HEADRICK RESIDENCE

8822 S.E. 62ND STREET, MERCER ISLAND, WA. 98040

POOL NOTES / CERTIFICATIONS

ONLINE CERTIFICATIONS DIRECTORY

WDDJ.E164833
Swimming Pool and Spa Cover Operators, Electric

Page Bottom

Swimming Pool and Spa Cover Operators, Electric

See General Information for Swimming Pool and Spa Cover Operators, Electric

LATHAM POOL PRODUCTS INC — E164833
1795 W 200 N
Lindon, UT 84042-1661 USA

Pool cover operators, Models CS 1800, CS 1800 CL, CS 1800 LO, CS 1800 SS, CS 1800 SW.

Pool cover operator accessory, pool cover drain pump, Model AD-1100.

Pool cover operator and safety cover, Model Infinity 4000. Classified in Accordance with ASTM F 1346-91 (Reapproved 2010).

Last Updated on 2015-01-09

Questions? | Print this page | Terms of Use | Page Top

Certificate of Compliance

Certificate Number 20110728 – E211895
Report Reference E211895 – 2002 September 04
Issue Date 2011 July 28

Page 1 of 1

Underwriters Laboratories

Issued to: **POOL COVER SPECIALISTS NATIONAL INC**
8553 S 2940 W
WEST JORDAN, UT 84088 USA

This is to certify that representative samples of **Covers for Swimming Pools and Spas**

Manual Safety Cover, Model Life-Lock Dual-Pin Manual Safety Cover.

Have been investigated by Underwriters Laboratories in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: **ASTM F1346, "Standard Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs."**

Additional Information: See UL On-line Certification Directory at WWW.UL.COM for additional information.

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers: the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

William R. Carney
Director, North American Certification Programs
Underwriters Laboratories Inc.
Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.
For questions, please contact a local UL Customer Service Representative at http://www.ul.com/global/eng/pages/corporate/contactus

CONFORMANCE:
ALL MATERIAL AND CONSTRUCTION METHODS SHALL CONFORM TO CHAPTER 246-260 WAC, "WATER RECREATION FACILITIES" PUBLISHED BY THE WASHINGTON STATE DEPARTMENT OF HEALTH, INTERNATIONAL BUILDING CODE, NATIONAL ELECTRICAL CODE, UNIFORM MECHANICAL CODE (LATEST ADDITIONS) AND INTERNATIONAL SWIMMING POOL & SPA CODE 2015 CHAPTERS 3 & 8, ELECTRICAL CODE AND UNIFORM MECHANICAL CODE (LATEST ADDITIONS) AS MODIFIED BY THE LOCAL PERMIT AGENCY.

DESIGN CRITERIA:
THE POOL WALLS ARE DESIGNED TO MEET THE LOAD REQUIREMENTS RESULTING WHEN THE POOL IS EMPTY ASSUMING LATERAL EARTH PRESSURE (EQUIVALENT FLUID PRESSURE OF 55 PSF) ON THE ENTIRE HEIGHT OF WALL AND ALSO RESULTING WHEN THE POOL IS FULL OF WATER ASSUMING NO LATERAL EARTH RESISTANCE FOR THE TOP 2-1/2 FEET OF THE WALL.
IT IS FURTHER ASSUMED THAT THE POOL SHALL BE POURED AGAINST FIRM UNDISTURBED SOIL ALLOWING THAT THE TOP 2-1/2 FEET OF WALL MAY BE FORMED AND FILL PROVIDED IN BACK THEREOF. THE SOIL SHALL HAVE A MINIMUM SOIL BEARING CAPACITY OF 1,500 PSF.
THE POOL IS NOT DESIGNED AGAINST HYDROSTATIC UPLIFT WHEN EMPTY AND THEREFORE A PRESSURE RELIEF VALVE IS TO BE PROVIDED AT THE LOWEST POINT. THIS TYPE OF POOL ELIMINATES THE USE OF FORMS ON MOST OF THE WORK AND THEREFORE IT'S USE IS LIMITED TO SOILS WHICH CAN BE SHAPED TO THE DESIRED CONTOUR AND WHICH WILL RETAIN ITS SHAPE UNTIL THE GUNITE IS PLACED.

CONCRETE:
GUNITE: 1 PART CEMENT, 4-1/2 PARTS OF SAND, BASED ON DRY AND LOOSE VOLUME; 2,500 PSI @28 DAYS. PORTLAND CEMENT TYPE I OR II, ASTM C-150, SEVEN SACK MIX.

REINFORCEMENT:
REINFORCING STEEL, DEFORMED INTERMEDIATE GRADE, FY = 40,000 PSI, ASTM A-15. LAP SPLICES 40 DIAMETERS; SUPPORT ON CONCRETE BLOCKS AND TIE WITH 16 GAGE ANNEALED WIRE; 2" MINIMUM COVER BETWEEN EARTH AND STEEL.

CONSTRUCTION:
MAXIMUM LENGTH OF POOL WITHOUT CONTROL JOINT IS 60'-0". GUNITE IS TO BE PLACED MONOLITHIC AND PNEUMATICALLY.

EARTH SURFACES:
TO BE THOROUGHLY COMPACTED AND NEATLY TRIMMED TO LINE AND GRADE.

ENERGY CODE
PROVIDE POOL/SPA EQUIPMENT, COVERS, PIPING INSULATION, MOTORS, ETC. IN
ACCORDANCE WITH THE APPLICABLE PORTIONS OF 2015 WSEC SECTIONS R403.10.1 THROUGH R403.10.4.2 AND APSP-15. HEATERS, TIME SWITCHES AND COVERS TO CONFORM TO ISPSC 2015 SECTION 303 & 316.

MAKE-UP WATER
IF NOT OTHERWISE PROVIDED FOR IN THE DRAWINGS, MAKE-UP WATER SHALL BE PROVIDED BY HOSE BIBB LOCATED IN POOL DECK AREA BY OWNER. VACUUM BREAKER PROTECTION SHALL BE PROVIDED.

DUAL DRAIN SEPARATION
POOL FACILITY PUMP CIRCULATION SYSTEMS SHALL BE PROVIDED WITH A MINIMUM OF TWO (2) SUCTION OUTLETS OF THE APPROVED TYPE. A MINIMUM HORIZONTAL OR VERTICAL DISTANCE OF THREE (3) FEET SHALL SEPARATE SUCH OUTLETS. THESE SUCTION OUTLETS SHALL BE PIPED SO THAT WATER IS DRAWN THROUGH THEM SIMULTANEOUSLY THROUGH A VACUUM RELIEF-PROTECTED LINE TO THE PUMP OR PUMPS. SUCTION ENTRAPMENT AVOIDANCE SHALL CONFORM TO APSP 7.

SYSTEM DESIGN
A CIRCULATION SYSTEM CONSISTING OF PUMPS, PIPING, RETURN INLETS AND OUTLETS, FILTERS, AND OTHER NECESSARY EQUIPMENT SHALL BE PROVIDED FOR THE COMPLETE CIRCULATION OF WATER. WATER VELOCITY, PIPING AND FITTINGS SHALL CONFORM TO ISPSC 2015 SECTIONS 311.3 & 311.4. CIRCULATION SYSTEM PIPING EQUIPMENT SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE TEST PER ISPSC 2015 SECTION 311.9. CIRCULATION SYSTEM EQUIPMENT SHALL BE SIZED TO PROVIDE A TURNOVER OF THE POOL WATER WAS NOT LESS THAN ONCE EVERY 12 HOURS. THE SYSTEM SHALL BE DESIGNED TO PROVIDE THE REQUIRED TURNOVER RATE BASED ON THE MANUFACTURER'S SPECIFIED MAXIMUM FLOW RATE OF THE FILTER, WITH A CLEAN MEDIA CONDITION OF THE FILTER.

SANITIZING EQUIPMENT
WHERE INSTALLED, CHEMICAL FEED SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS CHEMICAL FEED PUMPS SHALL BE WIRED SO THAT THEY CANNOT OPERATE UNLESS THERE IS ADEQUATE RETURN FLOW TO DISBURSE THE CHEMICAL THROUGHOUT THE POOL OR SPA AS DESIGNED.

LIGHTING
WHERE LIGHTING IS INSTALLED FOR, AND IN, RESIDENTIAL POOLS AND PERMANENT SPAS, SUCH LIGHTING SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 70 OR THE INTERNATIONAL RESIDENTIAL CODE, AS APPLICABLE.

BONDING
ALL METALLIC COMPONENTS OF THE POOL AND SPA SHALL BE BONDED AND GROUNDED. #8 SOLID WIRE SHALL BE USED TO BOND ALL EQUIPMENT TOGETHER WITH APPROVED PRESSURE CONNECTORS. ALL ELECTRICAL EQUIPMENT LOCATED WITHIN 5 FEET OF THE WATER'S EDGE MUST BE GROUNDED, I.E. JUNCTION BOXES, TRANSFORMERS, PANELBOARDS, WET AND DRY NICHE LIGHTS, MOTORS, ETC.

DESIGN CRITERIA

DESIGN CRITERIA
PER THE 2015 INTERNATIONAL BUILDING CODE

EARTHQUAKE PER SECTION 1613
Design Per ASCE 7-10
Section 12.8 Equivalent Lateral Force Procedure

Base Shear: $V = C_S * W$
C_S = Seismic Response Coefficient
W = Effective Seismic Weight

Site / Project Specific Design Values:
$S_S = 1.45$ per USGS
Site Class D (Default)
R = 6.5 from Table 12.2-1
$S_1 = 0.56$ per USGS
Seismic Design Category D
Risk Category II from Table 1.5-1
$I_e = 1.00$ from Table 1.5-2

$C_S = 0.1487$ per Section 12.8.1.1

WIND DESIGN PER SECTION 1609 (Allowable Stress Design)
Design per ASCE 7-10 Section 28.6

Design Wind Pressure: $P_S = \lambda * I_e * K_{ZT} * PS_{30}$
where: λ = Exposure Factor
K_{ZT} = Topographic Factor
I_e = Importance Factor
PS_{30} = Base Design Pressure

Site/Project Specific Values:
Basic Wind Speed = 110 mph (V_{ult})
$\lambda = 1.00$ Exposure "B" (<30') "Urban Clustered Area"
$K_{ZT} = 1.30$
$I_e = 1.00$
PS_{30} = see ASCE 7-10, Figure 28.6.1

STANDARD DESIGN INFORMATION
The information described below is to be used unless otherwise noted on the plans

WOOD DESIGN per Section 2301, Allowable Strength Design, ANSI/AWC SDPWS 2015 & AF & PA NDS 2015 when applicable; per 2308 Conventional Light-Frame Construction

MINIMUM NAILING REQUIREMENTS per Table 2304.10.1

ANCHOR BOLTS:
5/8" Ø x 10", A307 or better, w/ 7" min. Embedment. V = 1.6 x 860 = 1376 # / bolt

CONCRETE DESIGN per Chapter 19 & ACI 318-14
Concrete: $f'_c = 2500$ psi
Rebar: $f_y = 40,000$ psi

MISCELLANEOUS HARDWARE
SIMPSON Strong-Tie Connectors or equal

PROJECT INFORMATION

ADDRESS: 8822 62ND STREET, MERCER ISLAND, WA 98040
TAX ID 865050-0040

SCOPE OF WORK:
REMOVE 593 SF OF EXISTING SHEDS / REMOVE PATIO AS INDICATED ON SITE PLAN
CONSTRUCT NEW DETACHED GARAGE OVER EXISTING PAVED AREA - 792 SF
CONSTRUCT NEW SWIMMING POOL TO REPLACE EXISTING (NEW LAYOUT)
CONSTRUCT NEW PERVIOUS DECK SURROUNDING NEW POOL
EXTEND EXISTING PAVED DRIVEWAY AS INDICATED ON SITE PLAN

BUILDING CODES

REQUIRED CODES:
IBC 2015
IRC 2015

CONSTRUCTION:
VB - NOT SPRINKLERED
(NOTE TYPE R FIRE SPRINKLER SYSTEM WILL BE ADDED AS PART OF PHASE 2 ADDITION TO RESIDENCE).

ENERGY ENVELOPE: N / A
DETACHED GARAGE WILL BE UNHEATED.
NOTE: AVERAGE BUILDING ELEVATION / ON SITE PLAN SHEET A2
NOTE: LOT SLOPE CALCULATION / ON SITE PLAN SHEET A2

SURVEY / ACCURACY STATEMENT:
SURVEYOR TO FIELD VERIFY MAXIMUM HEIGHT OF DETACHED GARAGE AND PROVIDE STATEMENT OF ACCURACY.

OWNER: Greg & Jennifer Headrick / 8822 S.E. 62nd Street, Mercer Island, WA 98040

DESIGN CONSULTANTS

ARCHITECTURE: Ned Nelson, Architect / 11773 Sunrise Drive NE, Bainbridge Island, Washington 98110
425.444.6782 / nednelson@msn.com

STRUCTURAL: WELLER CONSULTING Mark Weller / 21925 Bothell, WA 98021
425.488.9868 / 425.486.6715 fax

CIVIL: BUSH, ROED & HITCHINGS, INC. Ted Dimof, PE / Engineering Division Manager / Principal
2009 Minor Avenue East, Seattle, WA 98102
206.323.4144 / 206.720.3572 / tedd@brhinc.com

GEOTECHNICAL ENGINEER: GEOTECH CONSULTANTS / Robert Ward / 2401 10th Ave E, Seattle, WA 98102
425.747.5618 / geotech@geotechnw.com

CRITICAL AREAS: WETLAND RESOURCES, INC. / Niels Pedersen / 9505 19th Ave SE, Suite 106, Everett, WA 98208
425.337.3174 / Niels@wetlandresources.com

SURVEYOR: TERRANE Edwin J.Green Jr. / 10801 Main Street, Suite 102, Bellevue, WA 98004
425.458.4488 / support@terrane.net

POOL CONSULTANT: KRISCO AQUATECH POOLS & SPAS Mark Muir, Design Consultant / 17537 132nd Ave. NE, Woodinville, WA 98072
206.226.2433 / 425.487.6400 / 425.486.9696 fax

POOL ENGINEERING: MITCHELL ENGINEERING / 7821 168th Ave NE, Redmond, WA 98052
425.747.1500 / mitchellengineeringinc@comcast.net

ARBORIST: ARBORISTS NW, LLC Neal Baker / ArboristsNW.com / ISA Cert. PN1075A / TRAQ ISA (Tree Risk Assessment Qualified)
Member AREA & SOCA
206.779.2579 / neal@arboristsnw.com

INDEX TO DRAWINGS

1

Ned Nelson, Architect
11773 Sunrise Drive NE,
Bainbridge Island, WA 98110
telephone: 425.444.6782
email: nednelson@msn.com

2315 REGISTERED ARCHITECT
NED H. NELSON, JR.
STATE OF WASHINGTON

HEADRICK RESIDENCE
8822 S.E. 62ND STREET,
MERCER ISLAND, WA. 98040

REVISIONS:

Mark	Date
1	05-20-20

DATE: 03-22-21

PROJECT INFORMATION

SHEET:
A1

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

(PER CHICAGO TITLE INSURANCE COMPANY, ORDER NUMBER 0134363-ETU, DATED AUGUST 23, 2018)

LOT 8, BLOCK 1, TIMBERLAND ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 52 OF PLATS, PAGE 20, IN KING COUNTY, WASHINGTON. SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

SCHEDULE B ITEMS

ITEM 1
COVENANTS, CONDITIONS, RESTRICTIONS, RECITALS, RESERVATIONS, EASEMENTS, EASEMENT PROVISIONS, DEDICATIONS, BUILDING SETBACK LINES, NOTES, STATEMENTS, AND OTHER MATTERS, IF ANY, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH ON PLAT OF TIMBERLAND, RECORDED IN VOLUME 52 OF PLATS, PAGE 20:
RECORDING NO: 4393606 (BLANKET IN NATURE)

ITEM 3
EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON
PURPOSE: INGRESS AND EGRESS, SOLELY FOR MAINTAINING, OPERATION, REPAIRING AND REPLACING SANITARY
SEWER AND STORM DRAINAGE PIPE AND LINES
RECORDING DATE: FEBRUARY 23, 1982
RECORDING NO.: 8202230542
AFFECTS: A PORTION OF SAID PREMISES (PLOTTED)

ITEM 4
SANITARY SEWER EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: SEPTEMBER 14, 1988
RECORDING NO.: 8809140722 (PLOTTED)

ITEM 5
COMMITMENT TO CONTRIBUTE TO REPAIR OF TIMBERLAND/SALEM WOODS RAVINE AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: SEPTEMBER 14, 1988
RECORDING NO.: 8809140722 (BLANKET IN NATURE)

METHOD OF SURVEY

INSTRUMENTATION FOR THIS SURVEY WAS A LEICA 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.

BEARING MERIDIAN

A BEARING OF S88°43'21"E ON THE CENTERLINE OF S.E. 63RD STREET, PER THE PLAT OF TIMBERLAND ADDITION, AS RECORDED IN VOLUME 19 OF PLATS, PAGE 20, RECORDS OF KING COUNTY, WA.

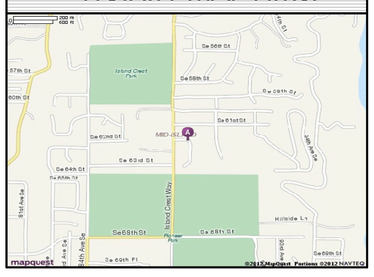
VERTICAL DATUM

CITY OF MERCER ISLAND BENCH MARK NO. 2289
(NAVD 88) (VISITED 08-06-12)

FOUND "1/2"" COPPER PIN IN CONC (DN 1.5')", LOCATED SE 63RD ST, OPP HSE #8817.

ELEVATION = 292.97'

VICINITY MAP N.T.S.



LEGEND

- FOUND MONUMENT AS NOTED
- SET REBAR & CAP AS NOTED
- FOUND IRON PIPE AS NOTED
- UTILITY POLE
- CATCH BASIN
- SANITARY SEWER MANHOLE
- FINISHED FLOOR ELEVATION
- SPOT ELEVATION
- WATER METER
- FIRE HYDRANT
- TELEPHONE RISER
- ASPHALT SURFACE
- RET. WALL
- CONC SURFACE
- STAIRS
- BRICK SURFACE

D.W.APRON DRIVEWAY ACCESS
CONC CONCRETE
R-O-W RIGHT-OF-WAY
( ) RECORD AS NOTED

- BUILDING LINE
- CENTERLINE OF ROAD
- OHP OVERHEAD WIRES
- SLOPE AS NOTED
- EAVES
- METAL FENCE
- S SEWER LINE
- ST BURIED STORM LINE
- GUY WIRE
- WOOD FENCE

- DECIDUOUS TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- ALDER TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- CEDAR TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- APPLE TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- MAPLE TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- HEMLOCK TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- FIG TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- HOLLY TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- FIR TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- CHERRY TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- SPRUCE TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- WETLAND FLAG

ITEM 3 - INGRESS AND EGRESS ESM'T FOR SEWER AND STORM REC. NO. 8202230542

ITEM 4 - SEWER ESM'T REC. NO. 8809140722

08-06-12 SET 1/2" REBAR & CAP "GEOD LS #15025" AT PROPERTY CORNER

TAX PARCEL NO. 1924059139

08-06-12 FOUND IRON PIPE WITH CAP 0.1' S & 0.4' W OF PROPERTY CORNER ELEV. = 305.0'

LOT 19

30" CMP

S88°43'21"E 99.99'

WOOD FENCE IS 0.5' W OF LINE

WOOD FENCE IS 0.3' W OF LINE

LOT 9

N31°31'58"E 157.85'

20.0'

HOUSE NO. 8822
BUILDING FOOTPRINT
AREA 1,702 SQ.FT.+/-

AREA PER ASSESSOR:
3,380 SQ.FT. TOTAL LIVING

EAVE

25.7'

24.5'

35.5'

CONC PATIO

CONC STAIRS

ROCK STAIRS

CONC WALL

F.F. ELEV. 307.2' +/-

309.8'

F.F. ELEV. 312.0' +/-

35.1'

31.6'

BRICK

PEAK ELEV. 325.6' +/-

311.0'

27.8'

31.2'

OHP

22.3'

310.8'

F.F. ELEV. 310.8' +/-

21.5'

21.6'

GARAGE
AREA 480 SQ.FT.+/-

310.4'

SWIMMING POOL

STAIRS

EDGE OF LAWN

28.9'

8.0'

F.F. ELEV. 310.7' +/-

310.4'

24.7'

PUMP HOUSE FOR POOL
235 SQ.FT.+/-

43.5'

S12°45'40"E 140.00'

ITEM 4
25' WIDE SEWER EASEMENT RECORDING NO. 8809140722

LOT 17

SALEM WOODS VOL. 70, PAGES 42-43

LOT 16

18" PVC

08-06-12 SET 1/2" REBAR & CAP "GEOD LS #15025" AT PROPERTY CORNER

WALL IS 0.2' S OF LINE

N70°27'19"E 173.09'

WALL IS 0.3' N OF LINE

ITEM 3
25' WIDE INGRESS AND EGRESS EASEMENT FOR SEWER AND STORM RECORDING NO. 8202230542

LOT 7

BLOCK 1
TIMBERLAND ADDITION
VOL. 52, PAGE 20

08-06-12 SET 1/2" REBAR & CAP "GEOD LS #15025" AT PROPERTY CORNER

08-06-12 FOUND IRON PIPE WITH CAP 0.2' S & 0.3' W OF PROPERTY CORNER ELEV. = 312.9'

MAILBOX

CATCH BASIN RIM ELEV. = 312.32'

4=38°55'21" L=81.52'

R=120.00

30' R-O-W

D.W. APRON ACCESS

CONC CURB

ASPHALT DRIVEWAY

S.E. 62ND STREET

4=90°00'00" L=141.37' R=90.00

EDGE OF ASPHALT

SANITARY SEWER MANHOLE RIM ELEV. = 311.23'

CATCH BASIN RIM ELEV. = 310.62'

CATCH BASIN RIM ELEV. = 309.41'

S28°43'56"W CALC'D 48.07'

ISLAND CREST WAY

"PUBLIC ROADWAY"

89TH AVENUE S.E.

