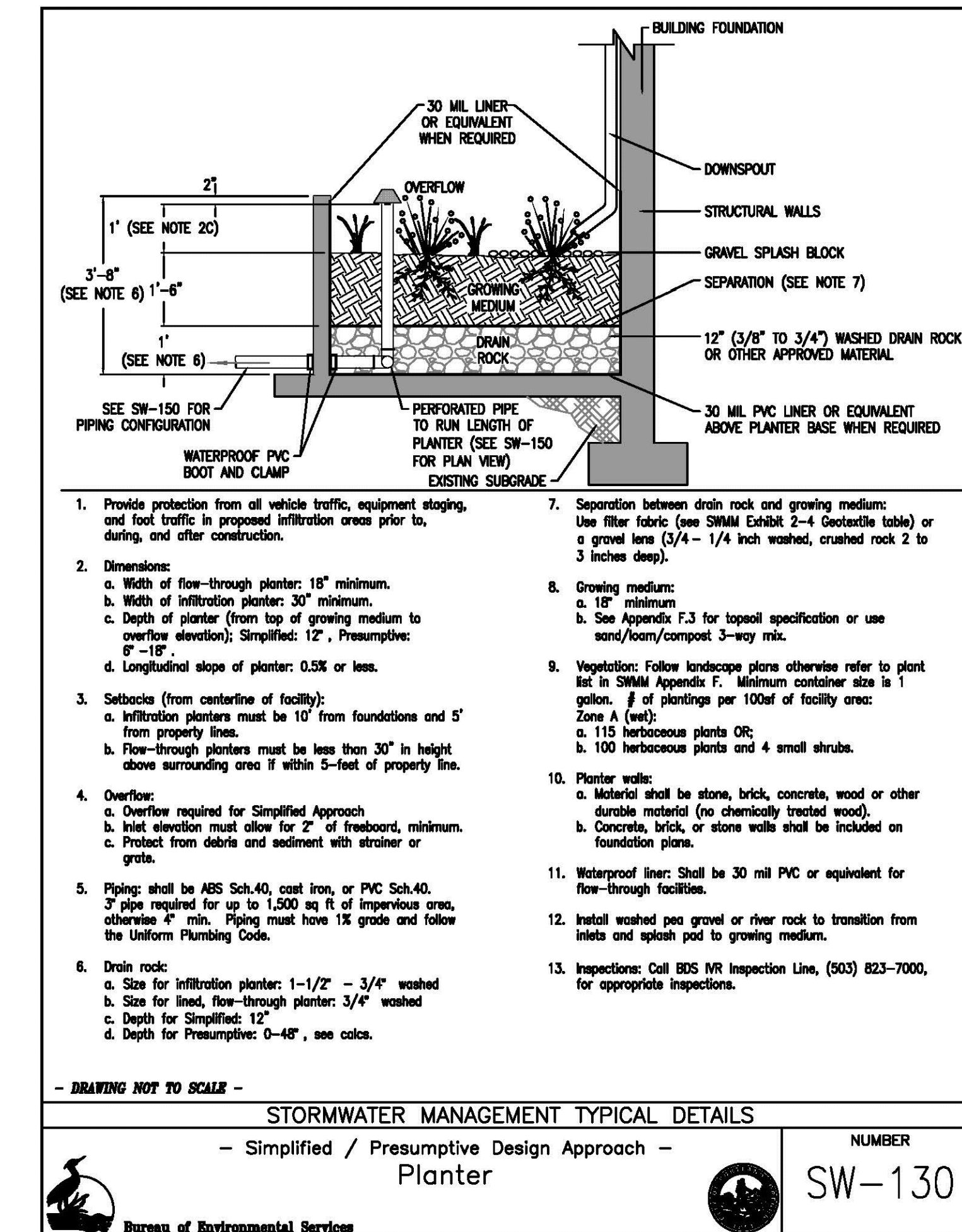
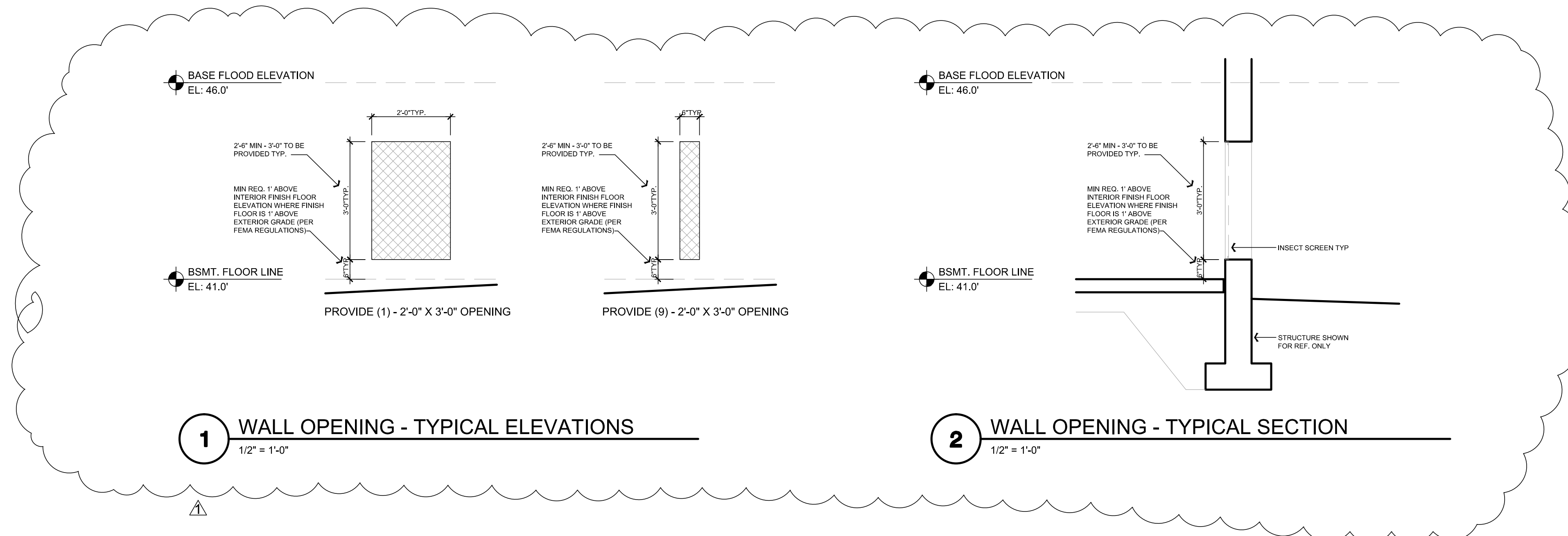
BASE FLOOD ELEVATION: 46.00'
 REQ'D FINISH FLOOR ELEV: 47.00'
 EXISTING FLOOR ELEV: 47.50'
 PROPOSED FLOOR ELEV: 52.00'



