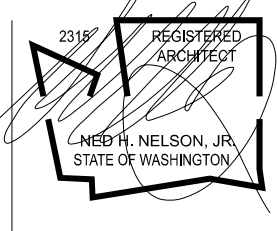


# HEADRICK RESIDENCE

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



**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  
1 02-10-23

DATE: 03-22-21

PROJECT INFORMATION

SHEET:  
**A1**

### POOL NOTES / CERTIFICATIONS

**UL 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  
London, 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

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**Certificate of Compliance**

Certificate Number: 20110720 - E211895  
Report Reference: E211895 - 2002 September 04  
Issue Date: 2011 July 26

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](http://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 "U" and "C" identifiers. On the word "LISTED" a control number may be alphanumeric as assigned by UL and the product category name (product identifiers 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.  
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### 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  
 $S_1 = 0.56$  per USGS  
Site Class D (Default) Seismic Design Category D  
 $R = 6.5$  from Table 12.2-1 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:**  $P_g = \lambda * I_e * K_{zt} * PS_{30}$   
where  $\lambda =$  Exposure Factor  
 $K_{zt} =$  Topographic Factor  
 $I_e =$  Importance Factor  
 $PS_{30} =$  Base Design Pressure

**Site/Project Specific Values:**  
Basic Wind Speed = 110 mph ( $V_{30}$ )  
 $\lambda = 1.00$  Exposure "B" ("C-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.  $V = 1.6 \times 860 = 1376 \# / \text{bolt}$

**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

**ENERGY ENVELOPE: N / A**  
DETACHED GARAGE WILL BE UNHEATED, EXCEPT FOR FREEZE PROTECTION.  
POOL BATHROOM - ELECTRIC WALL HEATER FREEZE PROTECTION.  
**NOTE:** AVERAGE BUILDING ELEVATION / ON SITE PLAN SHEET A2  
**NOTE:** LOT SLOPE CALCULATION / ON SITE PLAN SHEET A2

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

**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**

**NEW STRUCTURAL:** QUANTUM CONSULTING ENGINEERS, Sandro Kodama / 1511 Third Ave, Seattle, WA 98101  
**206.957.3907 / 206.957.3901 fax / skodama@quantumce.com**

**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

ARCHITECTURAL		CIVIL	
SHEET	DESCRIPTION	SHEET	DESCRIPTION
A1	CITY OF MERCER ISLAND COVER SHEET	C2	STORM DRAINAGE PLAN
A2	PROJECT INFORMATION		
A2.1	SURVEY		
A2.2	SITE PLAN		
A3	EASEMENTS		
A4	AREA SUMMARY		
A5	FINAL MITIGATION PLAN		
A6	FINAL MITIGATION PLAN		
	GARAGE FLOOR PLAN - FOUNDATION PLAN - ROOF FRAMING PLAN - DETAILS		
	ELEVATIONS - SECTION		
	GARAGE WALL SECTIONS		
	POOL & DECK DETAILS		
STRUCTURAL		TREE INVENTORY	
SHEET	DESCRIPTION	SHEET	DESCRIPTION
S1.0	STRUCTURAL DETAILS		
L1	TREE INVENTORY		

**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 ITS 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 #6 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.



**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, REGITALS, 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)