"PUBLIC ROADWAY" N01°16'39"E (360.00') PLAT 52/(20)

S.E. 63RD STREET

"PUBLIC ROADWAY"

08-06-12 FOUND CONC MON IN CASE

BASIS OF BEARING S88°43'21"E (170.00') 170.16' MEAS. PLAT 52/(20)

4=90°00'00" L=141.37' R=90.00

08-06-12 FOUND CONC MON IN CASE

GRAPHIC SCALE 1"=10'

0 10 20 30

SURVEYOR'S NOTES

1) THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN AUGUST OF 2012. 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 CONVIENENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2) SUBJECT PROPERTY TAX PARCEL NO. 8650500040.
3) SUBJECT PROPERTY AREA PER THIS SURVEY IS 27,481 SQ.FT.+/-.

SHEET NUMBER 1 OF 1

REVISION HISTORY
DATE: 03/13/2019
DATE: 09/19/2018

SCALE: 1" = 10'
CHECKED BY: E.J.G.
DRAFTED BY: V.L.J.
DATE: 08/13/2012
JOB NUMBER: 12421

Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@terrane.net
www.terrane.net

EDWIN J. GREEN JR. STATE OF WASHINGTON 15025 REGISTERED PROFESSIONAL LAND SURVEYOR

TOPOGRAPHIC & BOUNDARY SURVEY
SE 1/4 OF THE SW 1/4 OF SEC. 19, TWP. 24N., RGE. 5E., W.M.
CITY OF MERCER ISLAND, KING COUNTY, WA.

HEADRICK RESIDENCE
8822 S.E. 62ND STREET
MERCER ISLAND, WA. 98040

measure success

LEGAL DESCRIPTION

(PER CHICAGO TITLE INSURANCE COMPANY, ORDER NUMBER 0134363–ETU, DATED AUGUST 23, 2018)

LOT 8, BLOCK 1, TIMBERLAND ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 52 OF PLATS, PAGE 20, IN KING COUNTY, WASHINGTON. SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

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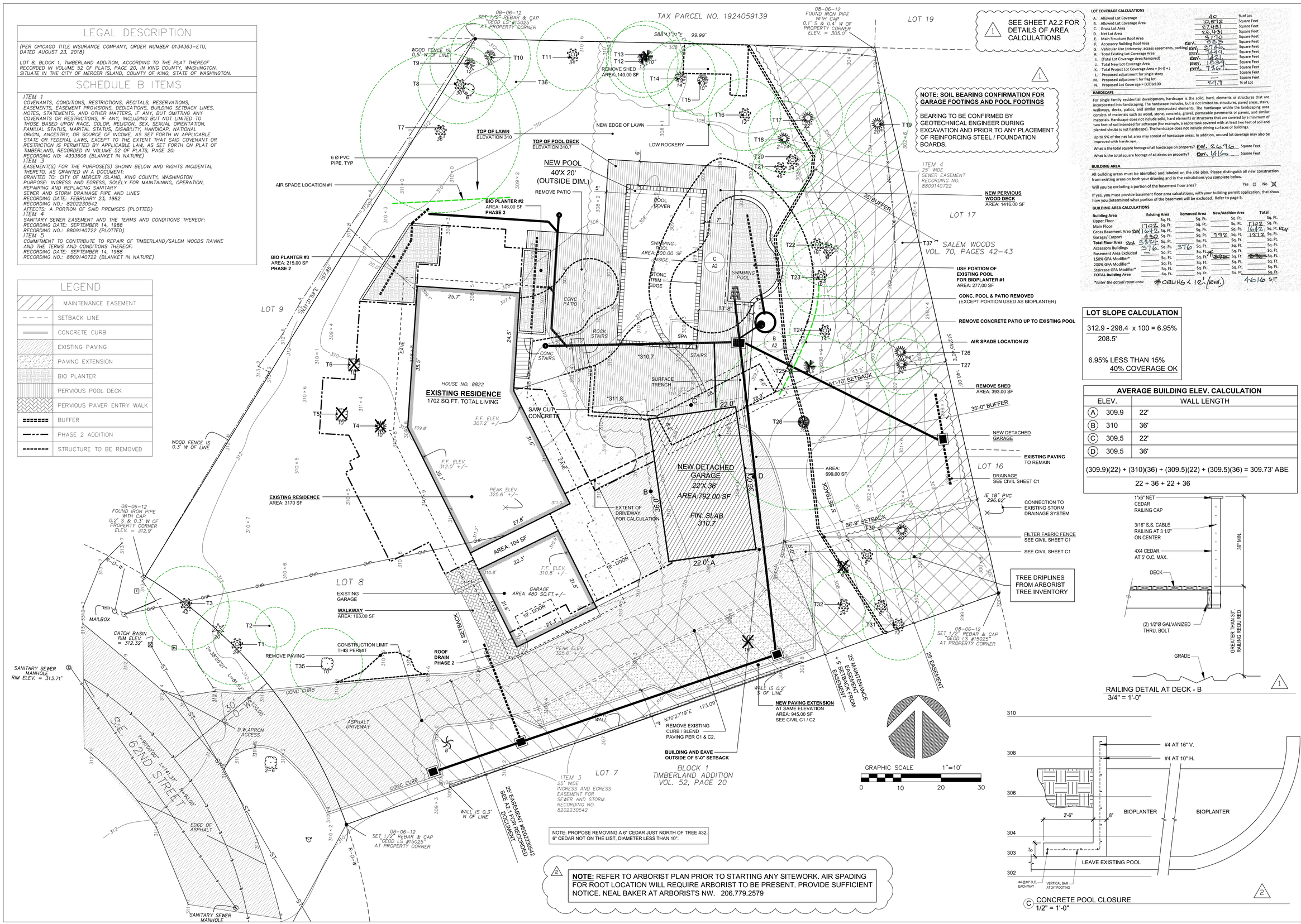
PURPOSE: INGRESS AND EGRESS, SOLELY FOR MAINTAINING, OPERATION, REPAIRING AND REPLACING SANITARY SEWER AND STORM DRAINAGE PIPE AND LINES
RECORDING DATE: FEBRUARY 23, 1982
RECORDING NO.: 8202230542
AFFECTS: A PORTION OF SAID PREMISES (PLOTTED)
ITEM 4
SANITARY SEWER EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: SEPTEMBER 14, 1988
RECORDING NO.: 8809140722 (PLOTTED)
ITEM 5
COMMITMENT TO CONTRIBUTE TO REPAIR OF TIMBERLAND/SALEM WOODS RAVINE AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: SEPTEMBER 14, 1988
RECORDING NO.: 8809140722 (BLANKET IN NATURE)

LEGEND

- MAINTENANCE EASEMENT
- SETBACK LINE
- CONCRETE CURB
- EXISTING PAVING
- PAVING EXTENSION
- BIO PLANTER
- PERVIOUS POOL DECK
- PERVIOUS PAVER ENTRY WALK
- BUFFER
- PHASE 2 ADDITION
- STRUCTURE TO BE REMOVED



1 SEE SHEET A2.2 FOR DETAILS OF AREA CALCULATIONS

1

NOTE: SOIL BEARING CONFIRMATION FOR GARAGE FOOTINGS AND POOL FOOTINGS

BEARING TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING EXCAVATION AND PRIOR TO ANY PLACEMENT OF REINFORCING STEEL / FOUNDATION BOARDS.

LOT COVERAGE CALCULATIONS

A.	Allowed Lot Coverage	40	% of Lot
B.	Allowed Lot Coverage Area	10,812	Square Feet
C.	Gross Lot Area	27,031	Square Feet
D.	Net Lot Area	26,431	Square Feet
E.	Main Structure Roof Area	3170	Square Feet
F.	Accessory Building Roof Area	EXIST. 953	Square Feet
G.	Vehicular Use (driveway, access easements, parking)	EXIST. 3746	Square Feet
H.	Total Existing Lot Coverage Area	EXIST. 7419	Square Feet
I.	(Total Lot Coverage Area Removed)	EXIST. 1421	Square Feet
J.	Total New Lot Coverage Area	EXIST. 1639	Square Feet
K.	Total Project Lot Coverage Area = (H-I) + J	EXIST. 7307	Square Feet
L.	Proposed adjustment for single story	—	Square Feet
M.	Proposed adjustment for flag lot	—	Square Feet
N.	Proposed Lot Coverage = (K/D)x100	27.7	% of Lot

HARDSCAPE

For single family residential development, hardscape is the solid, hard, elements or structures that are incorporated into landscaping. The hardscape includes, but is not limited to, structures, paved areas, stairs, walkways, decks, patios, and similar constructed elements. The hardscape within the landscaping area consists of materials such as wood, stone, concrete, gravel, permeable pavements or pavers, and similar materials. Hardscape does not include solid, hard elements or structures that are covered by a minimum of two feet of soil intended for softscape (for example, a septic tank covered with at least two feet of soil and planted shrubs is not hardscape). The hardscape does not include driving surfaces or buildings.

Up to 9% of the net lot area may consist of hardscape areas. In addition, unused lot coverage may also be improved with hardscape.

What is the total square footage of all hardscape on property? EST. 2696 Square Feet

What is the total square footage of all decks on property? EST. 1416 Square Feet

BUILDING AREA

All building areas must be identified and labeled on the site plan. Please distinguish all new construction from existing areas on both your drawing and in the calculations you complete below.

Will you be excluding a portion of the basement floor area? Yes ☐ No ☒

If yes, you must provide basement floor area calculations, with your building permit application, that show how you determined what portion of the basement will be excluded. Refer to page 5.

BUILDING AREA CALCULATIONS

Building Area	Existing Area	Removed Area	New/Addition Area	Total
Upper Floor	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.	1702 Sq. Ft.
Main Floor	1702 Sq. Ft.	— Sq. Ft.	— Sq. Ft.	1642 Sq. Ft. REV
Gross Basement Area	EST. 1642 Sq. Ft.	— Sq. Ft.	— Sq. Ft.	1272 Sq. Ft.
Garage/ Carport	480 Sq. Ft.	— Sq. Ft.	792 Sq. Ft.	— Sq. Ft.
Total Floor Area	EST. 3824 Sq. Ft.	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.
Accessory Buildings	276 Sq. Ft.	— Sq. Ft.	376 Sq. Ft.	— Sq. Ft.
Basement Area Excluded	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.
150% GFA Modifier*	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.
200% GFA Modifier*	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.
Staircase GFA Modifier*	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.
TOTAL Building Area	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.	— Sq. Ft.

**Enter the actual room area*

*CEILING 12' (REF.)

4616 S.F.

LOT SLOPE CALCULATION

312.9 - 298.4 x 100 = 6.95%
208.5'

6.95% LESS THAN 15%
40% COVERAGE OK

AVERAGE BUILDING ELEV. CALCULATION

ELEV.	WALL LENGTH
(A) 309.9	22'
(B) 310	36'
(C) 309.5	22'
(D) 309.5	36'

(309.9)(22) + (310)(36) + (309.5)(22) + (309.5)(36) = 309.73' ABE
22 + 36 + 22 + 36

RAILING DETAIL AT DECK - B
3/4" = 1'-0"

1

C CONCRETE POOL CLOSURE
1/2" = 1'-0"

2

NOTE: PROPOSE REMOVING A 6" CEDAR JUST NORTH OF TREE #32. 6" CEDAR NOT ON THE LIST. DIAMETER LESS THAN 10".

2 **NOTE:** REFER TO ARBORIST PLAN PRIOR TO STARTING ANY SITEWORK. AIR SPADING FOR ROOT LOCATION WILL REQUIRE ARBORIST TO BE PRESENT. PROVIDE SUFFICIENT NOTICE. NEAL BAKER AT ARBORISTS NW. 206.779.2579

Ned Nelson, Architect
2015 REGISTERED ARCHITECT
NED H. NELSON, JR. STATE OF WASHINGTON
11773 Sunrise Drive NE,
Bainbridge Island, WA 98110
telephone: 425.444.6782
email: nednelson@msn.com

HEADRICK RESIDENCE
8822 S.E. 62ND STREET,
MERCER ISLAND, WA. 98040

REVISIONS:

Mark	Date
1	05-20-20
2	03-22-21

DATE: 03-22-21

SITE PLAN

SHEET: A2

#8202230542 INGRESS / EGRESS EASEMENT FOR MAINTENANCE OF SANITARY AND STORM DRAINAGE FACILITIES

8202230542

INGRESS AND EGRESS EASEMENT

The undersigned, Grantor, for and in consideration of one dollar ($1.00) and other valuable consideration, the receipt of which is hereby acknowledged, by these presents bargains, sells, transfers and conveys unto the CITY OF MERCER ISLAND, King County, Washington, Grantee, an easement over and across the following described property situated in King County, State of Washington, to-wit:

The South 25.00 feet of Lot 8, Block 1, in the Plat of Timberland as recorded in Volume 52 of Plats, page 20, records of King County, Washington, measured perpendicular to the common property line between Lots 7 and 8 of said Plat.

This easement is subject to the following limitations:

a. It shall be for the purpose of ingress and egress across said described property solely for maintaining, operating, repairing and replacing sanitary sewer and storm drainage pipe and lines plus all necessary connections and appurtenances thereto on adjacent property.

b. Said easement shall be 25 feet in width, except to the extent that it lies along the asphalt driveway in which event it shall be 25 feet or the width of the driveway, whichever is the lesser figure; otherwise the easement is as indicated on the attached map.

c. Grantee in each instance shall immediately after utilizing said access restore said premises as nearly as possible to its previous condition.

DATED this 1st day of February, 1982.

Carolyn C. Blackstock
Carolyn C. Blackstock

1% EXCISE TAX NOT REQUIRED
King Co. Records Division
By D Reeves, Deputy

STATE OF WASHINGTON)
) SS.
COUNTY OF KING)

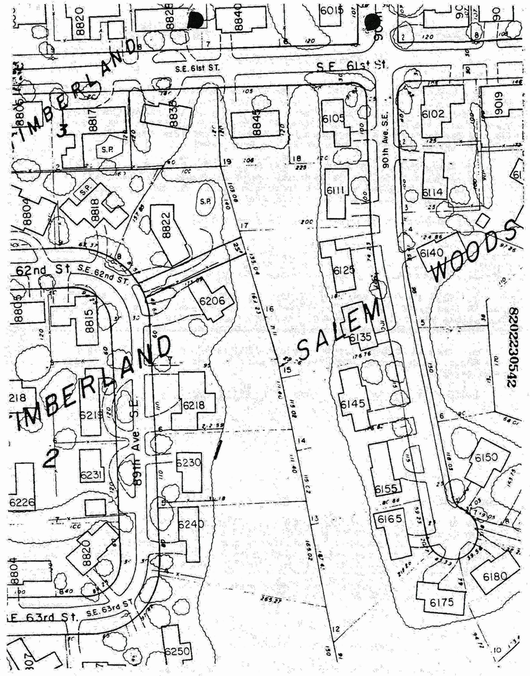
On this 1st day of February, 1982, before me, appeared Carolyn C. Blackstock, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged to me that she signed and sealed the said instrument as her free and voluntary act and deed for the uses and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

RECEIVED
MAR - 9 1982
CITY OF MERCER ISLAND

Debra E. Simmons
Notary Public in and for the State of Washington, residing at Mercer Island

No. PILE NO. 1050



#8809140722 PUBLIC AND PRIVATE STORM DRAIN AND SANITARY SEWER EASEMENT

8809140722

PUBLIC AND PRIVATE
STORM DRAIN AND SANITARY SEWER EASEMENT

KNOW ALL MEN BY THESE PRESENTS that Carolyn C. Blackstock Owner(s)/Grantor(s) of the following described property:

LOT 8, BLOCK 1, IN THE PLAT OF TIMBERLAND AS RECORDED IN VOLUME 52 OF PLATS, PAGE 20, RECORDS OF KING COUNTY, WASHINGTON.

for and in valuable consideration hereby grant and convey to Grantee, City of Mercer Island, its successors and assigns, a public and private storm drain and sanitary sewer easement over, under, upon and across the above described property as follows:

The east 25.00 feet of Lot 8, Block 1, in the Plat of Timberland as recorded in Volume 52 of Plats, page 20, Records of King County, Washington, measured perpendicular to the east property line.

Said easement being for the purpose of installing, constructing, maintaining, operating, repairing and replacing public and private sanitary sewer and storm drainage facilities and all necessary connections and appurtenances thereto, together with the right of ingress and egress to, from and across said described property for the foregoing purposes, provided that in the original installation of such utilities and appurtenances the Grantees shall immediately after such installation restore said premises to their original condition as near as may be.

DATED this 19th day of August, 1988

Carolyn C. Blackstock
Carolyn C. Blackstock

STATE OF WASHINGTON)
) ss
COUNTY OF KING)

On this 19th day of August, 1988, personally appeared before me Carolyn C. Blackstock, to me known to be the individual(s) described in and who executed the foregoing instrument, and acknowledged that they signed and sealed the same as their free and voluntary act and deed for the uses and purposes therein mentioned.

Given under my hand and official seal the day and year last above written.

Notary Public in and for the State of Washington, residing at Mercer Island

My Commission expires 2-20-89

RECORDED AT REQUEST OF:
Mercer Island City Clerk
3505 88th Avenue S.E.
P.O. Box 1440
Mercer Island, Washington 98040-1440

8809140722

DATED this 19th day of August, 1988.

Carolyn C. Blackstock
Property Owner

Property Owner

STATE OF WASHINGTON)
) ss
COUNTY OF KING)

On this 19th day of Aug, 1988, before me personally appeared CAROLYN C. BLACKSTOCK and to me known to be the individuals described in and who executed the foregoing instrument and acknowledged that they signed and sealed the same as their free and voluntary act and deed for the uses and purposes therein mentioned.

Given under my hand and official seal the day and year last above written.

Notary Public in and for the State of Washington, residing at Mercer Island

My Commission expires 2-20-89

BEVERLEE MARSHALL NOTARY PUBLIC STATE OF WASHINGTON

RECORDED IN KING COUNTY, WA
SEP 14 2 19 PM '88
RECORDS & ELECTIONS

Ned Nelson, Architect
11773 Sunrise Drive NE,
Bainbridge Island, WA 98110
telephone: 425.444.6782
email: nednelson@msn.com

HEADRICK RESIDENCE
8822 S.E. 62ND STREET,
MERCER ISLAND, WA. 98040

REVISIONS:

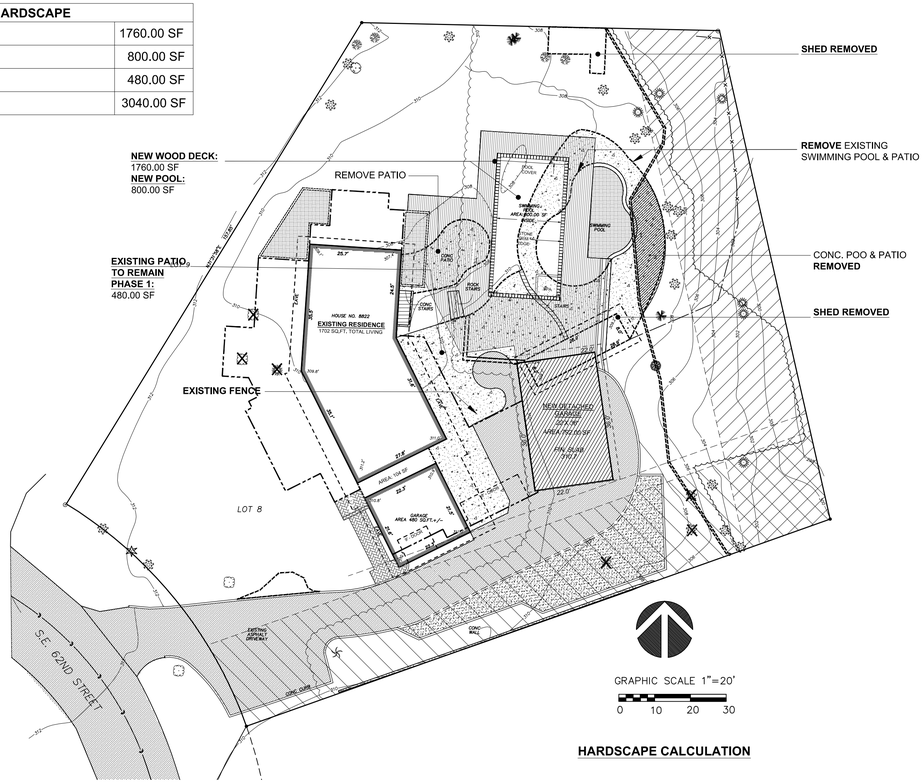
Mark	Date

DATE: 05/20/20

EASEMENTS

SHEET:
A2.1

HARDSCAPE	
Wood Deck	1760.00 SF
Pool	800.00 SF
Patio to Remain	480.00 SF
TOTAL HARDSCAPE	3040.00 SF