Drawing:

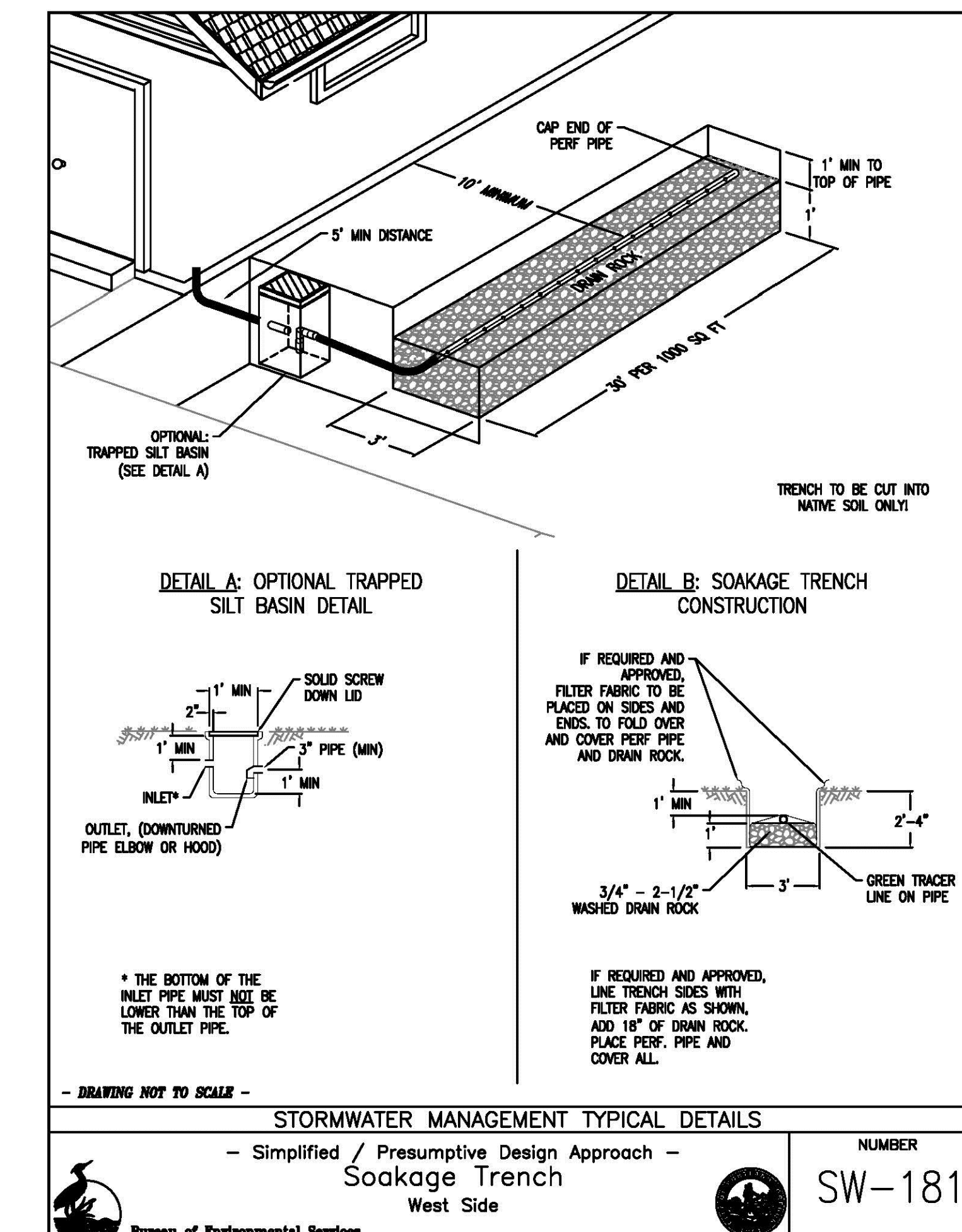
FLOOD MANAGEMENT PLAN

Job No: 15144
 Date: 03/22/2016
 Drawn By:
 Checked By:
 Sheet No:



- Provide protection from all vehicle traffic, equipment stopping, and foot traffic in proposed infiltration areas prior to, during, and after construction.
- Dimensions:
 - Width of flow-through planter: 18" minimum.
 - Width of infiltration planter: 30" minimum.
 - Depth of planter (from top of growing medium to overflow elevation): Simplified: 12", Presumptive: 30" - 18"
 - Longitudinal slope of planter: 0.2% or less.
- Setbacks (from centerline of facility):
 - Infiltration planters must be 10' from foundations and 5' from property lines.
 - Flow-through planters must be less than 30' in height above surrounding area if within 5'-feet of property line.
- Overflow:
 - Overflow required for Simplified Approach
 - Overflow elevation must allow for 2" of freeboard, minimum.
 - Protect from debris and maintain with strainer or grate.
- Piping: shall be ABS Sch.40, cast iron, or PVC Sch.40. 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping must have 1% grade and follow the Uniform Plumbing Code.
 - Size for infiltration planter: 1-1/2" - 3/4" washed
 - Size for lined, flow-through planter: 3/4" washed
 - Depth for Simplified: 12"
 - Depth for Presumptive: 0-48", see codes.
- Separation between drain rock and growing medium: Use filter fabric (see SMMA Catalog 2-4 Geotextile table) or a gravel lens (3/4" - 1/4" inch washed, crushed rock 2 to 3 inches deep).
- Growing medium:
 - 18" minimum
 - See Appendix F.3 for topsoil specification or use sand/loam/compost 3-soy mix.
- Vegetation: Follow landscape plans otherwise refer to plant list in SMMA Appendix F. Minimum container size is 1 gallon. # of plantings per 100sq ft of facility area: Zone A (leaf):
 - 10 herbaceous plants OR
 - 100 herbaceous plants and 4 small shrubs.
- Planter walls:
 - Material shall be stone, brick, concrete, wood or other durable material (no chemically treated wood).
 - Concrete, brick, or stone walls shall be included on foundation plans.
- Waterproof liner: Shall be 30 mil PVC or equivalent for flow-through facilities.
- Install washed pea gravel or river rock to transition from side and splash pad to growing medium.
- Inspections: Call BSS NR Inspection Line, (503) 623-7000, for appropriate inspections.

STORMWATER MANAGEMENT TYPICAL DETAILS
 - Simplified / Presumptive Design Approach -
 Planter
 NUMBER SW-130
 Bureau of Environmental Services