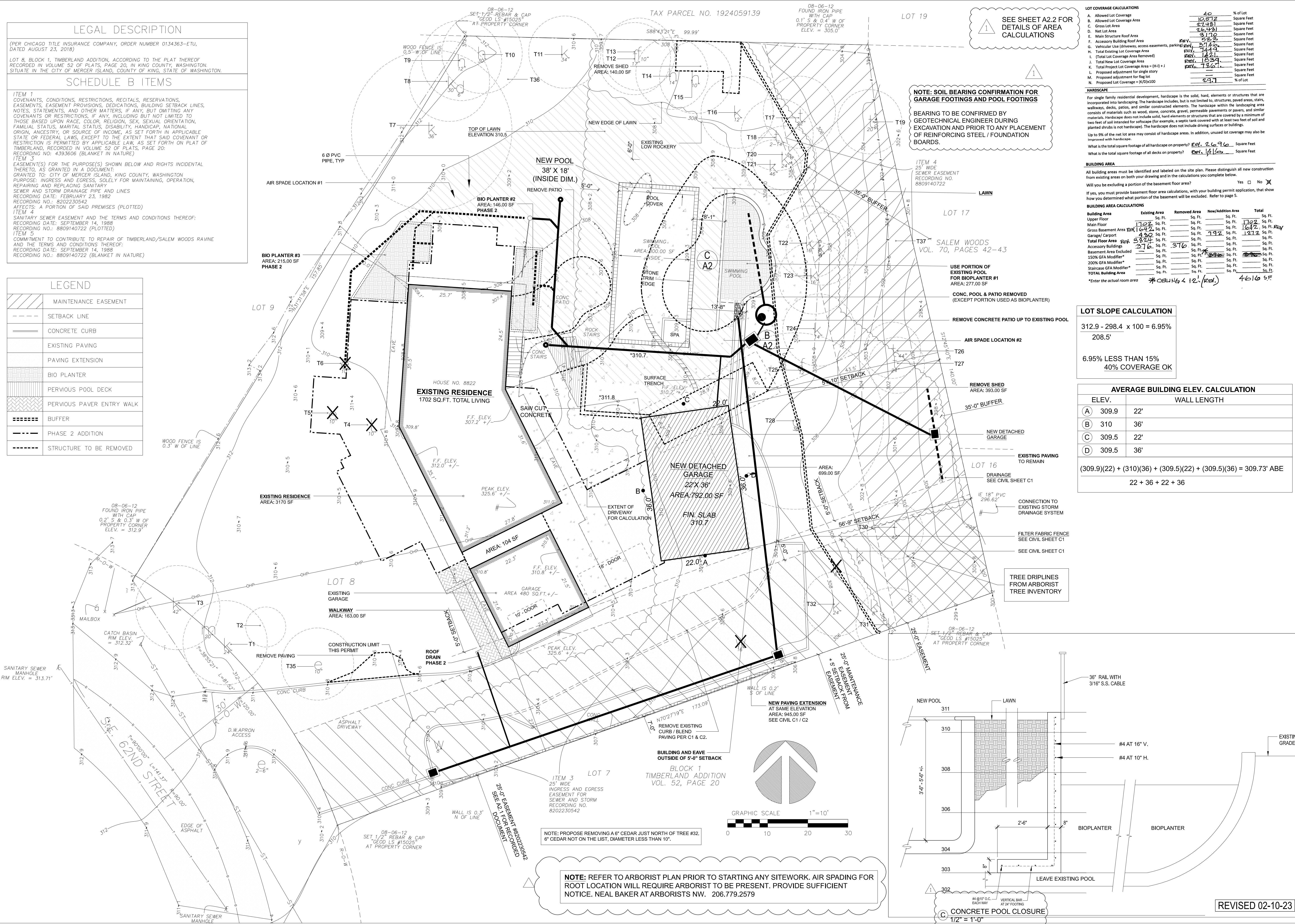
ITEM 2  
 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:  
 GRANTED TO: CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON  
 PURPOSE: INGRESS AND EGRESS, SOLELY FOR MAINTAINING, OPERATION, REPAIRING AND REPLACING SANITARY SEWER AND STORM DRAINAGE PIPE AND LINES  
 RECORDING DATE: FEBRUARY 23, 1982  
 RECORDING NO.: 8202230542  
 AFFECTS: A PORTION OF SAID PREMISES (PLOTTED)

ITEM 3  
 SANITARY SEWER EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 RECORDING DATE: SEPTEMBER 14, 1988  
 RECORDING NO.: 8809140722 (PLOTTED)

ITEM 4  
 COMMITMENT TO CONTRIBUTE TO REPAIR OF TIMBERLAND/SALEM WOODS RAVINE AND THE TERMS AND CONDITIONS THEREOF:  
 RECORDING DATE: SEPTEMBER 14, 1989  
 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



SEE SHEET A2.2 FOR DETAILS OF AREA CALCULATIONS

**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	27,452	Square Feet
C. Gross Lot Area	26,423	Square Feet
D. Net Lot Area	3,170	Square Feet
E. Main Structure Roof Area	922	Square Feet
F. Accessory Building Roof Area	3746	Square Feet
G. Vehicular Use (Driveway, access easements, parking lot)	149	Square Feet
H. Total Existing Lot Coverage Area	7,449	Square Feet
I. (Total Lot Coverage Area Removed)	1,821	Square Feet
J. Total New Lot Coverage Area	1,821	Square Feet
K. Total Project Lot Coverage Area = (H+I+J)	7,369	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	29.7	% 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? **REV. 26,916** Square Feet  
 What is the total square footage of all decks on property? **REV. 1,416** 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/Added Area	Total
	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
Upper Floor				
Main Floor	1702			1702
Gross Basement Area	1642			1642
Garage/Carport	480	792		1972
Total Floor Area	5824			5824
Accessory Buildings	376			376
Basement Area Excluded				
150% GFA Modifier*				
200% GFA Modifier*				
Staircase GFA Modifier*				
TOTAL Building Area				4616

\*Enter the actual room area **# CEILING 12' (REV.)**

**LOT SLOPE CALCULATION**  
 $312.9 - 298.4 \times 100 = 6.95\%$   
 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  
 $22 + 36 + 22 + 36$