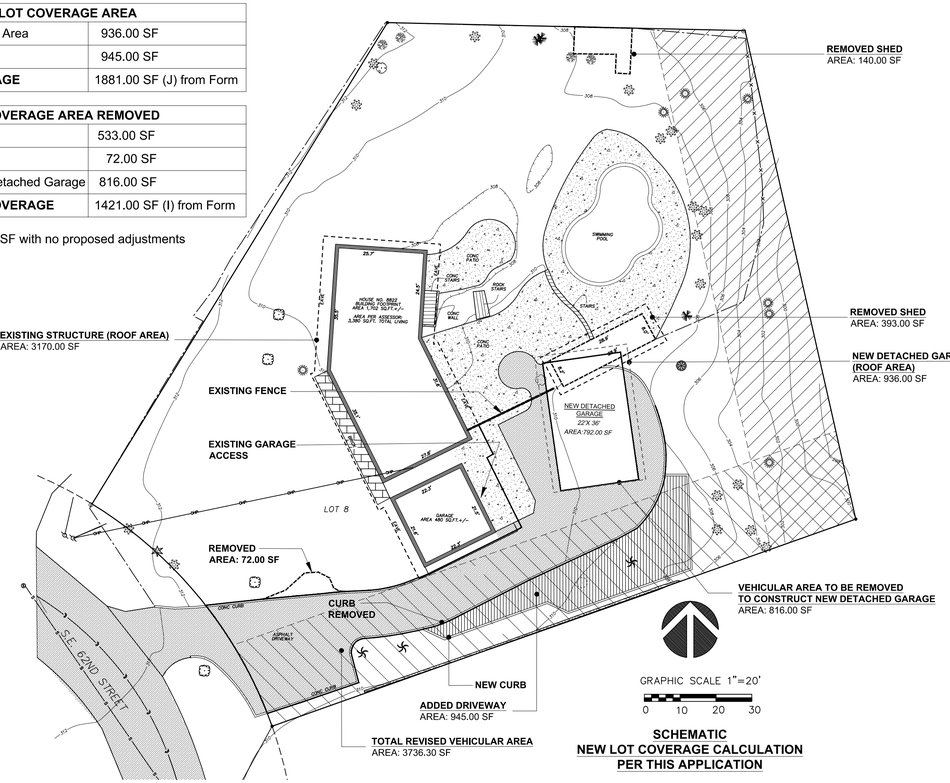


HARDSCAPE CALCULATION

TOTAL NEW LOT COVERAGE AREA	
New Detached Garage Roof Area	936.00 SF
Added Driveway Extension	945.00 SF
TOTAL NEW LOT COVERAGE	1881.00 SF (J) from Form

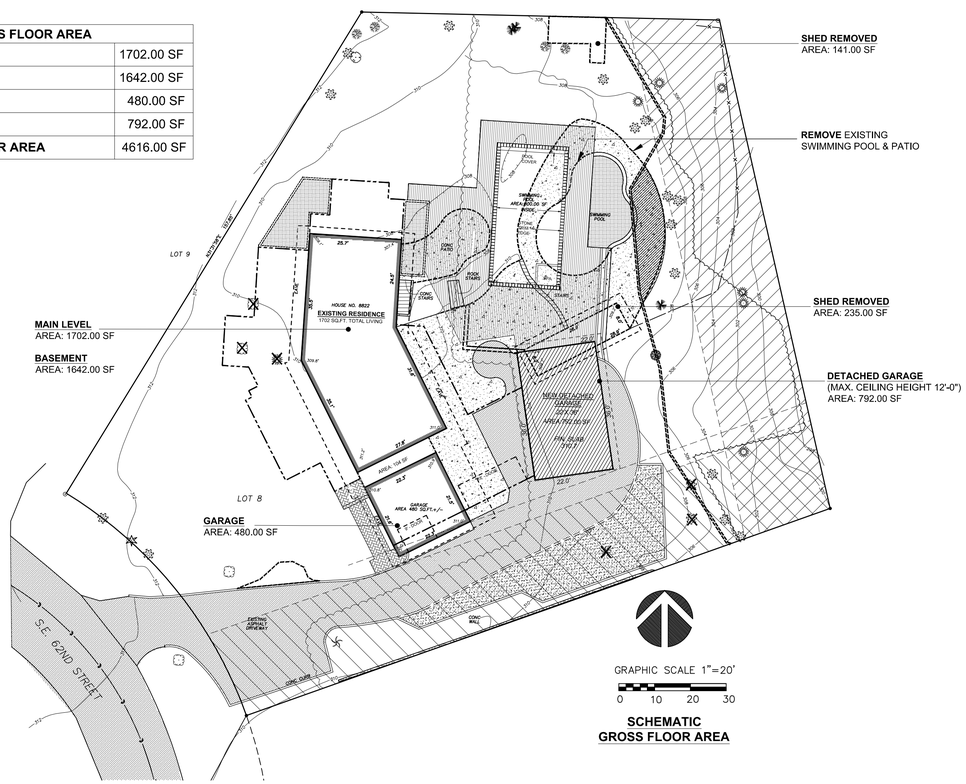
TOTAL LOT COVERAGE AREA REMOVED	
Exist. Shed Roof Area	533.00 SF
Paved Area at Entry	72.00 SF
Removed Paving for New Detached Garage	816.00 SF
TOTAL REMOVED LOT COVERAGE	1421.00 SF (I) from Form

NOTE: (H) - (I) + (J) = 7867 SF with no proposed adjustments



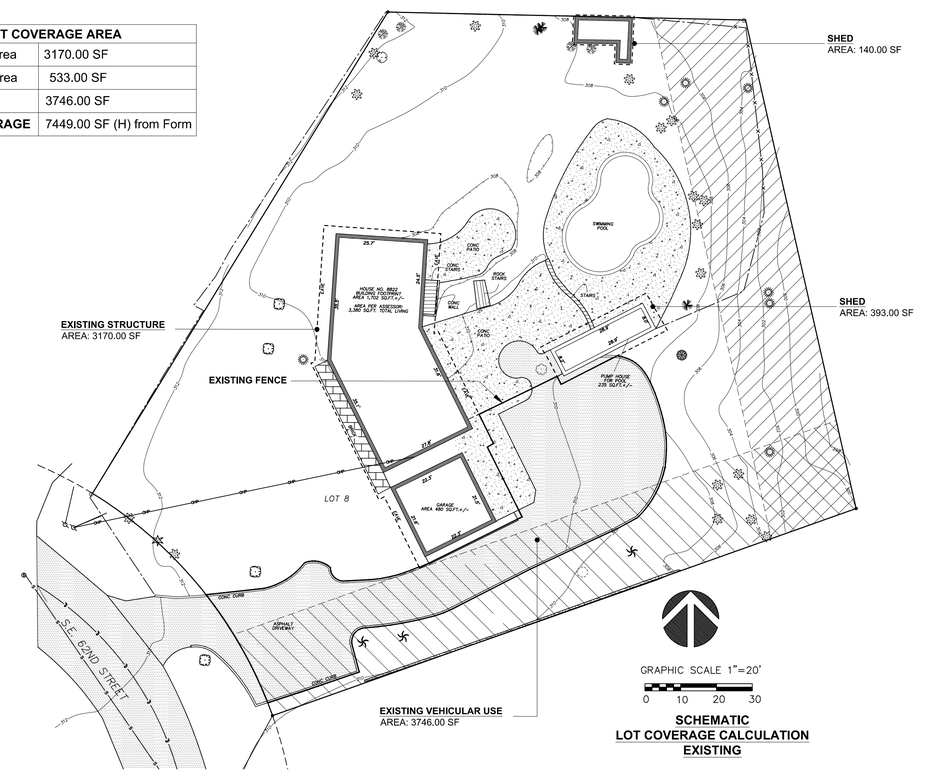
SCHEMATIC
NEW LOT COVERAGE CALCULATION
PER THIS APPLICATION

GROSS FLOOR AREA	
Main Level	1702.00 SF
Basement	1642.00 SF
Garage	480.00 SF
Detached Garage	792.00 SF
TOTAL GROSS FLOOR AREA	4616.00 SF



SCHEMATIC
GROSS FLOOR AREA

EXISTING LOT COVERAGE AREA	
Exist. Main Structure Roof Area	3170.00 SF
Exist. Accessory Structure Area	533.00 SF
Exist. Vehicular Use Area	3746.00 SF
TOTAL EXIST. LOT COVERAGE	7449.00 SF (H) from Form



SCHEMATIC
LOT COVERAGE CALCULATION
EXISTING

Ned Nelson, Architect
11773 Sunrise Drive NE,
Bainbridge Island, WA 98110
telephone: 425.444.6782
email: nednelson@msn.com

HEADRICK RESIDENCE
8822 S.E. 62ND STREET,
MERCER ISLAND, WA. 98040

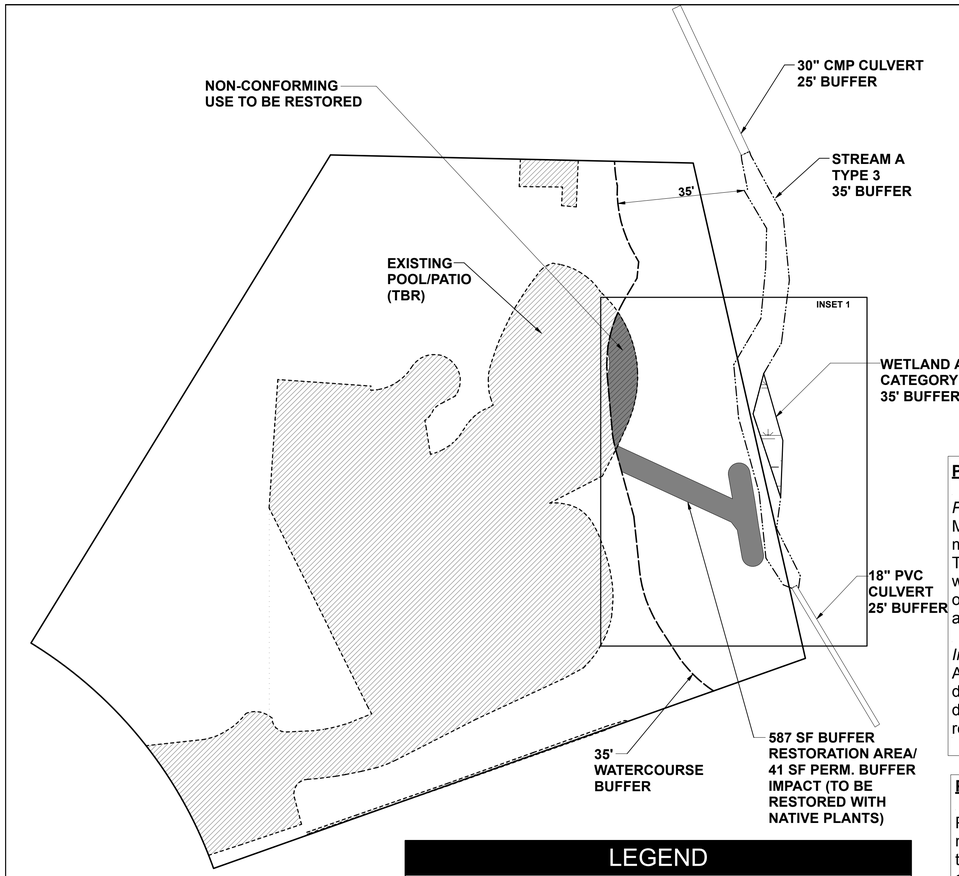
REVISIONS:

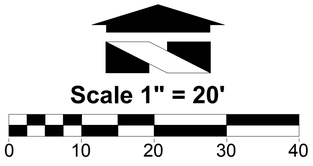
Mark	Date

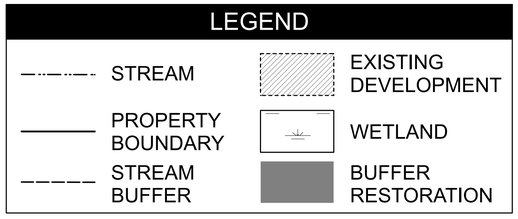
DATE: 03-22-21

AREA SUMMARY
LOT COVERAGE
GROSS FLOOR AREA
HARDSCAPE

SHEET:
A2.2







SITE DESCRIPTION

The Headrick project is located at 8822 SE 62nd Street, in the city of Mercer Island, Washington. Wetland Resources, Inc. (WRI) performed a site investigation on March 1, 2019 to locate critical areas on and in close proximity to the proposed project. The applicant met City staff at the site on September 10, 2019 to confirm critical area findings. The site is further located as a portion of Section 19, Township 24N, Range 4E, W.M.

The subject property is a relatively level lot that slopes towards a shallow north-to-south oriented ravine in the eastern portion of the property. The level portion of the site is developed with a single-family residence and appurtenant structures/uses, including access/parking, storage sheds, ornamental landscaping, lawngrass, paved areas, and a pool. A seasonal stream channel and a 123 square-foot wetland were identified along the east property line. The stream originates from a large-diameter culvert located near the northeast property boundary, and enters another culvert near the southeast property boundary. The small wetland is supported by groundwater discharge at the toe of the ravine, along the face of an existing retaining wall. The wetland also receives hydrology from a hyporheic connection with Stream A.

PROJECT DESCRIPTION

The applicant proposes to construct a new detached garage, to reconfigure an existing pool and patio, and to expand an existing driveway within the subject property. The proposal also includes a new stormwater conveyance system that will discharge near Stream A. No direct impacts to Stream A are proposed related to construction. Proposed development mostly occurs in the footprint of existing residential development/hardscape. Several structures will be removed to accommodate this project, including two existing sheds, most of an existing pool (nonconforming), and several hundred square feet of concrete patio area (partially nonconforming).

CRITICAL AREA IMPACTS AND MITIGATION

The proposed redevelopment will mostly occur outside of regulated critical areas and associated buffers. This project will remove 209 square feet of an existing non-conforming use (patio). Temporary buffer impacts will occur in an area consisting exclusively of undesirable non-native vegetation. In exchange for allowing project impacts, the applicant proposes to restore 209 square feet of nonconforming pool/patio, and to remove 378 square feet of invasive species and provide replacement with native trees and shrubs. Total mitigation includes 587 square feet of buffer enhancement.

BUFFER RESTORATION PLAN

The applicant proposes to restore 209 square feet of an existing patio that is located in the 35-foot buffer associated with Stream A/Wetland A, and 378 square feet surrounding a proposed stormwater conveyance system. Following the removal of concrete from the restoration area, underlying soils will be decompacted as necessary (to no less than one foot below existing native soils). Soil amendments shall consist of three inches of premium topsoil (with at least 15 percent organic content) tilled into the top twelve inches of existing soil. Mulch shall be placed throughout the restoration area, but away from the stems of woody plants. Additional soil preparation measures may be necessary, based on recommendations by the contracted biologist.

PROJECT NOTES

Preconstruction Meeting
Mitigation projects are typically more complex to install than to describe in plans. Careful monitoring by a wetland professional for all portions of this project is strongly recommended. There will be a pre-construction meeting on this site between the Permittee, the consulting wetland professional, and the contracted landscaper. The objective will be to verify the location of mitigation planting areas, to assess the adequacy of decompaction/amendment measures, and to describe the extent of aggressive control of invasive species prior to planting.

Inspections
A wetland professional shall be contracted to periodically inspect the mitigation installation described in this plan. Minor adjustments to the original design may be necessary prior to and during construction due to unusual or hidden site conditions. A City of Mercer Island representative and/or the consulting professional will make these decisions during construction.

PLANTING NOTES

Planting shall occur in the early spring or late fall. All plants shall be obtained from a reputable nursery. Care and handling of all plant materials is extremely important to the overall success of the project. The origin of all plant materials specified in this plan shall be native plants, nursery grown in the Puget Sound region of Washington. Some limited species substitution may be allowed, only with the agreement of the landscape designer, wetland biologist, and/or City staff.

Compost/Cultivation
During the pre-construction meeting, the condition of the soils in the restoration area will be evaluated. If soils appear extremely compacted or of poor quality, a plan for cultivating and/or adding compost will be created. If compost is deemed necessary, all areas denuded of vegetation and soil surface surrounding all planting pit areas shall receive no less than 2 inches of organic compost after planting. Compost shall be kept well away (at least 2 inches) from the trunks and stems of woody plants.

Handling
Plants shall be handled so as to avoid all damage, including: breaking, bruising, root damage, sunburn, drying, freezing or other injury. Plants must be covered during transport. Plants shall not be bound with wire or rope in a manner that could damage branches. Protect plant roots with shade and wet soil in the time period between delivery and installation. Do not lift container stock by trunks, stems, or tops. Do not remove from containers until ready to plant. Water all plants as necessary to keep moisture levels appropriate to the species horticultural requirements. Plants shall not be allowed to dry out. All plants shall be watered thoroughly immediately upon installation. Soak all containerized plants thoroughly prior to installation. Plants whose roots have dried out from exposure will not be accepted at installation inspection.

Storage
Plants stored by the Permittee for longer than one month prior to planting shall be planted in nursery rows and treated in a manner suitable to those species' horticultural requirements. Plants must be re-inspected by the wetland biologist and/or landscape designer prior to installation.

Damaged plants
Damaged, dried out, or otherwise mishandled plants will be rejected at installation inspection. All rejected plants shall be immediately removed from the site.

Plant Names
Plant names shall comply with those generally accepted in the native plant nursery trade. Any question regarding plant species or variety shall be referred to the landscape designer, wetland professional, or City staff. All plant materials shall be true to species and variety and legibly tagged.

Quality and condition
Plants shall be normal in pattern of growth, healthy, well-branched, vigorous, with well-developed root systems, and free of pests and diseases. Damaged, diseased, pest-infested, scraped, bruised, dried out, burned, broken, or defective plants will be rejected. Plants with pruning wounds over 1" in diameter will be rejected.

Roots
All plants shall be balled and burlapped or containerized, unless explicitly authorized by the landscape designer and/or wetland professional. Rootbound plants or B&B plants with damaged, cracked, or loose rootballs (major damage) will be rejected. Immediately before installation, plants with minor root damage (some broken and / or twisted roots) must be root-pruned. Matted or circling roots of containerized plantings must be pruned or straightened and the sides of the root ball must be roughened from top to bottom to a depth of approximately half an inch in two to four places. Bare root plantings of woody material are allowed only with permission from the landscape designer, wetland professional and/or City staff.

Sizes
Plant sizes shall be the size indicated in the plant schedule in approved plans. Larger stock may be acceptable provided that it has not been cut back to the size specified, and that the root ball is proportionate to the size of the plant. . Measurements, caliper, branching, and balling and burlapping shall conform to the American Standard of Nursery Stock by the American Association of Nurserymen (latest edition).

Form
Evergreen trees shall have single trunks and symmetrical, well-developed form. Deciduous trees shall be single trunked unless specified as multi-stem in the plant schedule. Shrubs shall have multiple stems and be well-branched.

Timing of Planting
Unless otherwise approved by City staff, all planting shall occur between November 1 and March 1. Overall, the earlier plants go into the ground during the dormant period, the more time they have to adapt to the site and extend their root systems before the water demands of spring and summer.

Weeding
Existing and exotic vegetation in the mitigation areas will be hand-weeded from around all newly installed plants at the time of installation and on a routine basis throughout the monitoring period. No chemical control of vegetation on any portion of the site is recommended.

Site conditions
The contractor shall immediately notify the landscape designer and/or wetland professional of drainage or soil conditions likely to be detrimental to the growth or survival of plants. Planting operations shall not be conducted under the following conditions: freezing weather, when the ground is frozen, excessively wet weather, excessively windy weather, or in excessive heat.

Planting Pits
Planting pits shall be circular or square with vertical sides, and shall be 6" deeper and 12" larger in diameter than the root ball of the plant. Break up the sides of the pit in compacted soils. Set plants upright in pits. Burlap shall be removed from the planting pit. Backfill shall be worked back into holes such that air pockets are removed without adversely compacting down soils.

Fertilizer
Slow release fertilizer may be used if pre-approved by City staff. Fertilizers shall be applied only at the base of plantings underneath the required covering of mulch (and shall not make contact with stems of plants). No soil amendment or fertilizers will be placed in planting holes.

Staking
Most shrubs and many trees DO NOT require any staking. If the plant can stand alone without staking in a moderate wind, do not use a stake. If the plant needs support, then strapping or webbing should be used as low as possible on the trunk to loosely brace the tree with two stakes. Do not brace the tree tightly or too high on the trunk. If the tree is unable to sway, it will further lose the ability to support itself. Do not use wire in a rubber hose for strapping as it exerts too much pressure on the bark. As soon as supporting the plant becomes unnecessary, remove the stakes. All stakes must be removed within two (2) years of installation.

Plant Location
Colored surveyors ribbon or other appropriate marking shall be attached to the installed plants to assist in locating the plants while removing the competing non-native vegetation and during the monitoring period.

Arrangement and Spacing
The plants shall be arranged in a pattern with the appropriate numbers, sizes, species, and distribution that are required in accordance with the approved plans. The actual placement of individual plants shall mimic natural, asymmetric vegetation patterns found on similar undisturbed sites in the area. Spacing of the plantings may be adjusted to maintain existing vegetation with the agreement of the landscape designer, wetland biologist, and/or City staff.

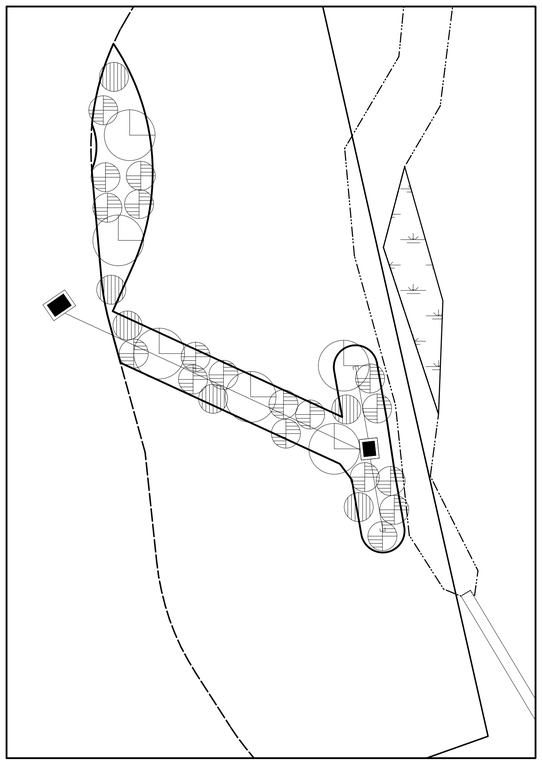
Inspection(s)
A wetland biologist shall be present on site to inspect the plants prior to planting. Minor adjustments to the original design may be required prior to and during construction.

Woodchip Mulch
After buffer restoration plant installation, two to four inches of woodchip mulch shall be placed throughout the restoration area. Woodchips shall be kept at least 2 inches from the trunks and stems of woody plants.