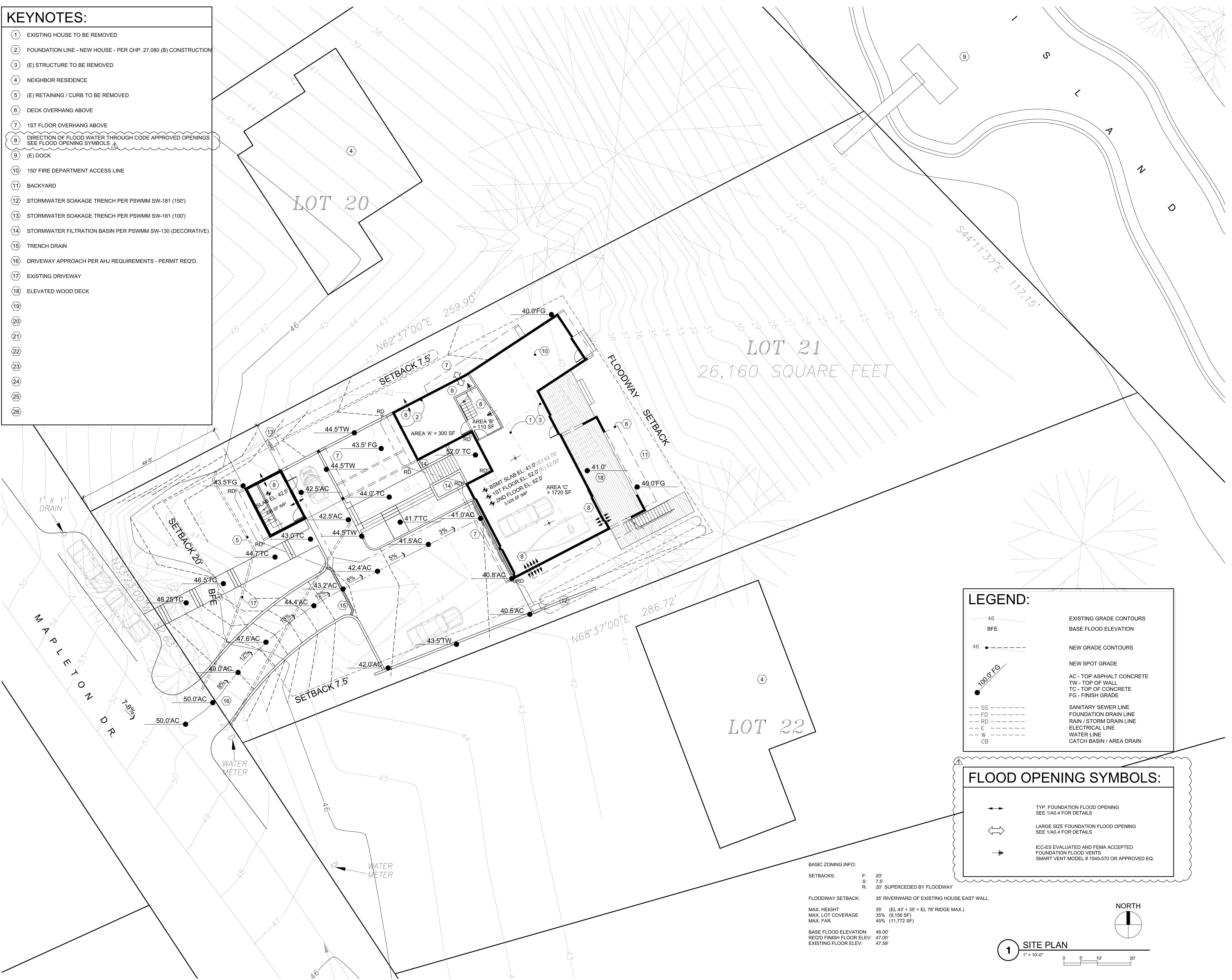
STORMWATER MANAGEMENT TYPICAL DETAILS
 - Simplified / Presumptive Design Approach -
 Soakage Trench
 West Side
 NUMBER SW-181
 Bureau of Environmental Services

KEYNOTES:

- ① EXISTING HOUSE TO BE REMOVED
- ② FOUNDATION LINE - NEW HOUSE - PER CHP. 27.080 (B) CONSTRUCTION
- ③ (E) STRUCTURE TO BE REMOVED
- ④ NEIGHBOR RESIDENCE
- ⑤ (E) RETAINING / CURB TO BE REMOVED
- ⑥ DECK OVERHANG ABOVE
- ⑦ 1ST FLOOR OVERHANG ABOVE
- ⑧ DIRECTION OF FLOOD WATER THROUGH CODE APPROVED OPENINGS
SEE FLOOD OPENING SYMBOLS
- ⑨ (E) DOCK
- ⑩ 150' FIRE DEPARTMENT ACCESS LINE
- ⑪ BACKYARD
- ⑫ STORMWATER SOAKAGE TRENCH PER PSWMM SW-181 (150')
- ⑬ STORMWATER SOAKAGE TRENCH PER PSWMM SW-181 (100')
- ⑭ STORMWATER FILTRATION BASIN PER PSWMM SW-130 (DECORATIVE)
- ⑮ TRENCH DRAIN
- ⑯ DRIVEWAY APPROACH PER AHJ REQUIREMENTS - PERMIT REQ'D.
- ⑰ EXISTING DRIVEWAY
- ⑱ ELEVATED WOOD DECK
- ⑲
- ⑳
- ㉑
- ㉒
- ㉓
- ㉔
- ㉕
- ㉖

ROYER RESIDENCE

5005 MAPLETON DR.
 WEST LINN, OR



LEGEND:

	EXISTING GRADE CONTOURS
	BASE FLOOD ELEVATION
	NEW GRADE CONTOURS
	NEW SPOT GRADE
	AC - TOP ASPHALT CONCRETE
	TW - TOP OF WALL
	TC - TOP OF CONCRETE
	FG - FINISH GRADE
	SANITARY SEWER LINE
	FOUNDATION DRAIN LINE
	RAIN / STORM DRAIN LINE
	ELECTRICAL LINE
	WATER LINE
	CATCH BASIN / AREA DRAIN

FLOOD OPENING SYMBOLS:

	TYP. FOUNDATION FLOOD OPENING SEE 1/100.4 FOR DETAILS
	LARGE SIZE FOUNDATION FLOOD OPENING SEE 1/100.4 FOR DETAILS
	ICC-ES EVALUATED AND FEMA ACCEPTED FOUNDATION FLOOD VENTS SMART VENT MODEL # 1540-570 OR APPROVED EQ.

BASIC ZONING INFO:

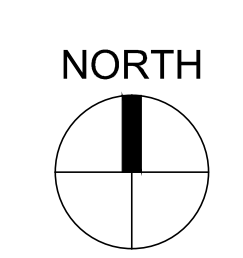
SETBACKS: F: 20'
 S: 7.5'
 R: 20' SUPERCEDED BY FLOODWAY

FLOODWAY SETBACK: 35' RIVERWARD OF EXISTING HOUSE EAST WALL

MAX. HEIGHT: 35' (EL 43' + 35' = EL 78' RIDGE MAX.)
 MAX. LOT COVERAGE: 35% (9,166 SF)
 MAX. FAR: 45% (11,772 SF)

BASE FLOOD ELEVATION: 46.00'
 REQ'D FINISH FLOOR ELEV.: 47.00'
 EXISTING FLOOR ELEV.: 47.59'

1 SITE PLAN
 1" = 10'-0"



REVISION - 04.27.2016
 Drawing:

SITE PLAN

Job No: 15144
 Date: 03/22/2016
 Drawn By: -
 Checked By: -
 Sheet No:

ELEVATION CERTIFICATE

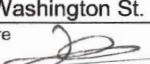
IMPORTANT: Follow the instructions on pages 1-9.

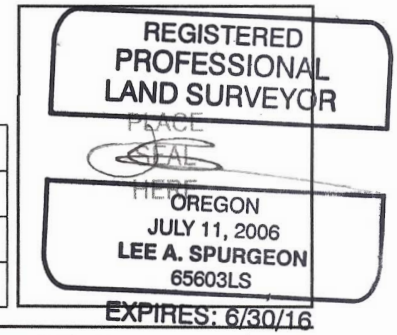
OMB No. 1660-0008
 Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name Garrin Royer		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5005 Mapleton Dr.		Company NAIC Number:
City West Linn	State OR	ZIP Code 97068
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Tax Lot 3600 on Map 4S 2E 27		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential		
A5. Latitude/Longitude: Lat. 45.385141 Long. -122.626990 Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983		
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance. (see comments)		
A7. Building Diagram Number 3		
A8. For a building with a crawlspace or enclosure(s):		A9. For a building with an attached garage:
a) Square footage of crawlspace or enclosure(s) N/A sq ft		a) Square footage of attached garage 43 sq ft
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 0		b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 0
c) Total net area of flood openings in A8.b 0 sq in		c) Total net area of flood openings in A9.b 0 sq in
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number Clackamas County, Oregon and incorporated areas 41005C		B2. County Name Clackamas		B3. State Oregon	
B4. Map/Panel Number 41005C / 0019	B5. Suffix D	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date 6/17/2008	B8. Flood Zone(s) AE, X	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 46'
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ / _____ / _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)	
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input checked="" type="checkbox"/> Finished Construction *A new Elevation Certificate will be required when construction of the building is complete.	
C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: Corps of Engineers 90H-3-02 Vertical Datum: NAVD88 Indicate elevation datum used for the elevations in items a) through h) below. <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____ Datum used for building elevations must be the same as that used for the BFE.	
Check the measurement used.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	<u>42 . 76</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor	<u>47 . 59</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only)	<u>N/A</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab)	<u>42 . 76</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	<u>50 . 04</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG)	<u>42 . 37</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG)	<u>47 . 16</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	<u>N/A</u> <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION			
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.			
<input checked="" type="checkbox"/> Check here if comments are provided on back of form.		Were latitude and longitude in Section A provided by a licensed land surveyor? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Check here if attachments.			
Certifier's Name Lee A. Spurgeon	License Number 65603LS		
Title Professional Land Surveyor	Company Name Township Surveys LLC		
Address 1415 Washington St.	City Oregon City	State OR	ZIP Code 97045
Signature 	Date 4/17/2015	Telephone 503-656-4915	



ELEVATION CERTIFICATE, page 2


IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5005 Mapleton Dr.			Policy Number:
City West Linn	State OR	ZIP Code 97068	Company NAIC Number:

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments A5) Horizontal datum is WGS84. (Google Earth)

C2.e) Water heater

Signature  Date 4/17/15

SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).

a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ feet meters above or below the HAG.

b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ feet meters above or below the LAG.