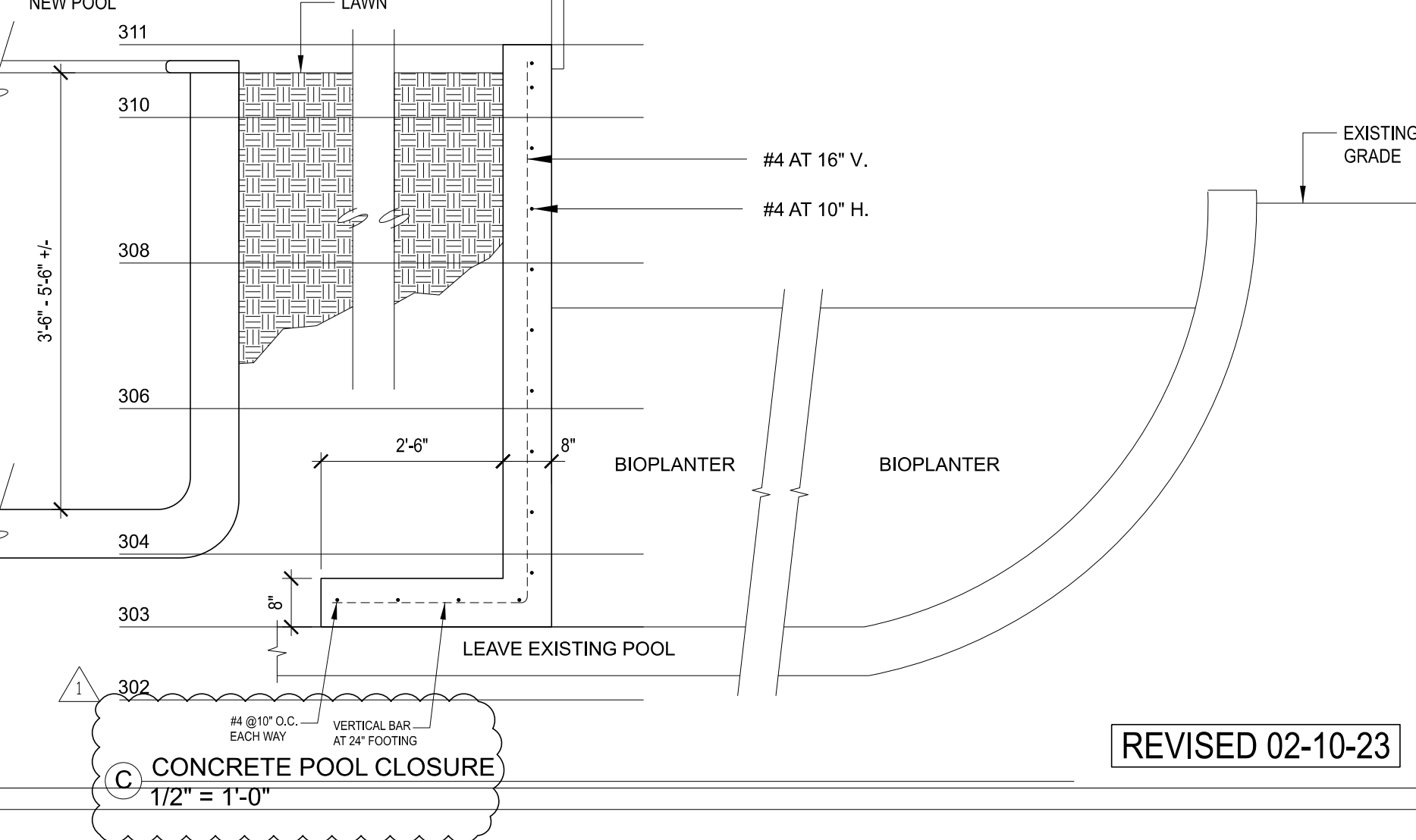
**Ned Nelson, Architect**  
 11773 Sunrise Drive NE  
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 telephone: 425.444.6782  
 email: nednelson@msn.com

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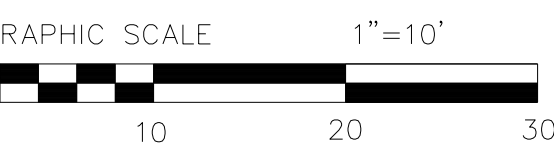
**REVISIONS:**