WRI JOB #18303
SCALE 1" = 10'
Drawn By: NIELS PEDERSEN
DATE: April 29, 2021

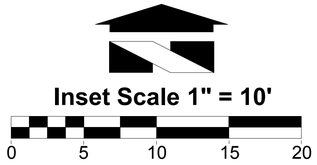
PREPARED FOR:
Greg and Jennifer Headrick
8822 SE 62nd St
Mercer Island, WA 98040

FINAL MITIGATION PLAN
HEADRICK
MERCER ISLAND, WASHINGTON



PLANT LEGEND

- WESTERN RED CEDAR
- SALMONBERRY
- VINE MAPLE



Common Name	Latin Name	Size	Spacing	Qty.
Western red cedar	*Thuja plicata*	1 gallon	10’	6
Salmonberry	*Rubus spectabilis*	1 gallon	5’	18
Vine maple	*Acer circinatum*	1 gallon	5’	6

BUFFER RESTORATION PLANTING PLAN

The applicant proposes to restore 209 square feet of an existing patio that is located in the 35-foot buffer associated with Stream A/Wetland A, and 378 square feet surrounding a proposed stormwater conveyance system. Following the removal of concrete from the restoration area, underlying soils will be decompacted as necessary (to no less than one foot below existing native soils). Soil amendments shall consist of three inches of premium topsoil (with at least 15 percent organic content) tilled into the top twelve inches of existing soil. Mulch shall be placed throughout the restoration area, but away from the stems of woody plants. Additional soil preparation measures may be necessary, based on recommendations by the contracted biologist.

Aggressive control of invasive species located in the restoration area shall occur prior to planting. Guidelines described by the King County Noxious Weed Control Board shall be implemented prior to planting, and throughout the monitoring period. The following plant species and quantities shall be installed within the restoration area.

Buffer Restoration Planting Plan (587 square feet)

Common Name	Latin Name	Size	Spacing	Qty.
Western red cedar	*Thuja plicata*	1 gallon	10’	6
Salmonberry	*Rubus spectabilis*	1 gallon	5’	18
Vine maple	*Acer circinatum*	1 gallon	5’	6

PROJECT MONITORING PROGRAM

Requirements for monitoring project:
1. Initial compliance/as-built report
2. Site inspection (twice per year for years one and two, and once per year until year 5)
3. Annual reports (one report submitted during each monitored year)

Purpose for Monitoring
The purpose for monitoring this mitigation project shall be to evaluate its success. Success will be determined if monitoring shows at the end of five years that the definitions of success stated below are met. The property owner shall grant access to the mitigation area for inspection and maintenance to the contracted landscaper, wetland specialist, and/or City of Mercer Island staff during the monitoring period or until the project is evaluated as successful.

Monitoring
Monitoring shall be conducted annually for five years in accordance with the approved Restoration Plan. The monitoring period will begin upon City acceptance of written notification confirming the mitigation plan has been successfully implemented. Final inspection will occur five years after completion of this project. The contracted consultant will prepare a final report documenting the success of the project.

Vegetation Monitoring
Due to the small physical size of the restoration area, monitoring will occur based on a hand count of installed species. Monitoring of vegetation sampling points shall occur once per year for five years. Semi-annual inspections will be primarily useful for making maintenance recommendations that will ensure long-term success.

Photo points
No less than two permanent photo points will be established within the mitigation areas. Photographs will be taken from these points to visually record condition of the restoration area. Photos shall be taken annually between May 15 and September 30 (prior to leaf drop), unless otherwise specified.

Monitoring Report Contents
Monitoring reports shall be submitted by December 31 of each year during the monitoring period. As applicable, monitoring reports must include descriptions / data for:

1. Site plan and vicinity map
2. Historic description of project, including date of installation, current year of monitoring, restatement of mitigation / restoration goals, and performance standards
3. Plant survival, and explanation of monitoring methodology in the context of assessing performance standards
4. Slope condition, site stability, any structures or special features
5. Stream and buffer conditions, e.g., surrounding land use, use by humans, and/or wild and domestic creatures
6. Observed wildlife, including amphibians, avian species, and others
7. Assessment of nuisance / exotic biota and recommendations for management
8. Color photographs taken from permanent photo-points that shall be depicted on the monitoring report map

CONTINGENCY PLAN

If 20% of the installed plants are severely stressed during any of the inspections, or it appears 20% may not survive, additional plantings of the same species may be added to the planting area. Elements of a contingency plan may include, but will not be limited to: more aggressive weed control, pest control, mulching, replanting with larger plant material, species substitution, fertilization, soil amendments, and/or irrigation.

MAINTENANCE

The mitigation areas will require periodic maintenance to remove aggressive non-native species and replace vegetation mortality. Maintenance shall occur in accordance with the approved plans. Maintenance may include, but will not be limited to: removal of competing grasses (by hand), irrigation, fertilization (only if necessary), replacement of plant mortality, and the replacement of mulch for each maintenance period. Chemical control, only if approved by City staff, shall be applied by a licensed applicator following all label instructions.

Duration and Extent
In order to achieve performance standards, the permittee shall have the mitigation area maintained for the duration of the five-year monitoring period. Maintenance will include: watering, weeding around the base of installed plants, pruning, replacement, re-staking, removal of all classes of noxious weeds (see Washington State Noxious Weeds List, WAC 16-750-005) as well as Himalayan blackberry, and any other measures needed to ensure plant survival. The landscape designer and/or wetland biologist shall direct all maintenance actions.

Survival
The permittee shall be responsible for the health of 100% of all installed woody plants, and 80% of herbaceous plants, for five growing seasons after successful installation. A growing season for these purposes is defined as occurring from spring to spring (March 15 to March 15 of the following year). For fall installation (often required), the growing season will begin the following spring. The permittee shall replace any plants that are failing, weak, defective in manner of growth, or dead during this growing season, as directed by the landscape designer, wetland biologist, and/or City of Mercer Island staff.

Installation Timing for Replacement Plants
Replacement plants shall be installed between September 15 and January 15, unless otherwise determined by the landscape designer, wetland professional, and/or City of Mercer Island staff.

Standards for Replacement Plants
Replacement plants shall meet the same standards for size and type as those specified for the original installation, unless otherwise directed by the landscape designer, wetland professional, and/or City of Mercer Island staff.

Replanting
Plants that have settled in their planting pits too deep, too shallow, loose, or crooked shall be replanted as directed by the landscape designer, wetland professional, and/or City of Mercer Island staff.

Herbicides / Pesticides
Chemical controls shall not be used in the mitigation area, sensitive areas, or their buffers. However, limited use of herbicides may be approved depending on site-specific conditions, only if approved by City of Mercer Island staff.

Irrigation / Watering
Water should be provided during the dry season (July 1 through October 15) for the first two years after installation to ensure plant survival and establishment. A temporary above ground irrigation system should provide water. Water should be applied at a rate of 1” of water twice per week for year one and 1” per week during year two.

GOALS, OBJECTIVES and PERFORMANCE STANDARDS

The overall goal of this restoration plan is to restore ecological functions within the buffer associated with Wetland A/Stream A. Specific goals, objectives, and performance standards include the following:

Goal 1
Modestly improve forage opportunities in the riparian corridor.

Objective 1a: Maintain diverse native species that can provide forage for terrestrial mammals and passerine birds.

Performance Standard 1a1: The restoration area shall contain at least three different native species (including native pioneer species) during each monitoring year.

Objective 1b: Control aggressive non-native species.

Performance Standard 1b1: Aggressive non-native species (i.e. Himalayan blackberry, English ivy, English holly, ornamental laurel, and yellow archangel) shall constitute less than 15 percent areal cover in the restoration area for all monitoring years.

Goal 2
Improve vegetative screening between proposed development and Stream A/Wetland A.

Objective 1a: Create soil conditions that can support successional development/screening goals within the restoration area.

Performance Standard 1a1: Prior to planting, concrete shall be removed from the restoration area. Soils shall be decompacted to at least twelve inches below existing native soils, and at least three inches of mulch shall be incorporated into the decompacted area.

Objective 1b: Install species that can improve screening in the shrub, sub-canopy, and canopy layers.

Performance Standard 1b1: Installed and native pioneer species in the restoration area shall constitute 70 percent areal cover in year five.

Performance Standard 1b2: There shall be 100 percent survival of all installed woody species in the restoration area in each monitored year.

WRI JOB #18303
SCALE 1" = 10'
Drawn By: NIELS PEDERSEN
DATE: April 29, 2021

PREPARED FOR:
Greg and Jennifer Headrick
8822 SE 62nd St
Mercer Island, WA 98040

FINAL MITIGATION PLAN
HEADRICK
MERCER ISLAND, WASHINGTON

SHEET 2/2

SHEAR WALL SCHEDULE

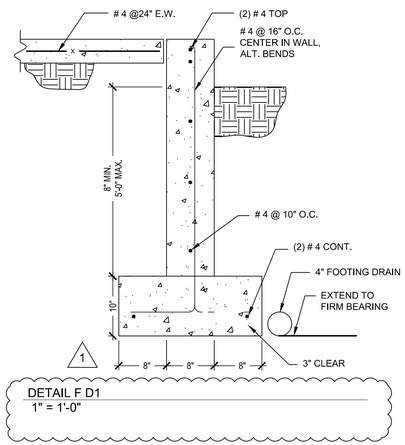
(SEE ANSI / AWC SDPWS-2015 Table 4.3A & Section 4.3.3)

All shear walls to be sheathed from top plate to bottom plate. Block all panel edges.
Nail spacing is for all panel edges. Space nails @ 12" o.c. along intermediate framing members.

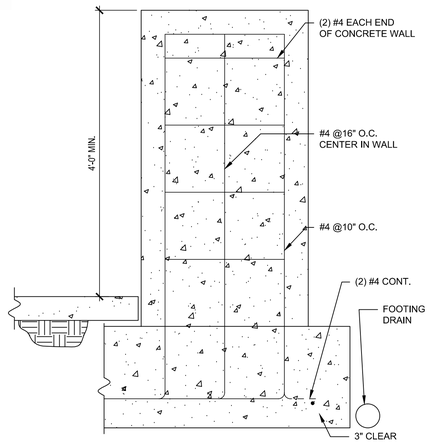
SW-6	**v = 350 plf**	7/16" OSB, w/ 8d (0.131" Ø) common nails @ 6" o.c. Anchorage (interior walls only) to SINGLE joist or blkg below: 16d (box) @ 4" o.c.

The shear values above are based upon the use of 8d common nails with a full head, a shank diameter of 0.131", and a minimum penetration of 1.375". From Table 4.3A use 15/32; 8d values with a 0.93 reduction for Hem-Fir & 1.4 increase for wind.

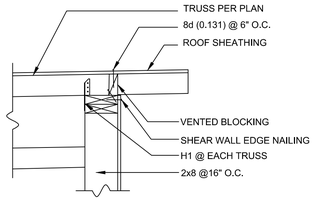
NOTE: 1/2" CD EXT. PLYWOOD ALTERNATE TO OSB.



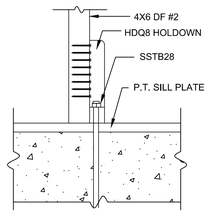
1 DETAIL F D1
1" = 1'-0"



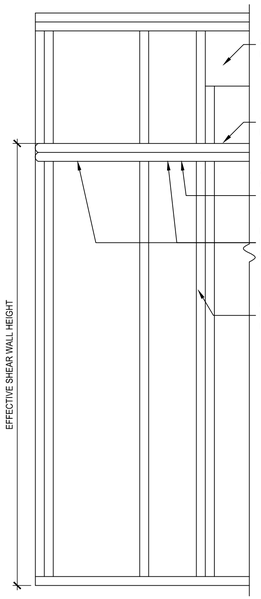
1 DETAIL F D2
1" = 1'-0"



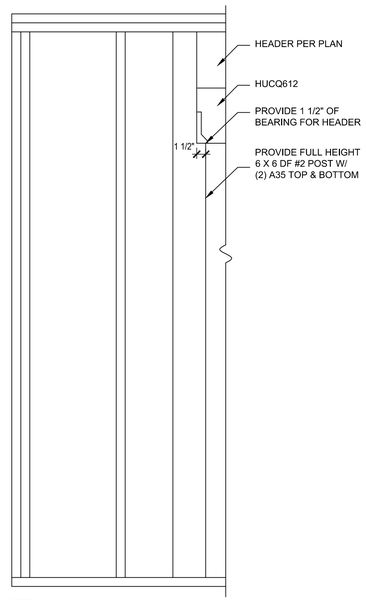
1 DETAIL A
1" = 1'-0"



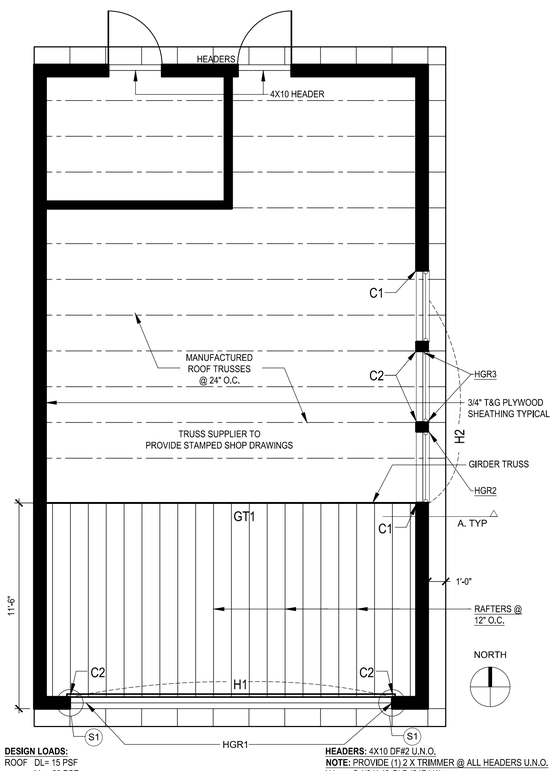
1 DETAIL C
1" = 1'-0"



1 DETAIL B
1" = 1'-0"



1 DETAIL S1
1" = 1'-0"



DESIGN LOADS:
ROOF DL= 15 PSF
LL= 60 PSF

ENGINEERED TRUSSES BY TRUSS MANUFACTURER
NOTE: PROVIDE (2) 2 x POST @ ALL HIP MASTERS & GIRDER TRUSSES U.N.O.

RAFTERS: 1 3/4 X 7 1/4 LVL @12" O.C.
NOTE: PROVIDE HU7 HANGERS @ ALL FLUSH FRAMED ENDS

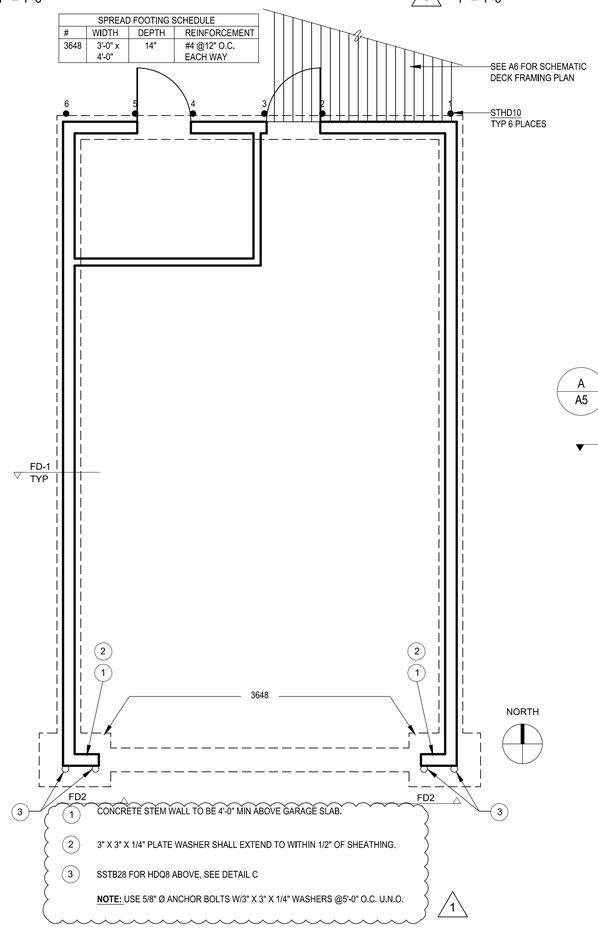
HEADERS: 4X10 DF#2 U.N.O.
NOTE: PROVIDE (1) 2 X TRIMMER @ ALL HEADERS U.N.O.
H1: 5 1/8 X 18 GLB (24F-V4)
H2: 5 1/8 X 9 GLB (24F-V4)

COLUMNS:
C1: 2 X 6 HF #2 TRIMMER W/ (2) 2 X 6 KING
C2: 6 X 6 DF #2 KING

HANGERS:
HGR1: HUCQ612
HGR2: HUCQ610
HGR3: HUC410

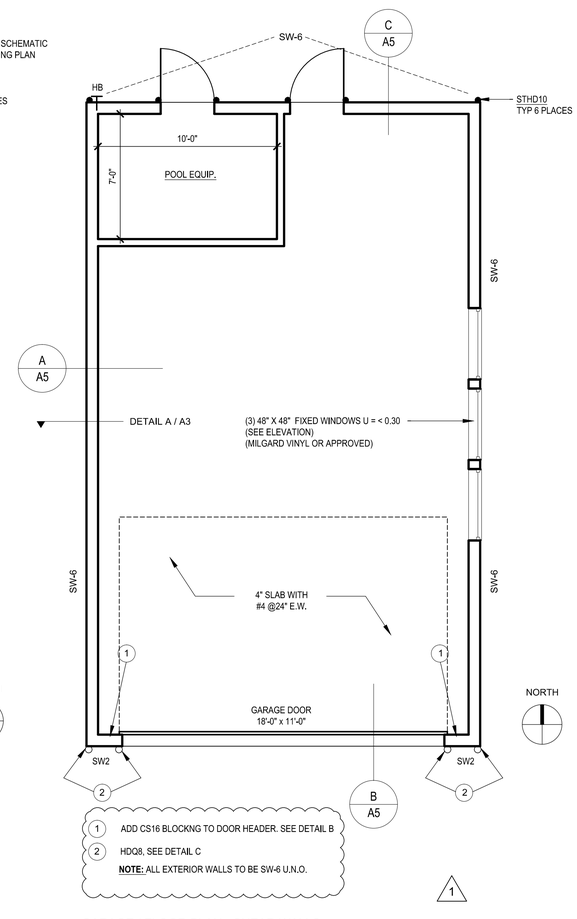
1 GARAGE / ROOF FRAMING PLAN
1/4" = 1'-0"

SPREAD FOOTING SCHEDULE			
#	WIDTH	DEPTH	REINFORCEMENT
3648	3'-0" x 4'-0"	14"	#4 @12" O.C. EACH WAY



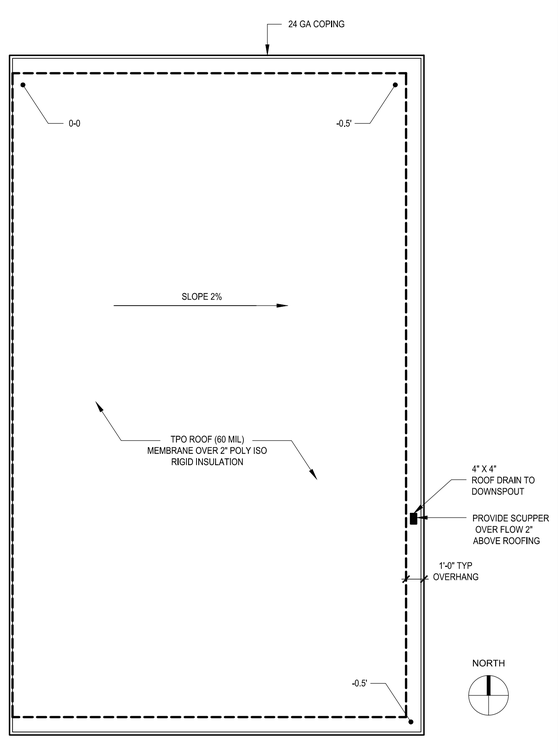
1 CONCRETE STEM WALL TO BE 4'-0" MIN ABOVE GARAGE SLAB.
2 3" X 3" X 1/4" PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF SHEATHING.
3 SSTB28 FOR HDQ8 ABOVE, SEE DETAIL C
NOTE: USE 5/8" Ø ANCHOR BOLTS W/3" X 3" X 1/4" WASHERS @5'-0" O.C. U.N.O.