E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8–9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____ . _____ feet meters above or below the HAG.

E3. Attached garage (top of slab) is _____ . _____ feet meters above or below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is _____ . _____ feet meters above or below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? Yes No Unknown. The local official must certify this information in Section G.

SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.

Property Owner or Owner's Authorized Representative's Name _____

Address _____ City _____ State _____ ZIP Code _____

Signature _____ Date _____ Telephone _____

Comments _____

_____ Check here if attachments.

SECTION G – COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.

G1. The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. The following information (Items G4–G10) is provided for community floodplain management purposes.

G4. Permit Number _____	G5. Date Permit Issued _____	G6. Date Certificate Of Compliance/Occupancy Issued _____
-------------------------	------------------------------	---

G7. This permit has been issued for: New Construction Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: _____ . _____ feet meters Datum _____

G9. BFE or (in Zone AO) depth of flooding at the building site: _____ . _____ feet meters Datum _____

G10. Community's design flood elevation: _____ . _____ feet meters Datum _____

Local Official's Name _____ Title _____

Community Name _____ Telephone _____

Signature _____ Date _____

Comments _____

_____ Check here if attachments.

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

IMPORTANT: In these spaces, copy the corresponding information from Section A.	FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5005 Mapleton Dr.	Policy Number:
City West Linn	State OR
	ZIP Code 97068
	Company NAIC Number:

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.