1 GARAGE / FOUNDATION PLAN
1/4" = 1'-0"



1 ADD CS16 BLOCKNG TO DOOR HEADER. SEE DETAIL B
2 HDQ8, SEE DETAIL C
NOTE: ALL EXTERIOR WALLS TO BE SW-6 U.N.O.

1 GARAGE / FLOOR PLAN - SHEAR WALLS
1/4" = 1'-0"



GARAGE / ROOF PLAN
1/4" = 1'-0"

Ned Nelson, Architect
11773 Sunrise Drive NE,
Bainbridge Island, WA 98110
telephone: 425.444.6782
email: nednelson@msn.com

REGISTERED ARCHITECT
NED H. NELSON
STATE OF WASHINGTON
2015

HEADRICK RESIDENCE
8822 S.E. 62ND STREET,
MERCER ISLAND, WA. 98040

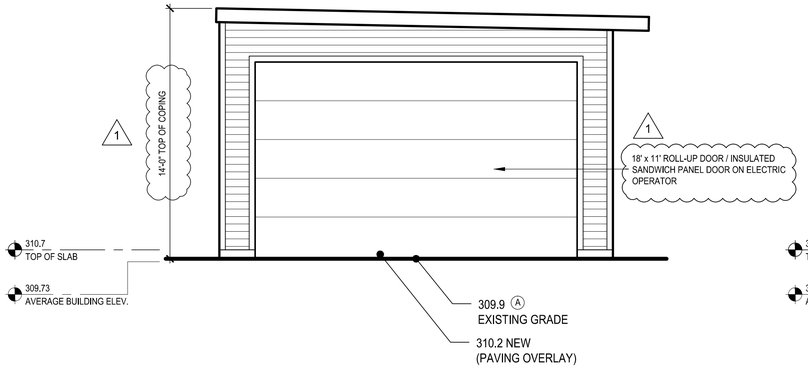
REVISIONS:

Mark	Date
1	05-20-20

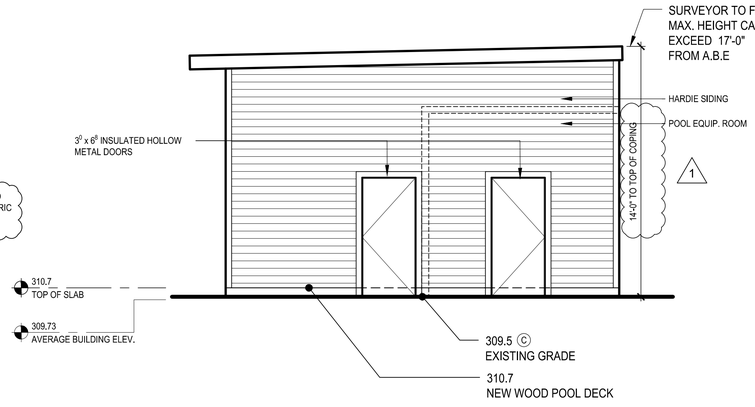
DATE: 03-22-21

GARAGE FLOOR PLAN
FOUNDATION PLAN
ROOF FRAMING PLAN
DETAILS

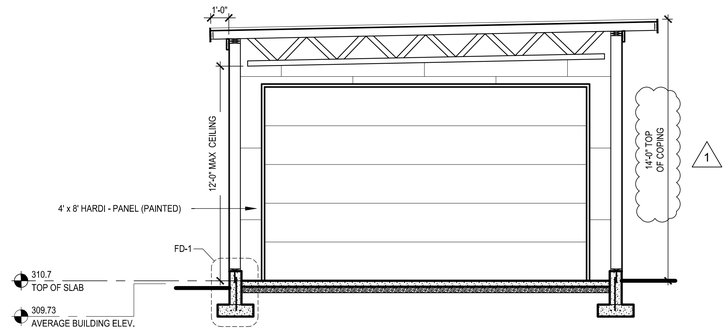
SHEET:
A3



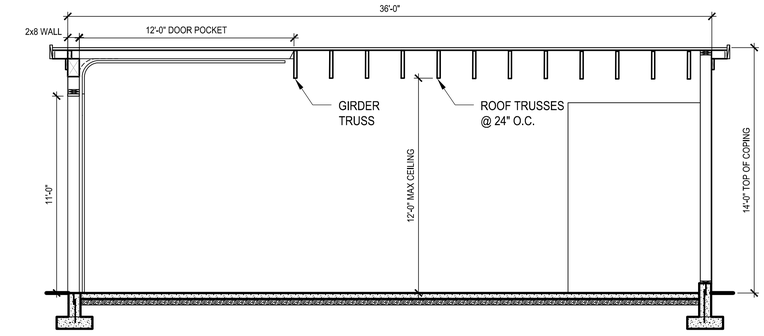
SOUTH ELEVATION
1/4" = 1'-0"



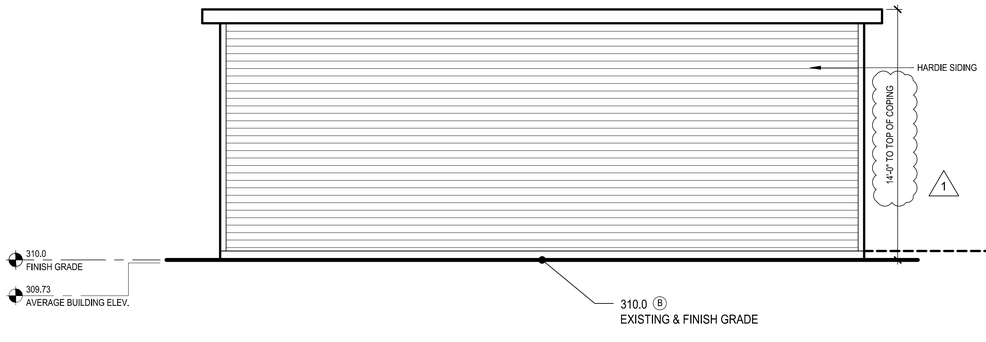
NORTH ELEVATION
1/4" = 1'-0"



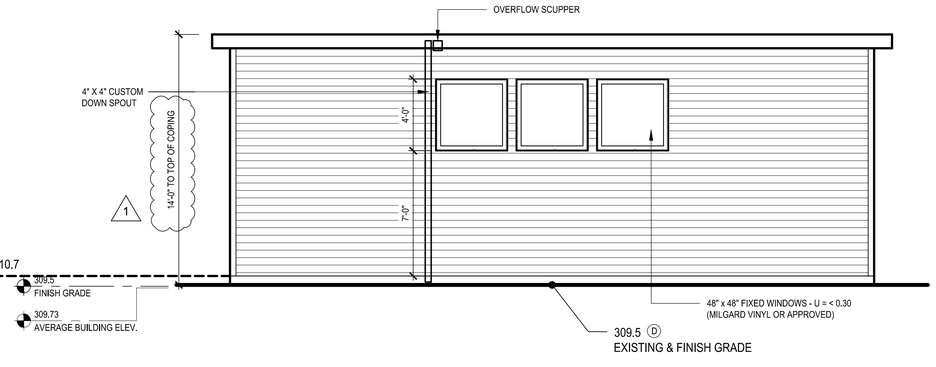
NORTH SECTION
1/4" = 1'-0"



1 EAST SECTION
1/4" = 1'-0"



WEST ELEVATION
1/4" = 1'-0"



EAST ELEVATION
1/4" = 1'-0"

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REVISIONS:

Mark	Date
1	05-20-20

DATE: 03-22-21

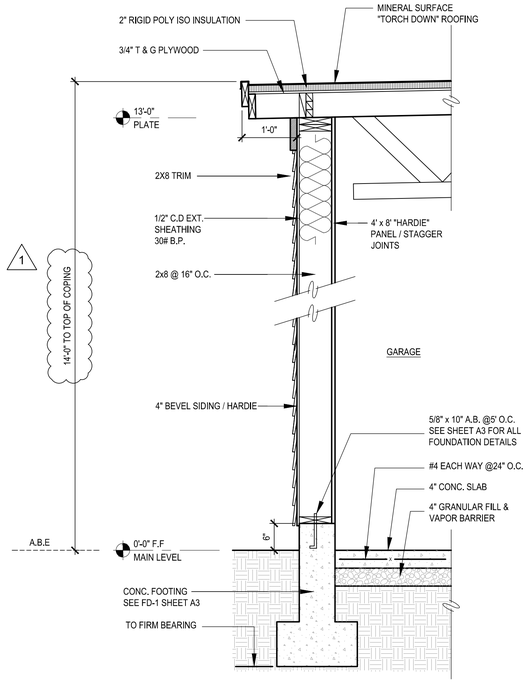
ELEVATIONS
SECTION

SHEET:
A4

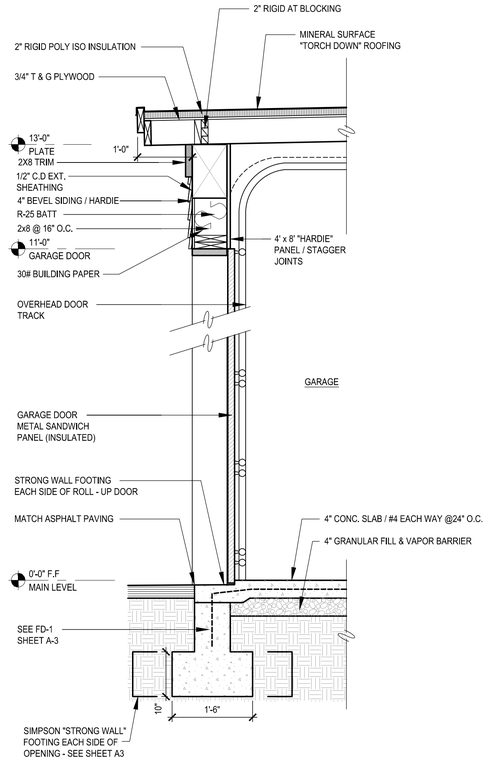
1

NOTE: SOIL BEARING CONFIRMATION FOR GARAGE FOOTINGS AND POOL FOOTINGS

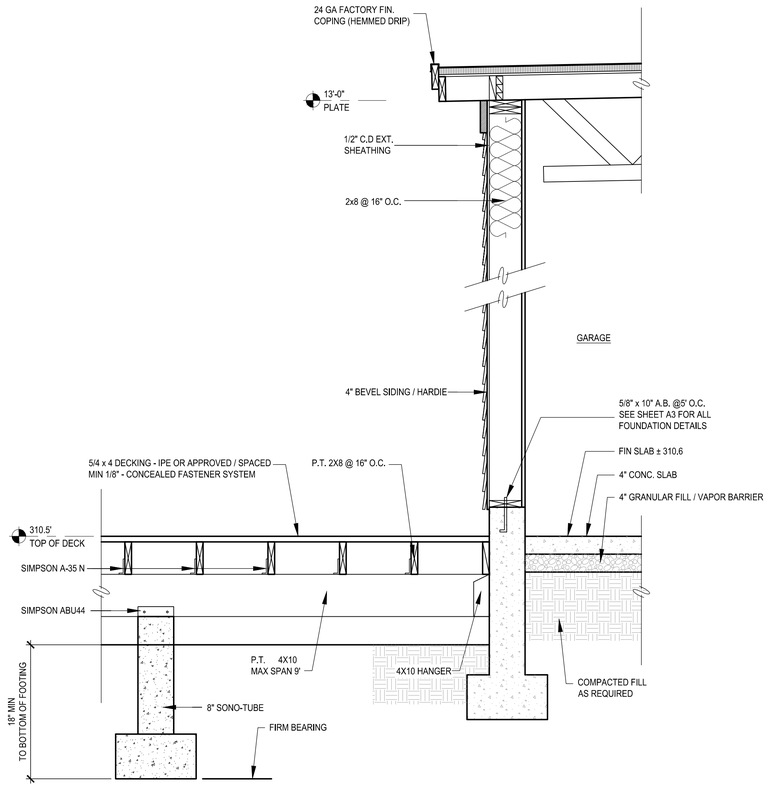
BEARING TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING EXCAVATION AND PRIOR TO ANY PLACEMENT OF REINFORCING STEEL / FOUNDATION BOARDS.



WALL SECTION A
3/4" = 1'-0"



WALL SECTION B
3/4" = 1'-0"



WALL SECTION C
3/4" = 1'-0"

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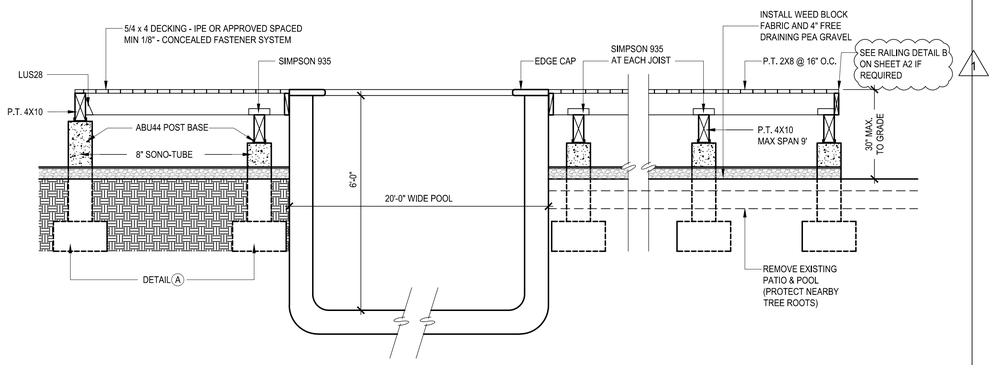
REVISIONS:

Mark	Date
1	05-20-20

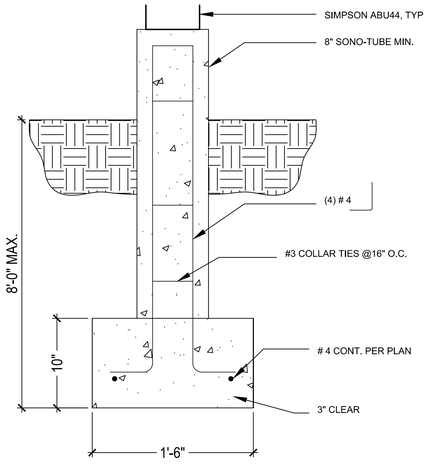
DATE: 03-22-21

GARAGE
WALL SECTIONS

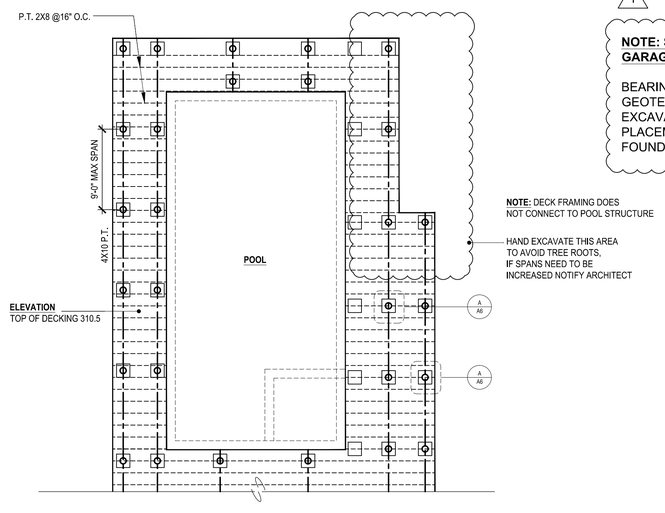
SHEET:
A5



POOL / WOOD DECK SECTION
1/2" = 1'-0"



A TYPICAL SONO-TUBE TO SPREAD FOOTING CONNECTION DETAIL
1 1/2" = 1'-0"

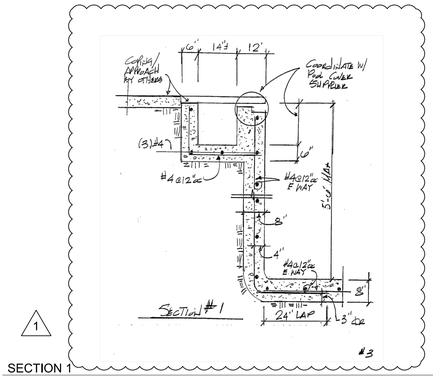


SCHEMATIC FRAMING PLAN FOR DECKING
1/8" = 1'-0"

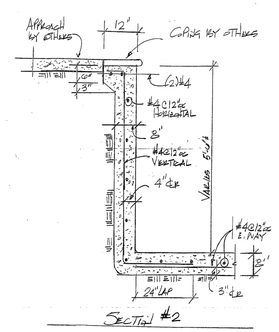
1

NOTE: SOIL BEARING CONFIRMATION FOR GARAGE FOOTINGS AND POOL FOOTINGS

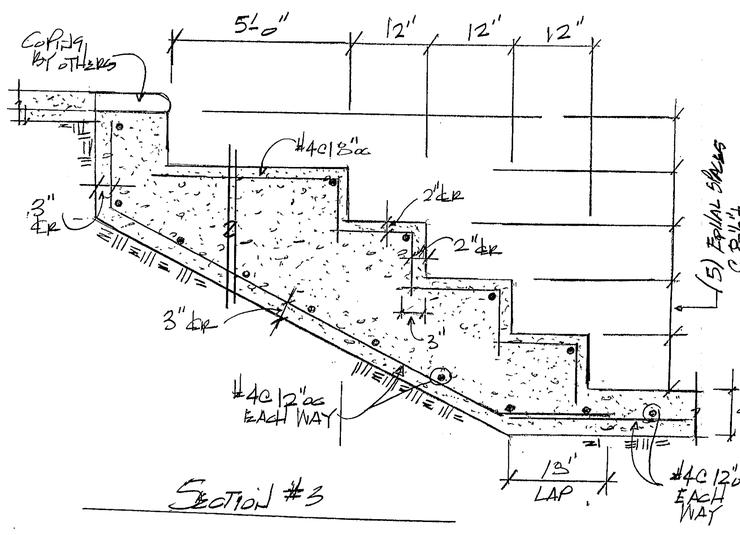
BEARING TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING EXCAVATION AND PRIOR TO ANY PLACEMENT OF REINFORCING STEEL / FOUNDATION BOARDS.



1
SECTION 1
1/2" = 1'-0"



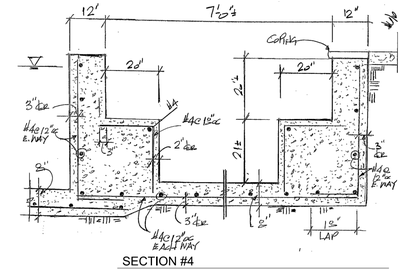
SECTION #2
1/2" = 1'-0"



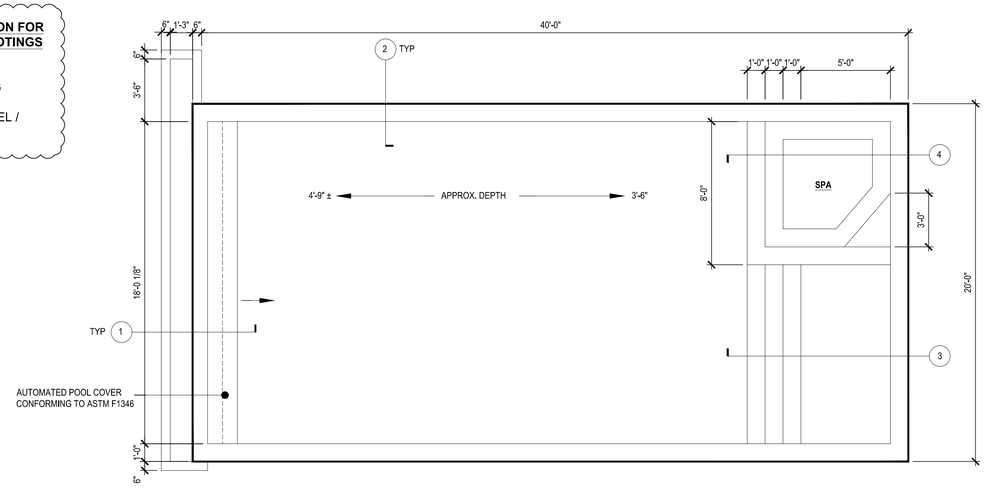
SECTION #3
1/2" = 1'-0"

SWIMMING POOL
STRUCTURAL NOTES

1. CONTRACTOR SHALL COMPLY WITH THE CURRENT EDITION OF THE 2015 INTERNATIONAL BUILDING CODE OR APPLICABLE CODE OR BUILDING ORDINANCE.
2. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS.
3. CALL LOCAL BUILDING DEPARTMENT FOR STEEL INSPECTION PRIOR TO POURING CONCRETE.
4. ASSUMED DESIGN FLUID PRESSURE = 35 LBS. PER CUBIC FOOT.
5. ASSUMED SOIL BEARING = 1500 LBS/ PER FOOT SQUARED.
6. THE GROUND SURROUNDING THE SWIMMING POOL IS ASSUMED LEVEL. NO SURCHARGE, RETAINING WALLS OR TERRACES ARE TO BE CONSTRUCTED ABOUT THE PERIMETER OF THE POOL.
7. AIR-PLACED CONCRETE SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 4000 PSI.
8. STEEL PLACEMENT SHALL BE AS SHOWN ON THE PLAN. LAP ALL BARS 30-BAR DIAMETERS. 2'-0" RETURN AT ALL CORNERS. ALL STEEL SHALL BE CAREFULLY AND FIRMLY WIRED INTO PLACE. REINFORCEMENT SHALL BE SECURED IN PLACE WITH CONCRETE BRICK.
9. CONCRETE SHALL BE PLACED ON FIRM; NATURAL, UNDISTURBED SOIL.
10. THE POOL SECTION HEREIN IS DESIGNED PRIMARILY FOR RECTANGULAR SHAPED POOLS, AND IS FULLY APPLICABLE TO FREE-FORM POOLS.
11. REINFORCEMENT SHALL BE DEFORMED BILLET STEEL fy = 40,000 PSI.