EAST SIDE OF HOUSE

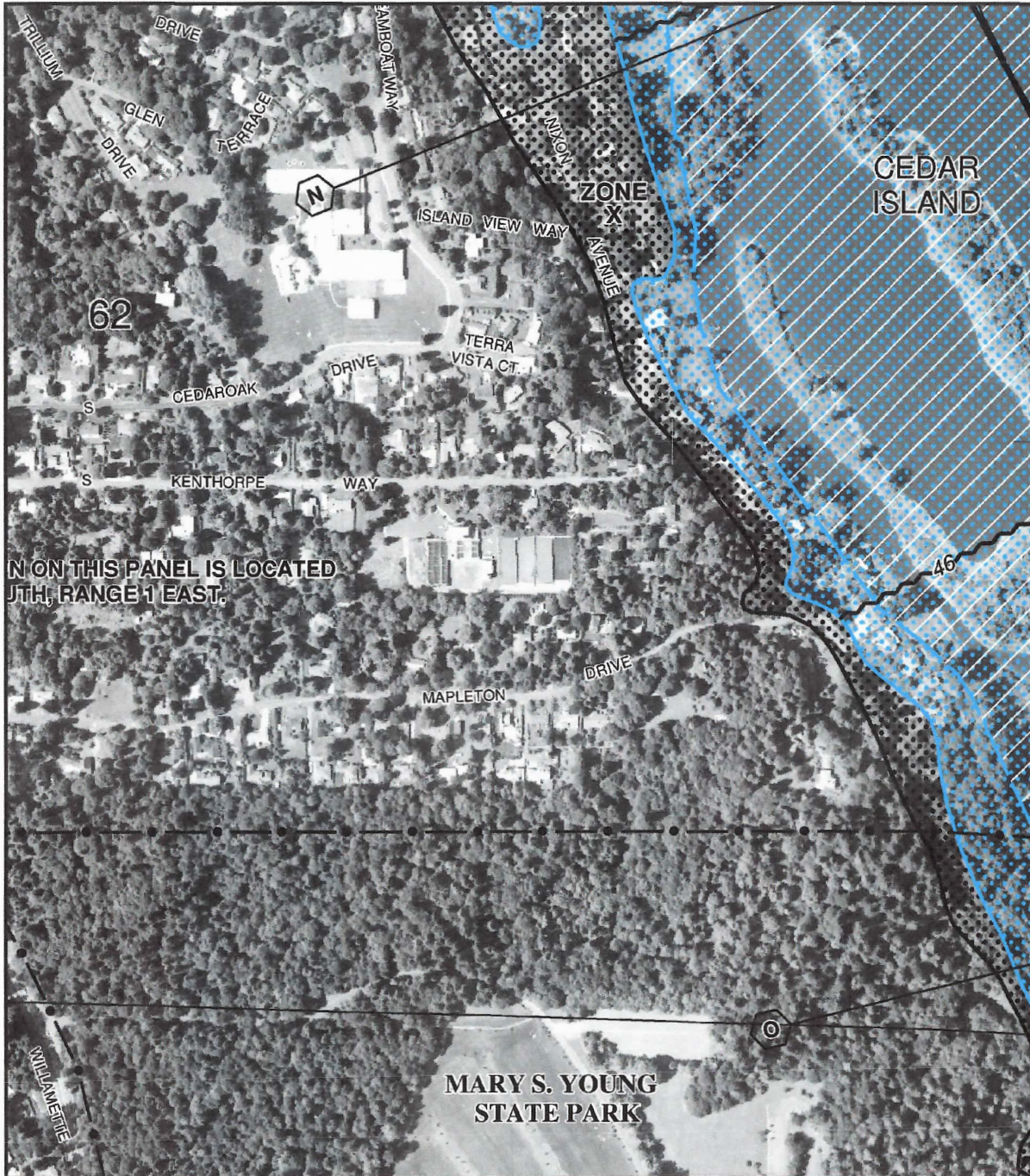


IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5005 Mapleton Dr.			Policy Number:
City West Linn	State OR	ZIP Code 97068	Company NAIC Number:

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.

WEST SIDE OF HOUSE





N ON THIS PANEL IS LOCATED
JTH, RANGE 1 EAST.

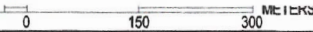
MARY S. YOUNG
STATE PARK

the Flood Insurance Study report for this jurisdiction.

Insurance is available in this community, contact your insurance agent or the National Flood Insurance Program at 1-800-638-6620.