SECTION #4
1/2" = 1'-0"



POOL ENGINEERING FROM:
MITCHELL ENGINEERING

POOL PLAN
1/4" = 1'-0"

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MERCER ISLAND, WA. 98040

REVISIONS:

Mark	Date
1	05-20-20

DATE: 03-22-21

POOL & DECK DETAILS

SHEET:
A6

EXISTING TREES

TREE #	TREE TYPE		DBH	DRIPLINE	RETAIN OR REMOVE
1.	WESTERN RED CEDAR	*THUJA PLICATA*	19" DBH	20' DL	RETAIN
2.	MOUNTAIN ASH	*SORBUS AMERICANA*	6" DBH	10' DL	RETAIN
3.	WESTERN RED CEDAR	*THUJA PLICATA*	48" DBH	21'DL	RETAIN
4.	JAPANESE MAPLE	ACER PALMATUM	9" DBH	15' DL	RETAIN
5.	PACIFIC DOGWOOD	*CORNUS NUTTALLII*	7" DBH	15' DL	RETAIN
6.	MAGNOLIA	*MAGNOLIA GRANDIFLORA*	12" DBH	15' DL	RETAIN
7.	WESTERN RED CEDAR	*THUJA PLICATA*	33" DBH	20' DL	RETAIN
8.	WESTERN RED CEDAR	*THUJA PLICATA*	25" DBH	20' DL	RETAIN
9.	DOUGLAS FIR	*PSEDUO-TSUGA MENZIESII*	20" DBH	20' DL	RETAIN
10.	DOUGLAS FIR	*PSEDUO-TSUGA MENZIESII*	22" DBH	20' DL	RETAIN
11.	WESTERN RED CEDAR	*THUJA PLICATA*	33" DBH	18' DL	RETAIN
12.	HEMLOCK	*TSUGA HETEROPHYLLA*	15" DBH	18' DL	RETAIN
13.	HEMLOCK	*TSUGA HETEROPHYLLA*	15" DBH	18' DL	RETAIN
14.	HEMLOCK	*TSUGA HETEROPHYLLA*	14" DBH	15' DL	RETAIN
15.	HEMLOCK	*TSUGA HETEROPHYLLA*	12" DBH	12' DL	RETAIN
16.	WESTERN RED CEDAR	*THUJA PLICATA*	12" DBH	12' DL	RETAIN
17.	BIG LEAF MAPLE	*ACER MACROPHYLLUM*	28" DBH	25' DL	RETAIN
18.	BIG LEAF MAPLE	*ACER MACROPHYLLUM*	28" DBH	25' DL	RETAIN
19.	BIG LEAF MAPLE	*ACER MACROPHYLLUM*	27" DBH	20' DL	RETAIN
20.	WESTERN RED CEDAR	*THUJA PLICATA*	28" DBH	20' DL	RETAIN
21.	WESTERN RED CEDAR	*THUJA PLICATA*	57" DBH	24' DL	RETAIN
22.	WESTERN RED CEDAR	*THUJA PLICATA*	20" DBH	18' DL	RETAIN
23.	WESTERN RED CEDAR	*THUJA PLICATA*	18" DBH	20' DL	RETAIN
24.	WESTERN RED CEDAR	*THUJA PLICATA*	17" DBH	18' DL	RETAIN
25.	HEMLOCK	*TSUGA HETEROPHYLLA*	11" DBH	14' DL	RETAIN
26.	STUMP SPROUT				RETAIN
27.	STUMP SPROUT				RETAIN
28.	SPRUCE,	*PICEA MARIANA*	39" DBH	22' DL	RETAIN
29.	PREVIOUSLY REMOVED				N/A
30.	BIG LEAF MAPLE	*ACER MACROPHYLLUM*	41" DBH	30' DL	RETAIN
31.	WESTERN RED CEDAR	*THUJA PLICATA*	14" DBH	12' DL	RETAIN
32.	WESTERN RED CEDAR	*THUJA PLICATA*	30" DBH	20' DL	RETAIN
33.	PREVIOUSLY REMOVED				N/A
34.	PREVIOUSLY REMOVED				N/A
35.	GINKO	*GINKO BILOBA*	10" DBH	12' DL	RETAIN
36.	THUNDERCLOUD PLUM	*PRUNUS CERASIFERA 'THUNDERCLOUD'*	14" DBH	12' DL	RETAIN
37.	WESTERN RED CEDAR	*THUJA PLICATA*	21" DBH	15' DL	RETAIN

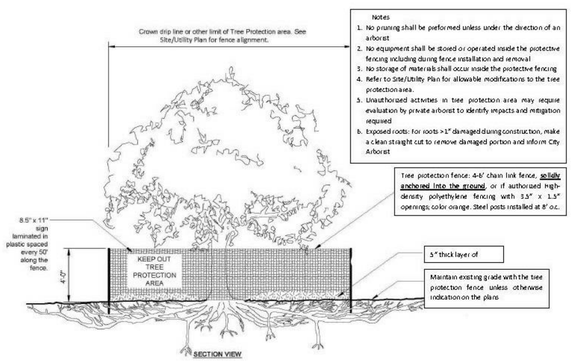
NEW / REPLACEMENT TREES

TREE #	TREE TYPE		PLANTED DBH
A.	WESTERN RED CEDAR	THUJA PLICATA	8' DRIPLINE
B.	WESTERN RED CEDAR	THUJA PLICATA	8' DRIPLINE
C.	WESTERN RED CEDAR	THUJA PLICATA	8' DRIPLINE
	(REPLACEMENTS WITH 20' OF SEPARATION OR AS CLOSE TO IT AS POSSIBLE).		

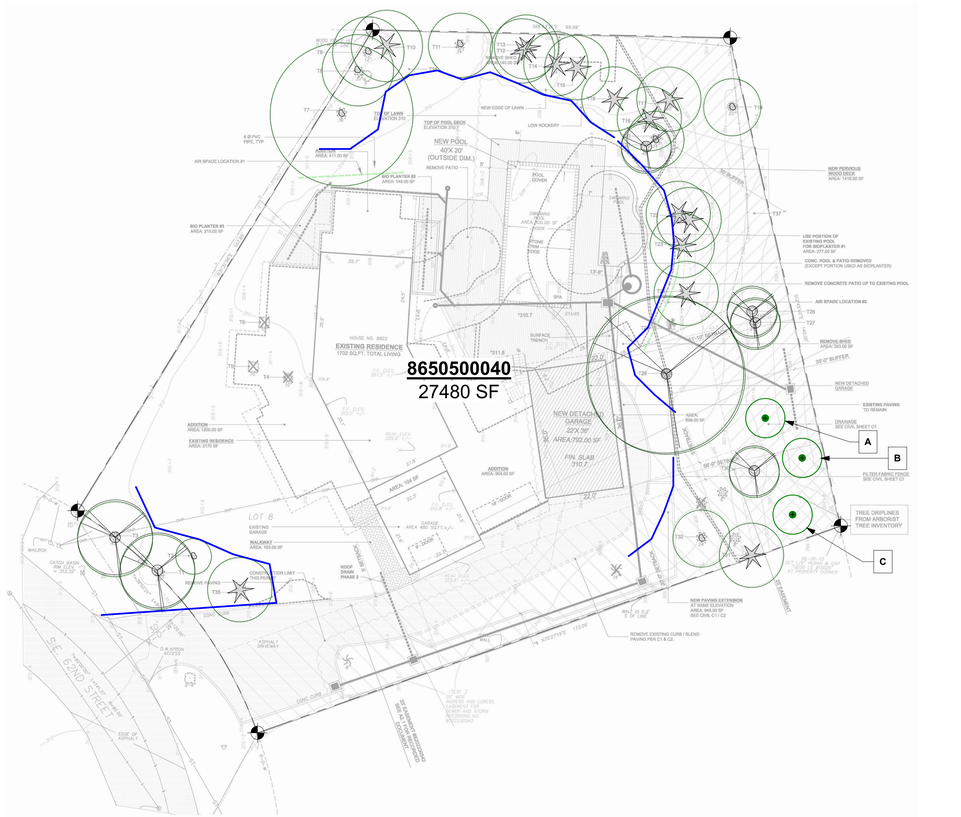
NOTE:

WHEN EXCAVATING FOR THE STORM PIPING THAT IS LOCATED WITHIN A TREES CRITICAL ROOT ZONE, THE EXCAVATION SHOULD BE DONE BY CAREFULLY DIGGING WITH HAND TOOLS OR BY USING AN AIRSPADE. SMALLER ROOTS CAN BE CUT IF NEEDED AND THE PIPING ROUTED AROUND LARGER ROOTS.

-REFER TO WETLAND RESOURCES SHEET 2/2 FOR RE-PLANTING IN THE CRITICAL AREA SPACE.



TREE PROTECTION DETAIL
3/4" = 1'-0"



ARBORISTS SITE PLAN
1" = 20'-0"

0' 10' 20' 80' NORTH

	1. TREES 10" AND GREATER
	2. TREES 24" AND GREATER
	3. TREES 36" AND GREATER
	4. EXCEPTIONAL TREES
	TREE TO BE REMOVED
	TREE PROTECTION FENCING
	NEW TREE

PREPARED BY:

NEAL BAKER
ARBORISTS NW .COM
ISA CERT. PN1075A
TRAQ ISA (TREE RISK ASSESSMENT QUALIFIED)
MEMBER AREA & SOCA
PH: 206 779 2579

arboristsNW

Arborists NW is a full spectrum arboricultural, consulting and landscape design and installation provider. When you think tree and landscape services, think Arborists NW.

ONLINE: https://arboristsnw.com/
PHONE: 206-779-2579
EMAIL: neal@arboristsnw.com

No.	Description	Date

HEADRICK RESIDENCE
8822 SE 62ND STREET, MERCER ISLAND, WA 98040

HEADRICK RESIDENCE

ARBORIST TREE PLAN

Project number	20006
Date	4/10/20
Drawn by	CW
Checked by	AB
	L1
Scale	As indicated

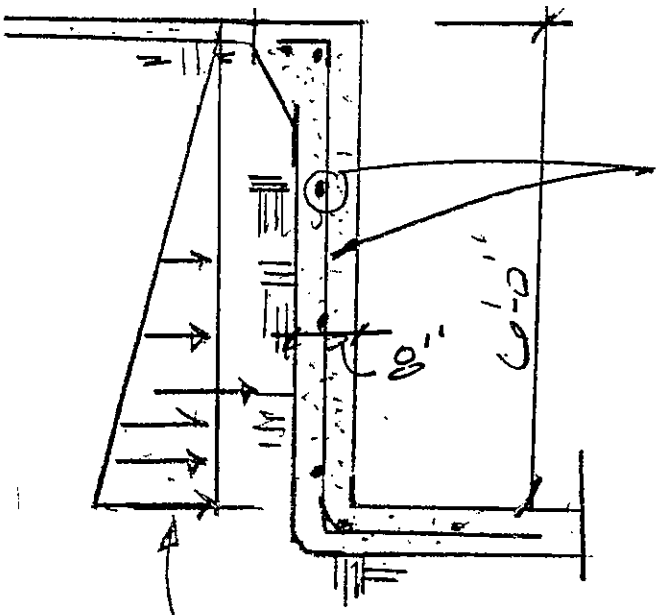
3/10/2021 8:16:43 PM

MITCHELL ENGINEERING INC.

7821 - 168th Ave. N.E
Redmond, WA 98052
(425) 747-1500
mitchellengineeringinc@comcast.net

Scope of Work.

Design for pool wall shown below for pool shown on sheet #A1 contained within.



PH = 1/2 x 30 psf x 6' = 108 #

35 PCF x 6' = 210 PCF x 1.7 = 360 #

M = 108 # x 6/3 = 216 FT-lb x 12 / 4,000 x 4" = 0.16 in²

#4@12"oc Vertical

PREPARED BY M.M. PROJECT Krisco Pools SHEET NO. 1 OF 6

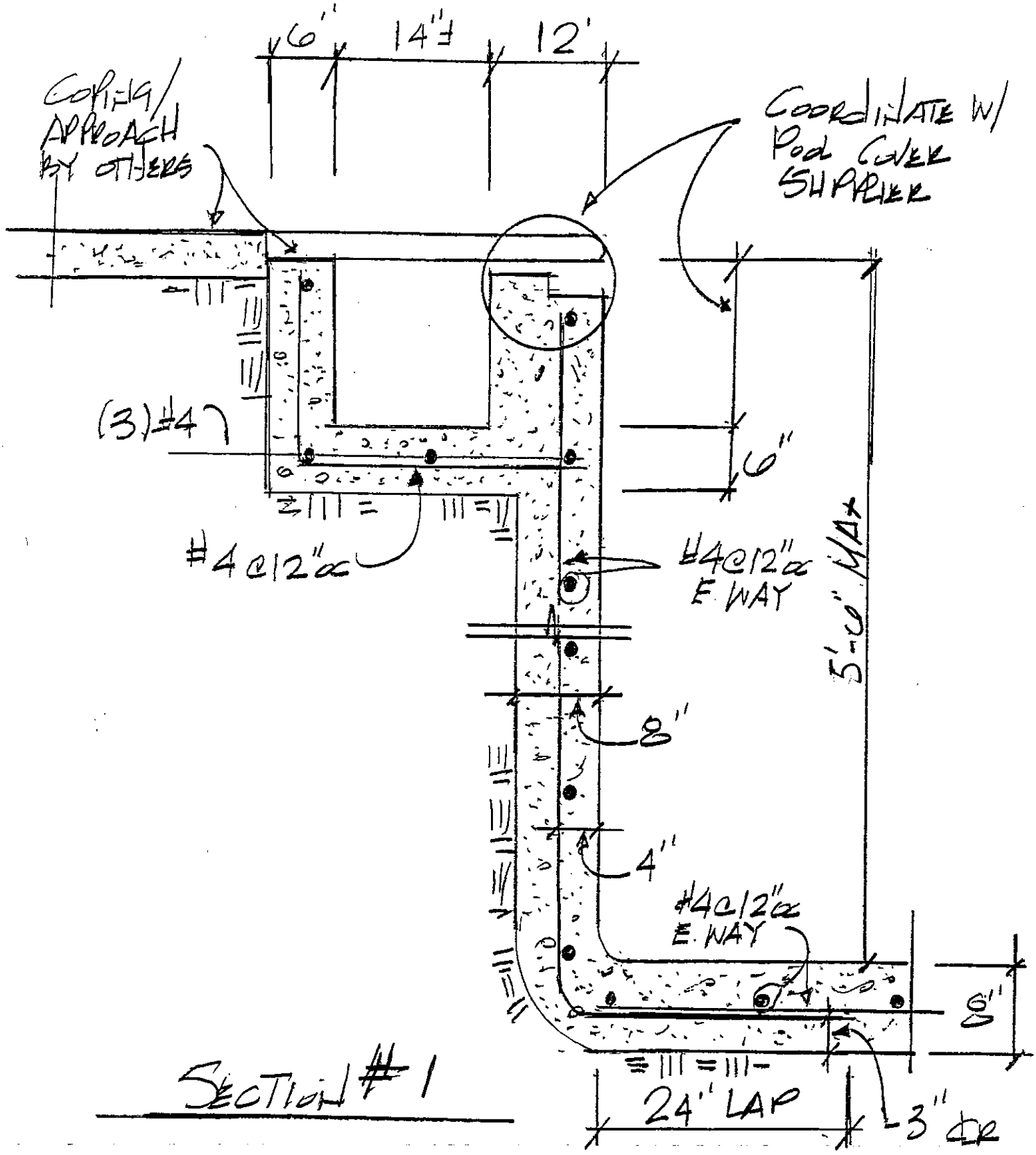
DATE 3/31/19 SUBJECT Headkick JOB NO. 019-227

STRUCTURAL NOTES

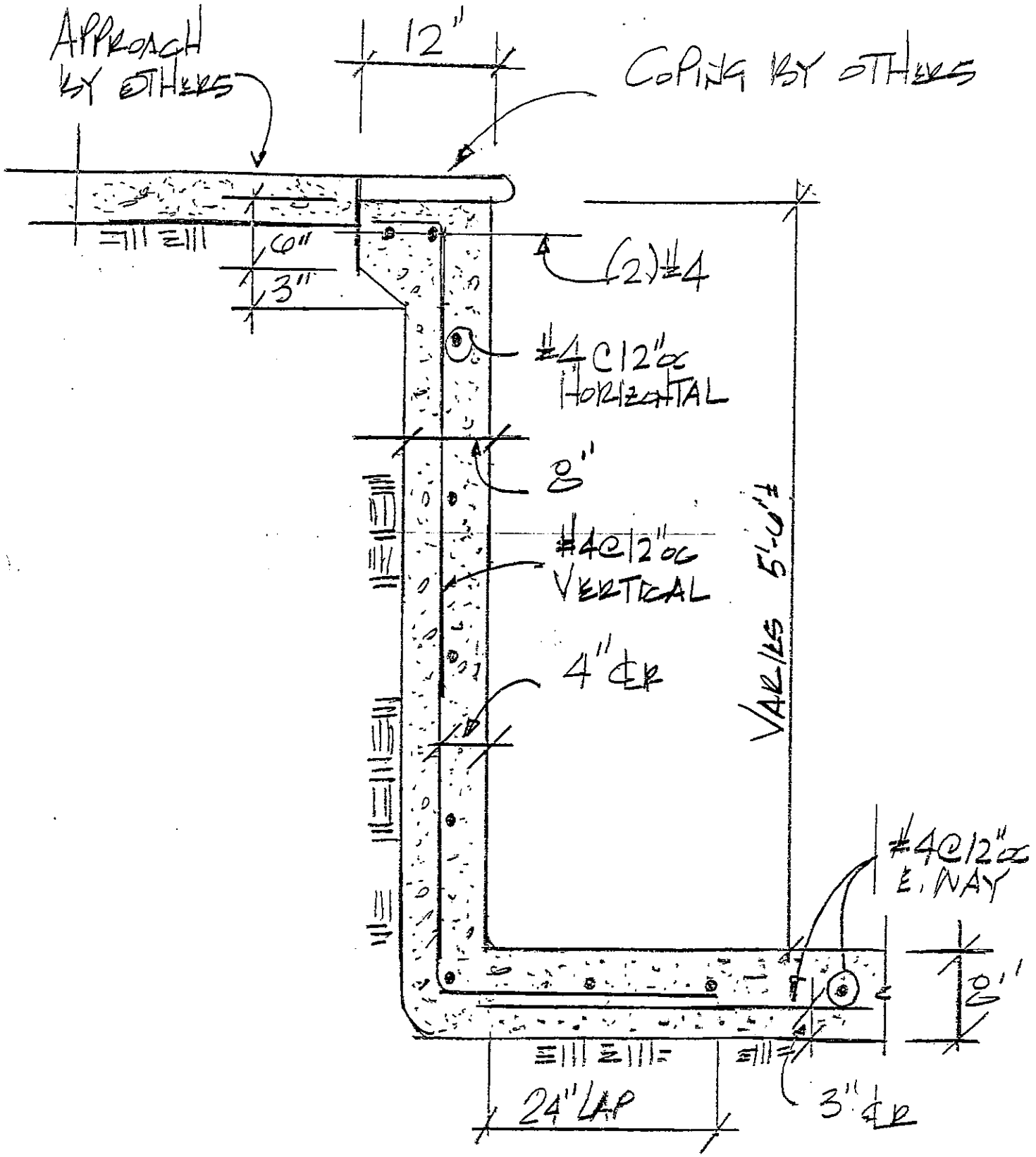
1. CONTRACTOR SHALL COMPLY WITH THE CURRENT EDITION OF THE 2015 INTERNATIONAL BUILDING CODE OR APPLICABLE CODE OR BUILDING ORDINANCE.
2. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS.
3. CALL LOCAL BUILDING DEPARTMENT FOR STEEL INSPECTION PRIOR TO POURING CONCRETE.
4. ASSUMED DESIGN FLUID PRESSURE = 35 LBS. PER CUBIC FOOT.
5. ASSUMED SOIL BEARING = 1500 LBS/ PER FOOT SQUARED.
6. THE GROUND SURROUNDING THE SWIMMING POOL IS ASSUMED LEVEL. NO SURCHARGE, RETAINING WALLS OR TERRACES ARE TO BE CONSTRUCTED ABOUT THE PERIMETER OF THE POOL.
7. AIR-PLACED CONCRETE SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 4000 PSI.
8. STEEL PLACEMENT SHALL BE AS SHOWN ON THE PLAN. LAP ALL BARS 30-BAR DIAMETERS. 2'-0" RETURN AT ALL CORNERS. ALL STEEL SHALL BE CAREFULLY AND FIRMLY WIRED INTO PLACE. REINFORCEMENT SHALL BE SECURED IN PLACE WITH CONCRETE BRICK.
9. CONCRETE SHALL BE PLACED ON FIRM; NATURAL, UNDISTURBED SOIL.
10. THE POOL SECTION HEREIN IS DESIGNED PRIMARILY FOR RECTANGULAR SHAPED POOLS, AND IS FULLY APPLICABLE TO FREE-FORM POOLS.
11. REINFORCEMENT SHALL BE DEFORMED BILLET STEEL fy = 40,000 PSI.

MITCHELL ENGINEERING INC.