MAP SCALE 1" = 500'



PANEL 0019D

FIRM
FLOOD INSURANCE RATE MAP
CLACKAMAS COUNTY,
OREGON
AND INCORPORATED AREAS

PANEL 19 OF 1175

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CLACKAMAS COUNTY	415688	0019	D
LAKE OSWEGO, CITY OF	410018	0019	D
WEST LINN, CITY OF	410024	0019	D

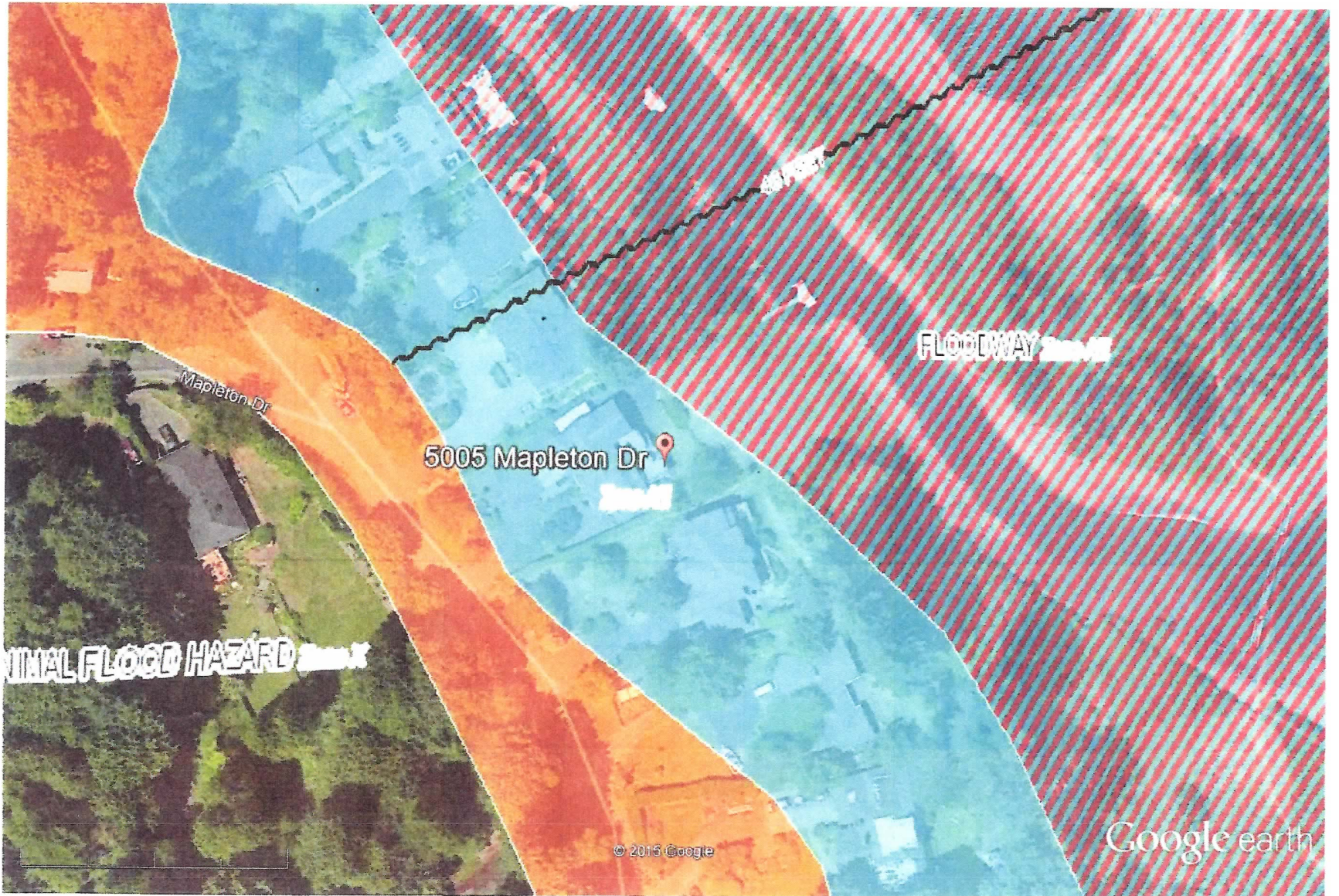
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
41005C0019D
EFFECTIVE DATE
JUNE 17, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov





Insulated FLOOD VENT - Wood Wall Model: 1540-570



Wood Wall Model
shown with interior
trim flange

High Efficiency Insulated Flood Vent **Superior Automatic Flood Protection Designed** **for Installation Between Studs**



ICC-ES Evaluated and FEMA Accepted Foundation Flood Vents

- **Potential savings on homeowner's NFIP premiums**
- **Preserves aesthetic beauty of a home by requiring 2/3 less vents**
- **Each vent certified to protect 200 sq. ft. of your home**
- **Code Compliant, FEMA accepted, ICC-ES Evaluated**
- **All Stainless Steel construction meets or exceeds flood and corrosion resistance code requirements**
- **Patented automatic floats release bi-directional flood door**

One 14 1/2" x 8 1/2" vent is certified to cover 200 square feet of enclosed area for flood protection

The Wood Wall Flood Vent is designed to fit between studs spaced on 16" centers. One vent covers 200 square feet of enclosed area, and it is an easy retrofit. This vent only comes in an insulated model.



SMART VENT

www.smartvent.com • 877-441-8368



Insulated FLOOD VENT - Wood Wall Model: 1540-570



Model #: 1540-570

Installation Type: Stud Wall

Style: Insulated

Dimensions: 14½" x 8½"

Rough Opening: 14½" x 8¾"

Finish: Stainless Steel (Standard)

Available Powder Coat Colors For Special Order:



White



Wheat



Gray



Black



Stainless (standard)

Optional Accessories:

Fire Damper, Interior Trim Flange

Other Models Available: SMART VENT® Dual Function Ventilation 16" x 8" Flood Vent, Insulated 16" x 8" FLOOD VENT, Overhead Garage Door Model, Stacked and Quad Configurations, Models for Wood Studded Wall Applications and Pour in Place Buck Systems.

There's more online at www.smartvent.com

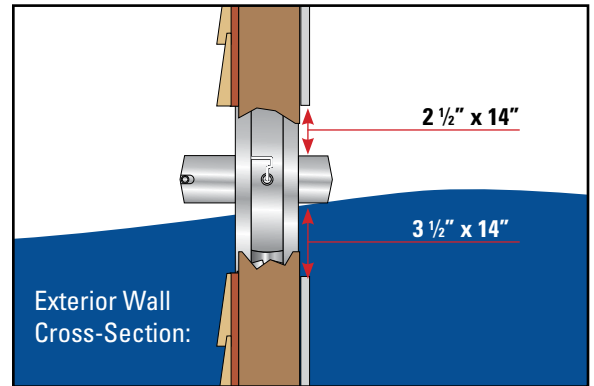
Dealer Locator, Installer Locator, Cad Drawings, Installation Instructions, Technical Specifications, Frequently Asked Questions, Video, Testimonials, Resource Library Database, Insurance Forms.



Rapidly rising floodwater can put extreme pressure on the foundation walls causing improperly vented structures to buckle and collapse. SMART VENTS® quickly and efficiently equalize the pressure and minimize damage.

How it works:

Flood Protection: The FLOOD VENT door is latched closed until flood water enters. Entering flood water lifts the patented internal floats which unlatches and rotates the door open. This allows the flood water to automatically enter and exit through the frame opening, relieving the pressure from your foundation.



Use Fewer Vents

Preserve the aesthetic beauty of a home by requiring 2/3 fewer vents. Each SMART VENT® protects 200 sq/ft of enclosed area vs. 60 sq/ft for non-compliant vents.



How does one SMART VENT® provide so much coverage?

You may have heard that FEMA requires that flood openings provide one square inch of opening per one square foot of enclosed area, referring to dimensions of the opening in proportion to the space to be vented. This is only partially correct. FEMA's regulations and guidelines do state that a non-engineered flood vent solution must (among other requirements) provide one square inch of opening per square foot of enclosed area to be vented. However, all SMART VENT® products are certified engineered openings. They have been designed, engineered, tested, rated, and certified to provide flood relief so efficiently that only one unit is needed for 200 square feet of enclosed area. It would be our pleasure to contact your code official, surveyor, or insurance agent if they require more information.