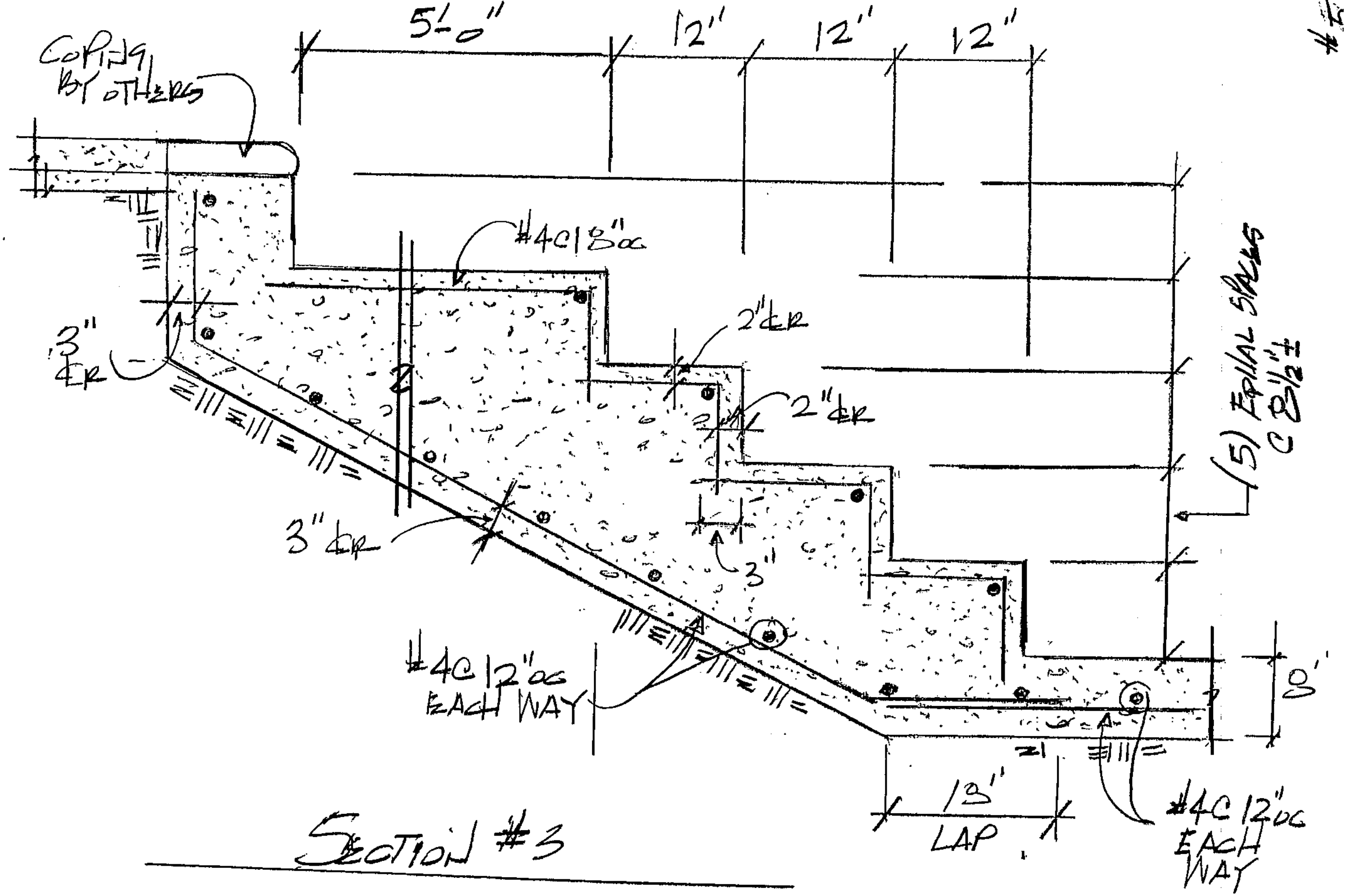
7821 - 168th Ave. I
Redmond, WA 9
(425) 747-1
mitchellengineeringinc@comcast



SECTION #1

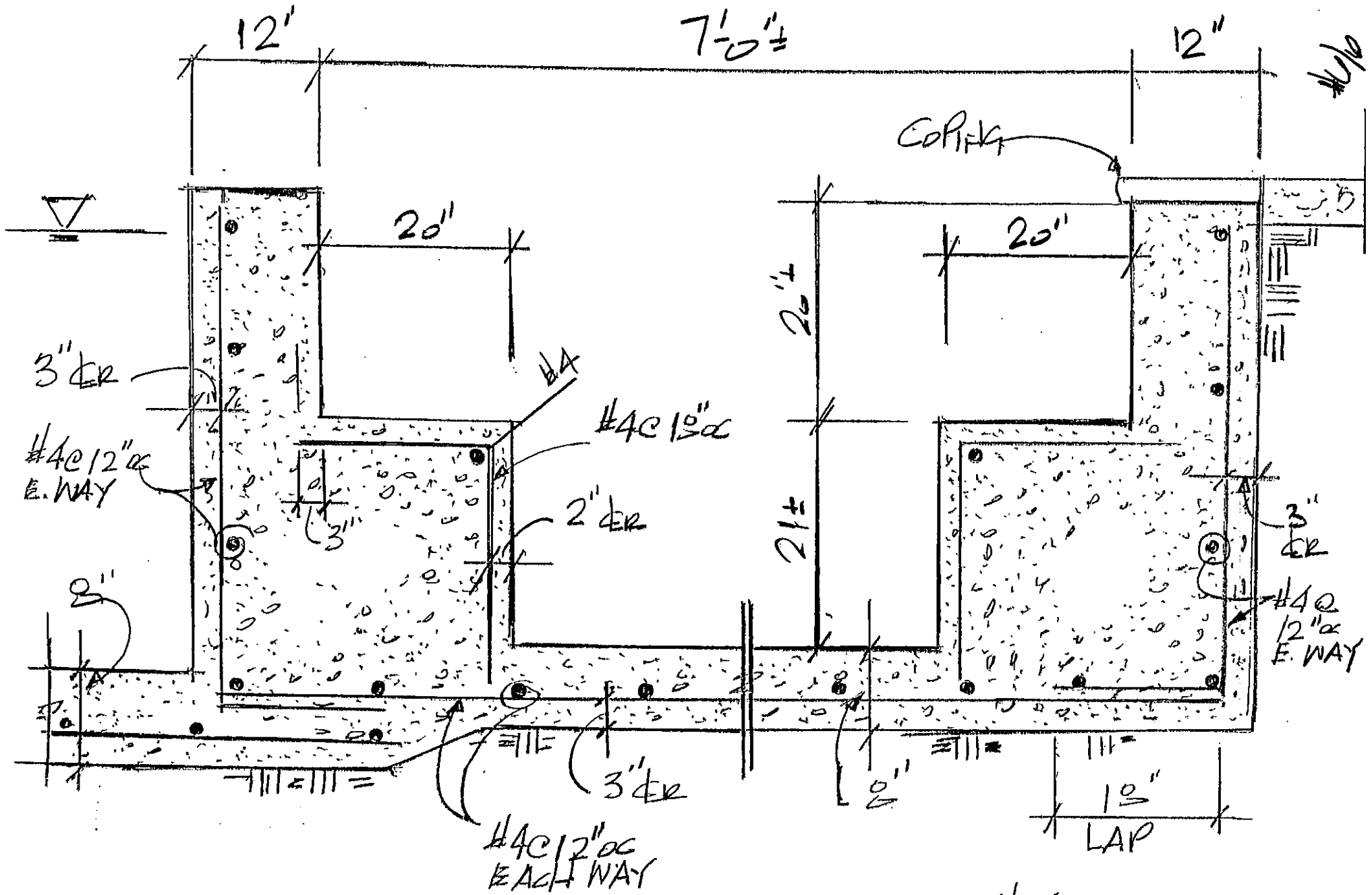

APPROACH BY OTHERS
12"
COPING BY OTHERS
6"
3"
(2)#4
#4 @ 12" oc HORIZONTAL
8"
#4 @ 12" oc VERTICAL
4" CLR
VARIES 5'-0"±
#4 @ 12" oc E. WAY
2'
24" LAP
3" CLR

SECTION #2

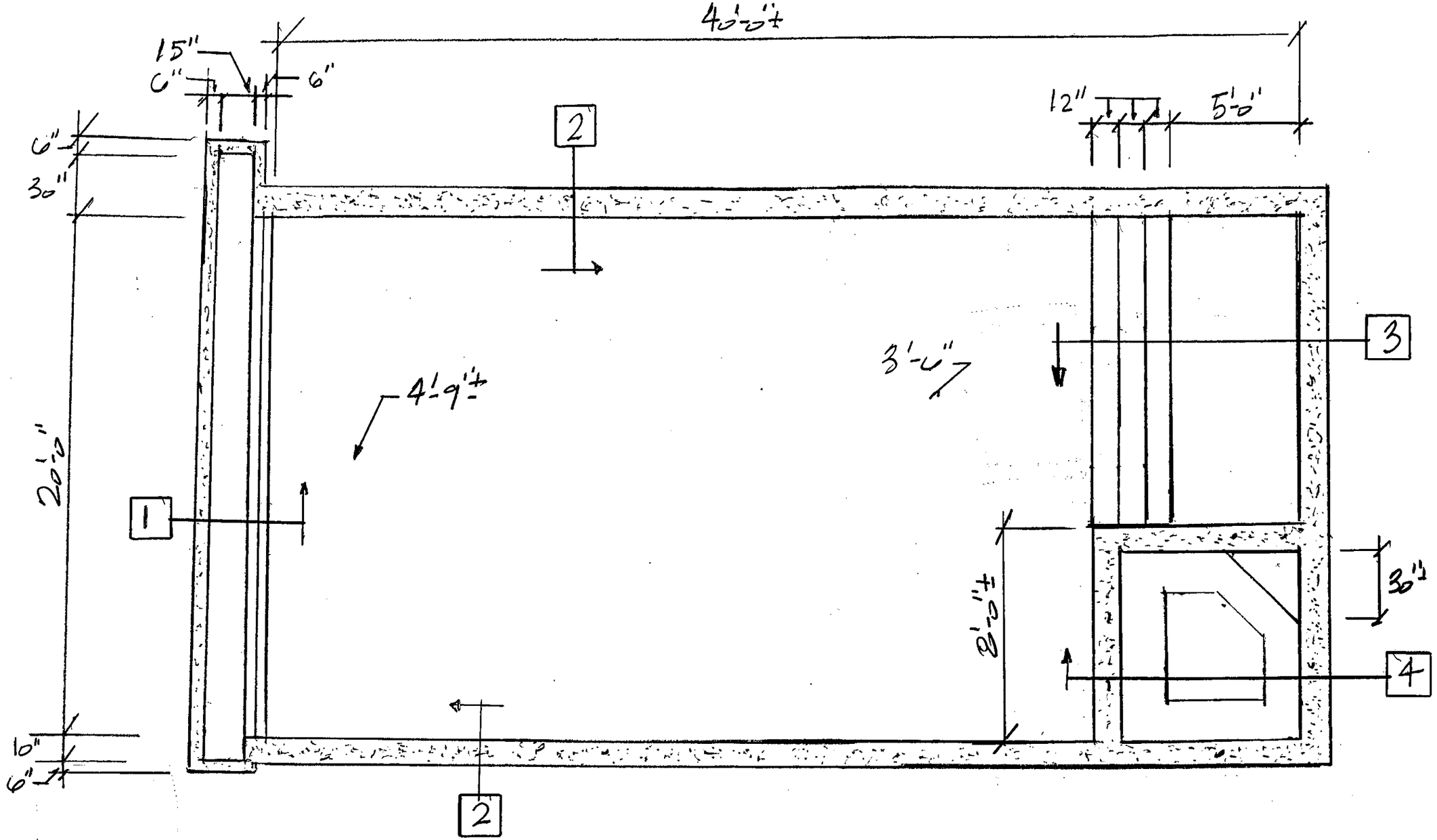


COPING BY OTHERS
5'-0"
12"
12"
12"
#4 C 18" oc
2" CLR
2" CLR
3" CLR
3" CLR
3"
(5) EQUAL SPACES C 8 1/2" ±
#4 C 12" oc EACH WAY
#4 C 12" oc EACH WAY
8"
13" LAP

SECTION #3

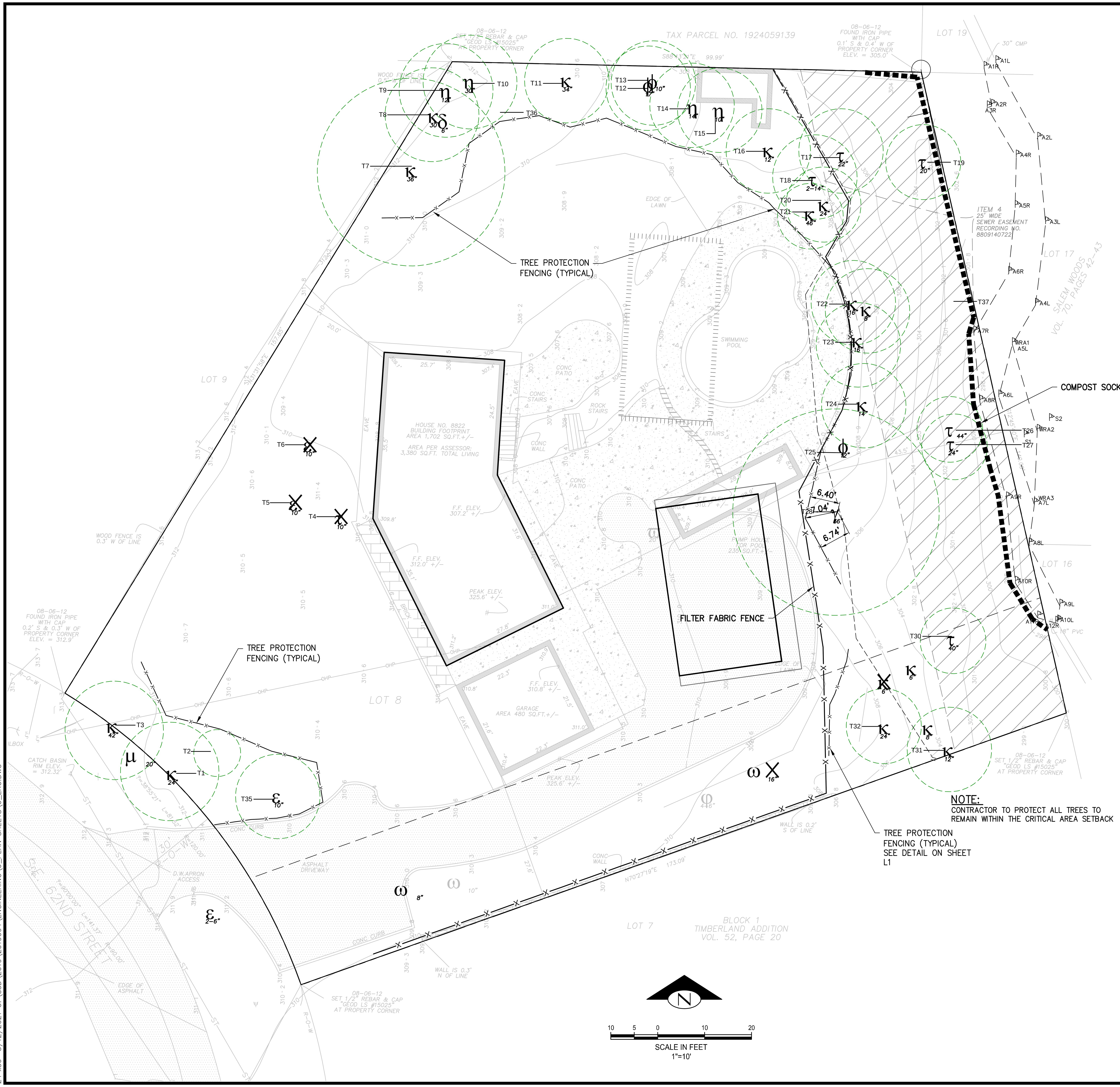

12"
7'-0"±
12"
COPING
20"
20"
3" CLR
#4 @ 15" oc
#4 @ 12" oc E. WAY
2" CLR
3"
2'-4"±
21±
3" CLR
#4 @ 12" oc E. WAY
2"
2"
3" CLR
#4 @ 12" oc EACH WAY
2"
10" LAP

SECTION #4

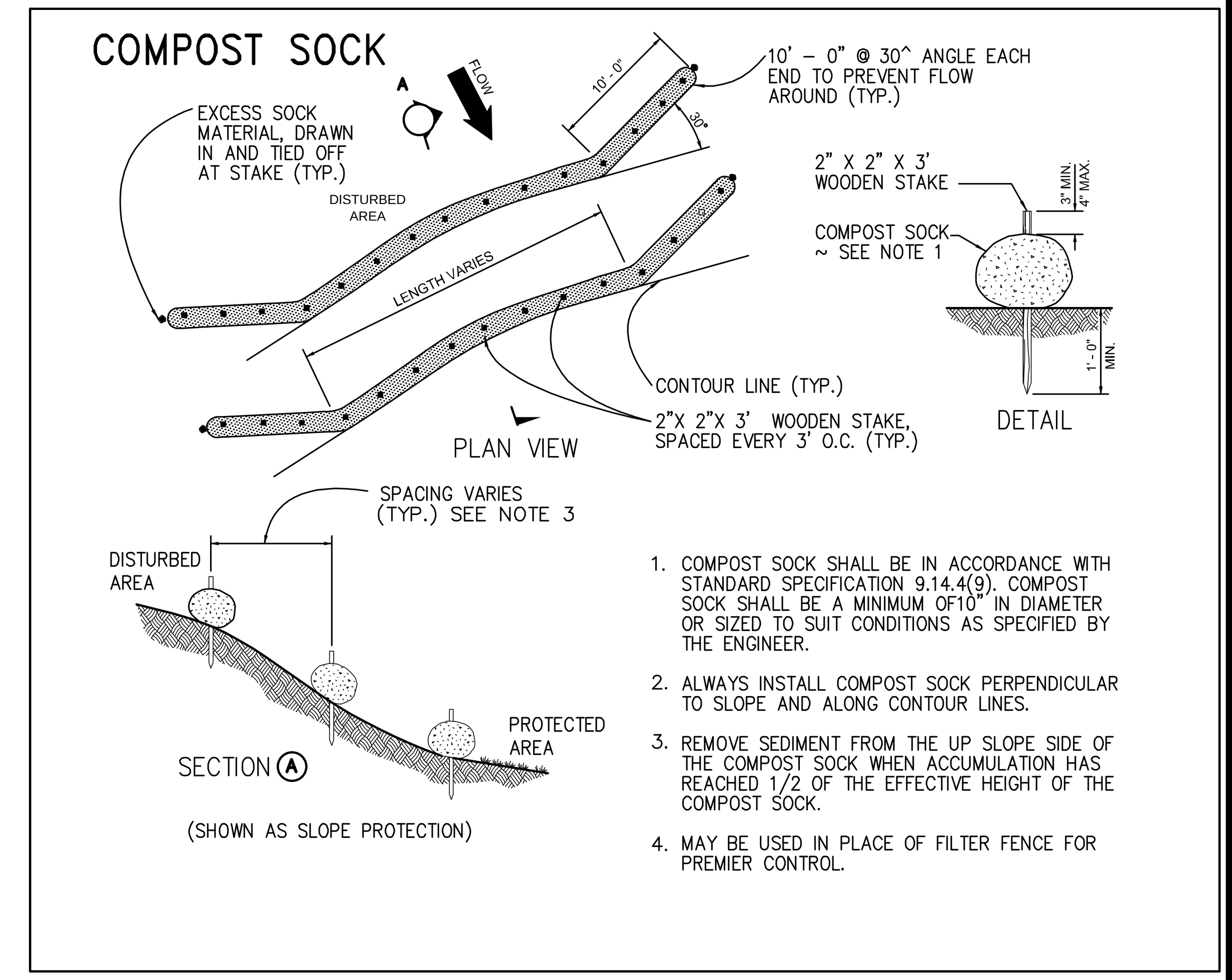


POOL PLAN

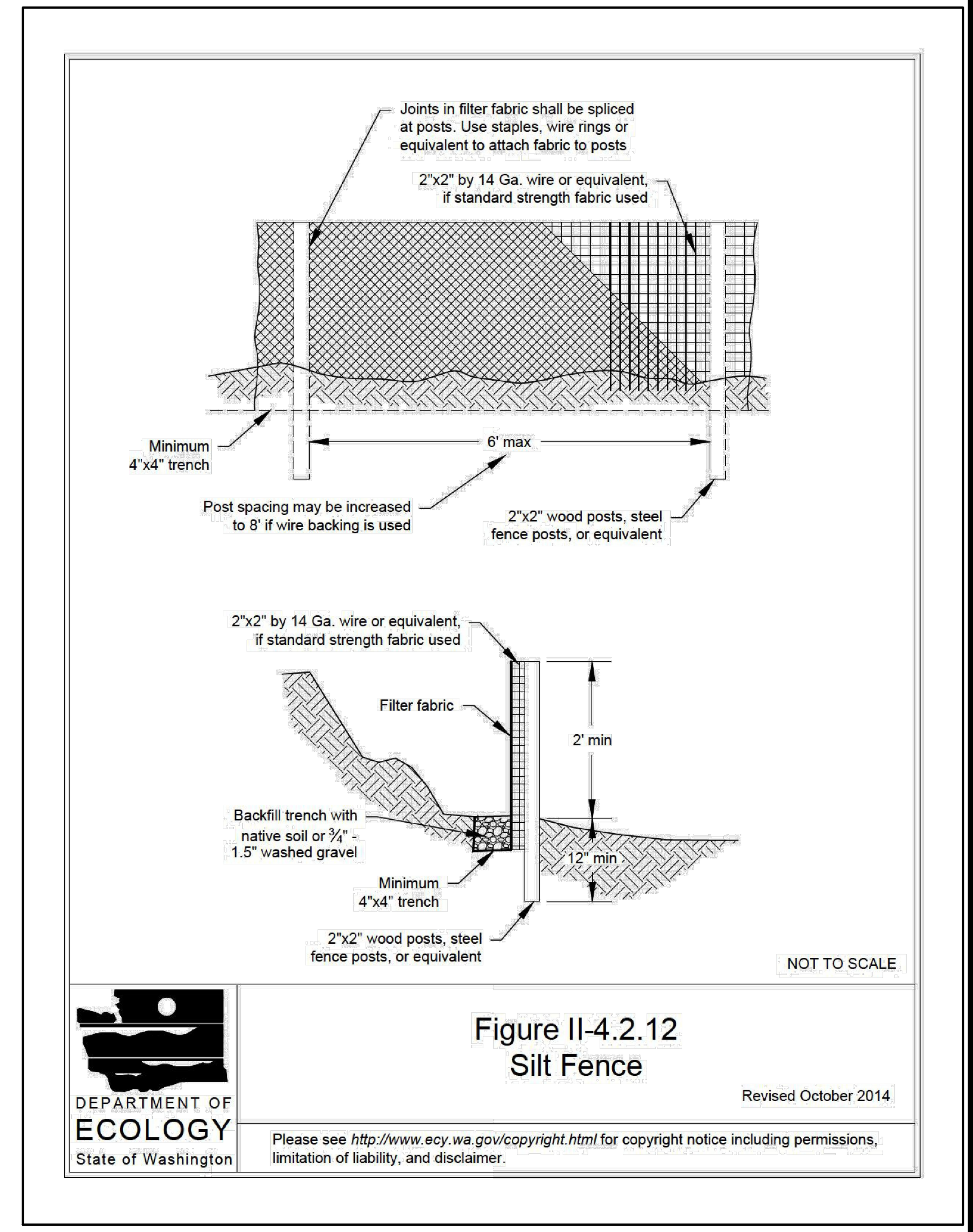
A1



TAX PARCEL NO. 1924059139
LOT 19
LOT 17
LOT 16
LOT 9
LOT 8
LOT 7
BLOCK 1
TIMBERLAND ADDITION
VOL. 52, PAGE 20
SALEM WOODS
VOL. 70, PAGES 42-43
S.E. 62ND STREET
TREE PROTECTION FENCING (TYPICAL)
COMPOST SOCK
FILTER FABRIC FENCE
SWIMMING POOL
HOUSE NO. 8822
BUILDING FOOTPRINT
AREA 1,702 SQ.FT.+/-
AREA PER ASSESSOR:
3,380 SQ.FT. TOTAL LIVING
F.F. ELEV. 307.2' +/-
F.F. ELEV. 312.0' +/-
PEAK ELEV. 325.6' +/-
F.F. ELEV. 310.8' +/-
GARAGE
AREA 480 SQ.FT.+/-
ITEM 4
25' WIDE
SEWER EASEMENT
RECORDING NO. 8809140722
ASPHALT DRIVEWAY
NOTE:
CONTRACTOR TO PROTECT ALL TREES TO REMAIN WITHIN THE CRITICAL AREA SETBACK
TREE PROTECTION
FENCING (TYPICAL)
SEE DETAIL ON SHEET L1
N
SCALE IN FEET
1"=10'



COMPOST SOCK
EXCESS SOCK MATERIAL, DRAWN IN AND TIED OFF AT STAKE (TYP.)
10' - 0" @ 30° ANGLE EACH END TO PREVENT FLOW AROUND (TYP.)
2" X 2" X 3' WOODEN STAKE
COMPOST SOCK ~ SEE NOTE 1
CONTOUR LINE (TYP.)
2"X 2"X 3' WOODEN STAKE, SPACED EVERY 3' O.C. (TYP.)
PLAN VIEW
DETAIL
SPACING VARIES (TYP.) SEE NOTE 3
DISTURBED AREA
PROTECTED AREA
SECTION A
(SHOWN AS SLOPE PROTECTION)
1. COMPOST SOCK SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 9.14.4(9). COMPOST SOCK SHALL BE A MINIMUM OF10" IN DIAMETER OR SIZED TO SUIT CONDITIONS AS SPECIFIED BY THE ENGINEER.
2. ALWAYS INSTALL COMPOST SOCK PERPENDICULAR TO SLOPE AND ALONG CONTOUR LINES.
3. REMOVE SEDIMENT FROM THE UP SLOPE SIDE OF THE COMPOST SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE COMPOST SOCK.
4. MAY BE USED IN PLACE OF FILTER FENCE FOR PREMIER CONTROL.



Joints in filter fabric shall be spliced at posts. Use staples, wire rings or equivalent to attach fabric to posts
2"x2" by 14 Ga. wire or equivalent, if standard strength fabric used
Minimum 4"x4" trench
6' max
Post spacing may be increased to 8' if wire backing is used
2"x2" wood posts, steel fence posts, or equivalent
Filter fabric
2' min
Backfill trench with native soil or 3/4" - 1.5" washed gravel
12" min
NOT TO SCALE
DEPARTMENT OF ECOLOGY State of Washington
Figure II-4.2.12
Silt Fence
Revised October 2014
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BUSH, ROED & HITCHINGS, INC.
LAND SURVEYORS & CIVIL ENGINEERS
2009 MINOR AVE. EAST
SEATTLE, Washington
98102-3513
(206) 323-4144
1-800-935-0508
FAX# (206) 323-7135

NO	REVISION	DATE

EROSION CONTROL PLAN
8822 S.E. 62ND STREET
HEADRICK RESIDECE
MERCER ISLAND KING COUNTY WASHINGTON

drawn by	checked by
WPG	TFD
scale: AS SHOWN	date: 03/15/21
job no. 2019094.00	
sheet C1	of

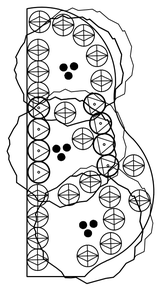
Call 811 two business days before you dig

24"x36" 3/12/2021 U:\C3D\2019\2019094\ENGINEERING\0_PLAN SHEETS\0_ERO.DWG

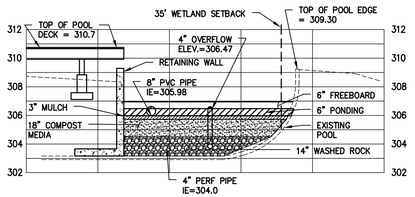
BIORETENTION PLANTING SCHEDULE

*INDICATES DROUGHT TOLERANT OR NATIVE

SYMBOL	BOTANICAL NAME/ COMMON NAME	SIZE/COND./SPACING
BIORETENTION PLANTS		
	AMELANCHIER GRANDIFLORA 'AUTUMN BRILLIANCE'/ SERVICEBERRY*	MULTI-STEM., MIN 3 STEMS, 6' HT./ B&B/ PER PLAN
	JUNCUS EFFUSUS/ COMMON RUSH*	1 GAL./CONT./24" O.C.
	CAREX OBNUPTA/ SLOUGH SEDGE*	1 GAL./CONT./24" O.C.
	IRIS SIBERICA/SIBERIAN IRIS*	1 GAL./CONT./24" O.C.
	CORNUS STOLONIFERA 'KELSEYII'/ KELSEY'S DOGWOOD*	2 GAL./CONT./24" O.C.
	ILEX GLABRA 'COMPACTA' / COMPACT INKBERRY HOLLY*	2 GAL./CONT./24" O.C.



PLANTING DIAGRAM INSIDE PLANTER



BOTTOM OF WASHED ROCK = 302.89

TOP OF WASHED ROCK = 304.23
BOTTOM OF COMPOST MEDIA

TOP OF COMPOST MEDIA = 305.72
BOTTOM OF MULCH

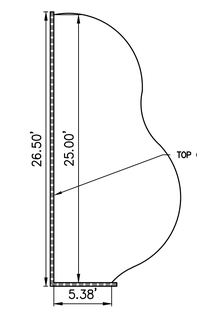
TOP OF MULCH = 305.97

6" PONDING
TOP OF 4" OVERFLOW RISER =306.47

1 SECTION A BIO RETENTION PLANTER
1"=5' H & V

CONTRACTOR NOTE:

1. REFER TO WALL SECTION ON SHEET A2 ©CONCRETE POOL CLOSURE.
2. EXISTING POOL TO BE FILED WITH LEAN CONCRETE TO ELEVATION 302.89.



INSIDE PLANTER WALL DIMENSIONS

2 ASPHALT PAVEMENT
NOT TO SCALE

4"x 4"TEE IE=304.84

4"ø SS CLEANOUT RIM=307.0± IE=304.60

EXISTING SEWER MANHOLE 27-76

4" SS CONNECTION TO EXISTING SEWER MAIN IE = 302.0±

~34LF 4" SEWER @ 8.0% PVC SDR 3034

EXISTING SIDE SEWER STUB PER G.I.S 9.3' SOUTH OF MH. CONTRACTOR TO VERIFY LOCATION HORIZONTALLY AND VERTICALLY PRIOR TO CONSTRUCTION.

4"ø SS CLEANOUT RIM=309.2± IE=305.78

~60LF 4" SEWER @ 2.00%

~23LF SEWER @ 5.0% PVC SDR 3034

BIO RETENTION PLANTER USING A PORTION OF THE EXISTING POOL. SEE SECTION A THIS SHEET.

AIR SPADE LOCATION #1

REMOVE CONCRETE PATIO UP TO EXISTING POOL

ITEM 4
25' WIDE SEWER EASEMENT RECORDING NO. 8809140722

4" 45° BEND IE=305.98

35' WETLAND SETBACK LINE

4"ø SS CLEANOUT RIM=309.2± IE=306.0

~53LF SEWER @ 2.0% PVC SDR 3034

AIR SPADE LOCATION #2

FUTURE BIORETENTION PLANTERS UNDER PHASE II

REMOVE CONCRETE PATIO UP TO EXISTING POOL

35' WETLAND SETBACK LINE

4" STUB IE=307.03 CONNECTION FOR POOL HOUSE DRAIN. SEE DETAIL ON SHEET 3

PIPE ANCHOR 3 PLACCES

GARAGE ROOF DOWN SPOUT

309.4±

309.25±

308.95±

309.55

310.10

310.40

310.30

309.95

308.75

6" ASPHALT EXTRUDED CURB

S.E. 62ND STREET

SANITARY SEWER MANHOLE RIM ELEV. = 313.71'

CATCH BASIN RIM ELEV. = 312.32'

MAILBOX

08-06-12 FOUND IRON PIPE WITH CAP 0.2' S. & 0.3' W. OF PROPERTY CORNER ELEV. = 312.9'

08-06-12 SET 1/2" REBAR & CAP "GEOD LS #15025" AT PROPERTY CORNER

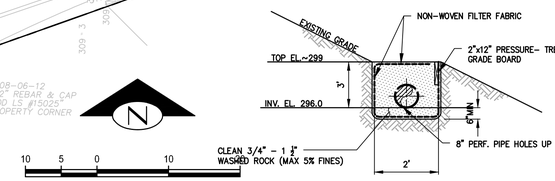
08-06-12 FOUND IRON PIPE WITH CAP 0.1' S. & 0.4' W OF PROPERTY CORNER ELEV. = 305.0'

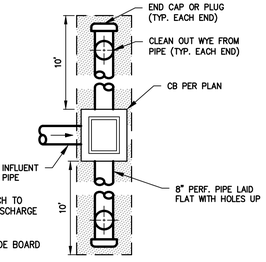
F.F. ELEV. 312.0'+/-

F.F. ELEV. 307.2'+/-

F.F. ELEV. 310.8'+/-

PEAK ELEV. 325.6'+/-





NOTES:
1. CONSTRUCT TRENCH TO PREVENT POINT DISCHARGE AND/OR EROSION
2. TRENCH AND GRADE BOARD MUST BE LEVEL

SCALE IN FEET
1"=10'

STORM DRAINAGE NOTES:

1. FLOW SPREADER (3/—)
2. TYPE I CB W/ SOLID LID RIM=299.0± IE=296.0±, 8" W IN IE=296.0±, 8" N OUT IE=296.0±, 8" S OUT
3. 47LF ~ 8"ø HDPE FUSE WEILDED LAID ON THE HILLSIDE SLOPE @ EXISTING GRADE.
4. TYPE 26 INLET W/SOLID LID RIM=309.0± IE=307.72, 6" PVC, W IN IE=307.72, 8" HDPE, E OUT
5. 6" 45° BEND IE=307.77
6. 6" X 4" TEE IE=307.80, 4" S GARAGE FOOTING DRAIN CONNECTION
7. 38LF ~6"ø PVC 1.0%
8. 6" X 6" WYE IE=308.18
9. 2LF ~ 8"ø PVC @ 1.0%
10. 6" CLEANOUT RIM=309.0± IE=308.2
11. 2LF ~ 6"ø PVC @ 1.0%
12. 6" 45° BEND IE=308.24
13. 29LF 6" @ 1.0%
14. 6" X 4" WYE IE=308.34
15. 6" X 4" WYE IE=308.53
16. 6" CLEANOUT RIM=310.0± IE=308.50
17. 3LF 4" @ 1.0%
18. 4" 45° BEND IE=308.53
19. 30LF 4" @ 1.0%
20. 4" STUB WITH CAP IE=308.83 FUTURE OUTLET FOR BIO-RETENTION PLANTER
21. 12LF 4" PVC SOLID PIPE @ 1.0% FOR FOOTING GARAGE FOOTING DRAIN ONLY.
22. 1" ø PVC FORCE MAIN FROM PUMP STATION
23. PUMP STATION TYPE II 54"ø CATCHBASIN W/SOLID LID (1/C3) RIM=309.2± IE=308.75, 1" FM IE=303.94, 6"
24. 6LF 4" PVC @ 1.0% INSIDE BIO RETENTION PLANTER 4" IE=304.0
25. 4"ø PERFORATED PIPE @ 0.0% ELEVATION =304.0
26. 89LF 8" @ 1.0%
27. 8" X 4" TEE IE=308.43 GARAGE ROOF DRAIN CONNECTION
28. TYPE I CB W/ GRATE LID RIM=308.75± IE=306.87 8" W IN IE=306.87 8" N OUT
29. 89LF 8" PVC @ 1.0%
30. TYPE I CB W/ GRATE LID RIM=309.8 IE=307.76, 8" E OUT

TREE PROTECTION NOTE:

CONTRACTOR TO PROTECT ALL TREES TO REMAIN WITHIN THE CRITICAL AREA SETBACK. CONTRACTOR TO CALL OUT ARBORIST ON SITE DURING ANY EXCAVATION WITHIN THE TREE DRIPLINES.

AREA #1 AIR SPADE WORK AT SITE ONE WAS TO A DEPTH OF 18". TWO ROOTS FROM TREE 7 WERE FOUND 2" IN DIAMETER, NUMEROUS FIBROUS ROOTS WHERE ALSO FOUND. PROPER CUTTING OF THESE ROOTS BY HAND WILL NOT ADVERSELY AFFECT THE TREE. APPLICATION OF MULCH OVER THE REMAINING ROOT SYSTEM AND APPLICATION OF FERTILIZER IN ADVANCE OF CONSTRUCTION WILL HELP THE TREE OVERCOME ANY STRESS FROM ROOT PRUNING.

AREA #2 AIR SPADE WORK TO 18" IN DEPTH SHOWED THAT ROOTS FROM THE NEARBY TREES HAS BEEN RESTRICTED BY THE CURRENT CONCRETE PAD WITH ROOTS RUNNING UP TO AND ALONG THE EDGE OF THE PAD. THE LOCATION OF THE DRAINAGE IS EXPECTED TO HAVE MINIMAL EFFECT ON ROOTS THAT HAVE MANAGED TO GROW TO THE LOCATION. MINOR ADJUSTMENT OF THE THE DRAIN LOCATION AT THE TIME OF INSTALLATION WILL FURTHER MINIMIZE ROOT ENCROACHMENT. MULCHING AND FERTILIZER APPLICATION AND POSSIBLE ROOT PRUNING IN ADVANCE OF CONSTRUCTION WILL HELP WITH ANY TREE STRESS.

Call 811 two business days before you dig

BUSH, ROED & HITCHINGS, INC.
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2009 MINOR AVE. EAST
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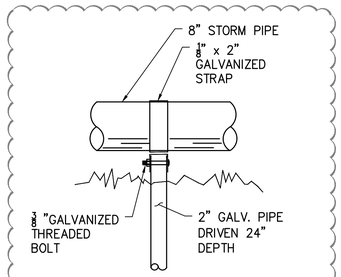
1-800-935-0508
FAX# (206) 323-7135

STORM DRAINAGE PLAN
8822 S.E. 62ND STREET
HEADRICK RESIDECE
MERCER ISLAND KING COUNTY WASHINGTON

NO	REVISION	DATE

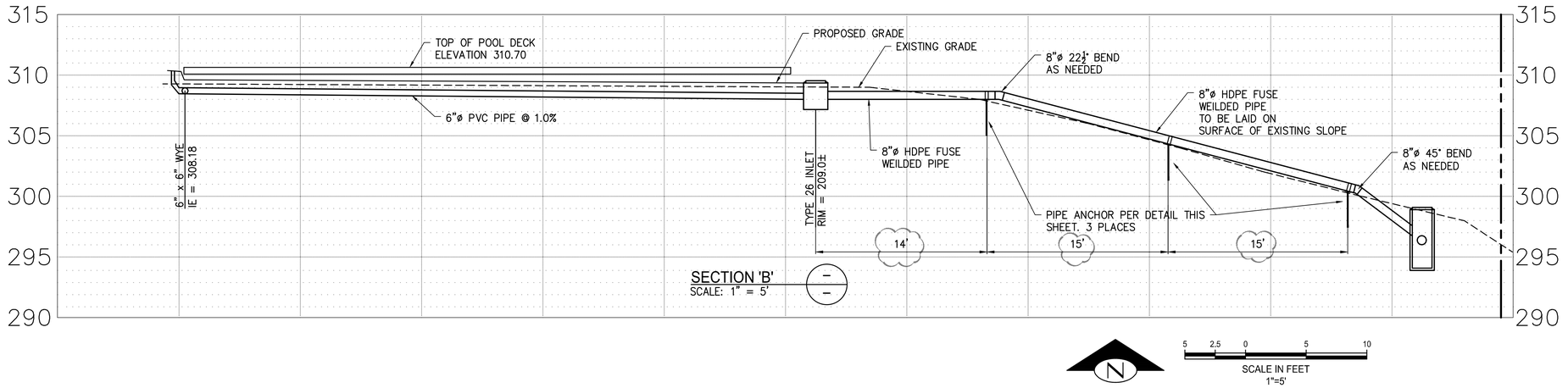
drawn by	checked by
WPG	TFD
scale	date
AS SHOWN	04/22/21
job no.	
2019094.00	
sheet C2	of

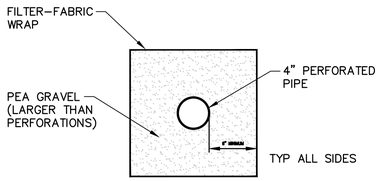
24"x36" 4/22/2021 U:\C3D\2019\2019094\ENGINEERING\0_PLAN SHEETS\0_GRD.DWG



PIPE ANCHOR

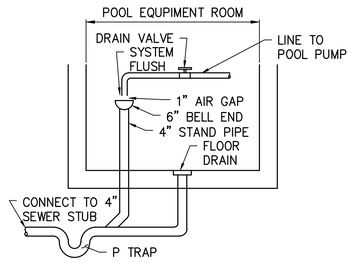
NO SCALE





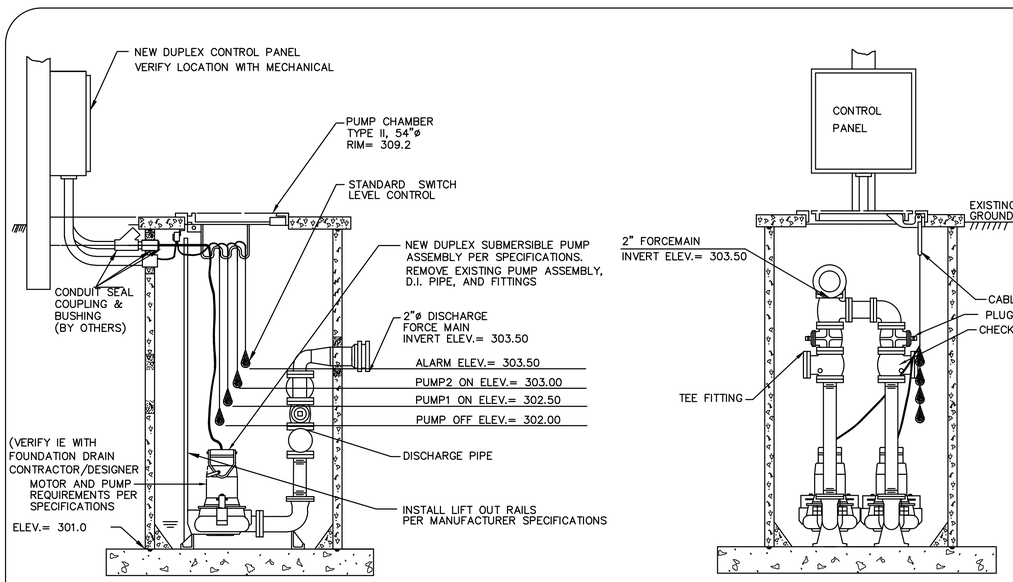
FOOTING DRAIN

NO SCALE



POOL DRAIN IN GARAGE

NO SCALE



PUMP STATION DETAIL 1/3
SCALE: NOT TO SCALE

NOTES:

1. THIS PUMP STATION DETAIL IS FOR SCHEMATIC PURPOSES ONLY AND TO OUTLINE THE BASIC PERFORMANCE REQUIREMENTS FOR THE SYSTEM. DETAILED SHOP DRAWINGS OF THE PUMP STATION SHALL BE SUBMITTED BY THE PUMP MANUFACTURER TO THE ENGINEER FOR REVIEW.
2. THE CONTRACTOR SHALL FOLLOW THE INSTALLATION REQUIREMENTS SPECIFIED BY THE PUMP MANUFACTURER.
3. A REPRESENTATIVE OF THE PUMP MANUFACTURER SHALL BE ON-SITE TO INSPECT THE INSTALLATION OF THE SYSTEM.
4. DUPLEX SUBMERSIBLE PUMP STATION REQUIREMENTS:
   - TDH=7 FT
   - Q=27 GPM/PUMP
   - 2-INCH DIAMETER FORCEMAIN w/ QUICK DISCONNECT ELBOW
   - RAIL SYSTEM FOR PUMP
   - ALARM SYSTEM (DESIGNED BY OTHERS)
   - EXPLOSION-PROOF PUMPS AND CONTROLS
   - DUPLEX CONTROL PANEL (DESIGNED BY OTHERS)
5. DUPLEX SUBMERSIBLE PUMP STATION SUGGESTIONS:
   - PACO DUPLEX PUMP ASSEMBLY OR EQUIV.-MODEL NO. 2570-21
   - 2 HORSEPOWER PUMPS-(1750 RPM, 60 HERTZ)
   - EFFICIENCY-50%
6. MECHANICAL/PLUMBING CONTRACTOR TO SUPPLY PUMPS AND DUPLEX CONTROL PANEL.
7. CLEAR OPENING OF DUAL HINGED ACCESS DOORS SHALL BE 43"x 30" MINIMUM DIMENSIONS OR PER PUMP MANUFACTURER'S RECOMMENDATIONS, WHICHEVER IS LARGER. OPENING LOCATION OVER MANHOLE STRUCTURE SHALL BE PER PUMP MANUFACTURER RECOMMENDATIONS. ALL ACCESS COVERS SHALL BE DESIGNED FOR H-20 VEHICULAR LOADING.

BUSH, ROED & HITCHINGS, INC.
LAND SURVEYORS & CIVIL ENGINEERS
2009 MINOR AVE. EAST
SEATTLE, Washington
98102-3513
(206) 323-4144
1-800-935-0508
FAX# (206) 323-7135

NO	REVISION	DATE

STORM DRAINAGE DETAILS
8822 S.E. 62ND STREET
HEADRICK RESIDECE
MERCER ISLAND KING COUNTY WASHINGTON

drawn by	checked by
WPG	TFD
scale	date
AS SHOWN	04/22/21
job no.	
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Call 811 two business days before you dig