Mark	Date
	02-10-23

DATE: 03-22-21  
 SHEET: **A2**  
 REVISED 02-10-23



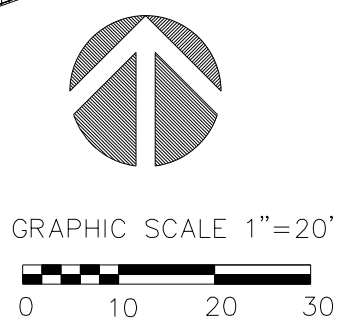
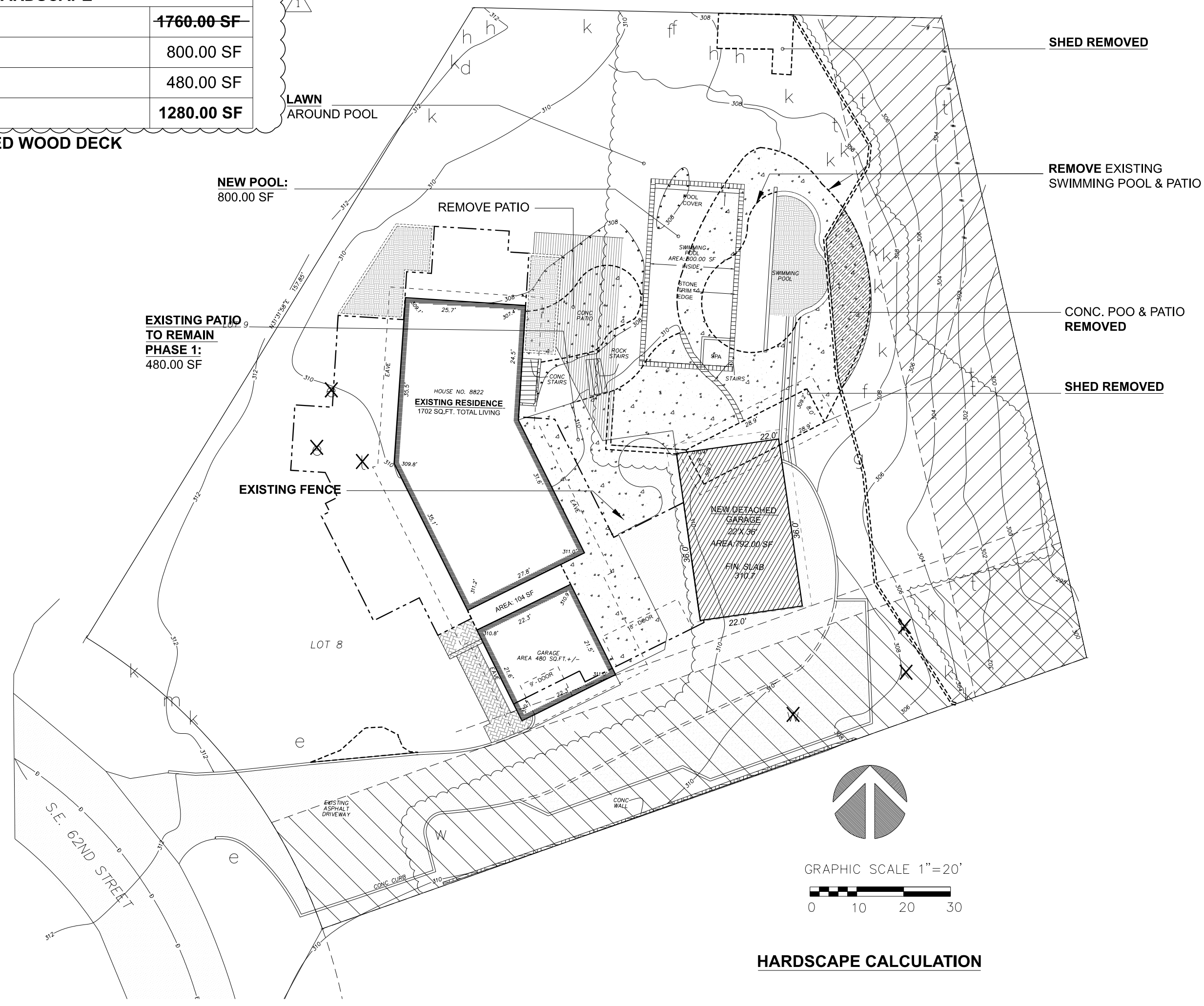
**NOTE: REFER TO ARBORIST PLAN PRIOR TO STARTING ANY SITEWORK. AIR SPADING FOR ROOT LOCATION WILL REQUIRE ARBORIST TO BE PRESENT. PROVIDE SUFFICIENT NOTICE. NEAL BAKER AT ARBORISTS NW. 206.779.2579**





HARDSCAPE	
Wood Deck	1760.00 SF
Pool	800.00 SF
Patio to Remain	480.00 SF
<b>TOTAL HARDSCAPE</b>	<b>1280.00 SF</b>

\* REPLACE PROPOSED WOOD DECK WITH LAWN

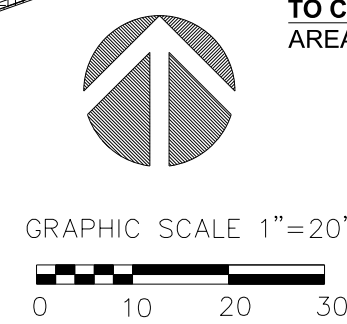
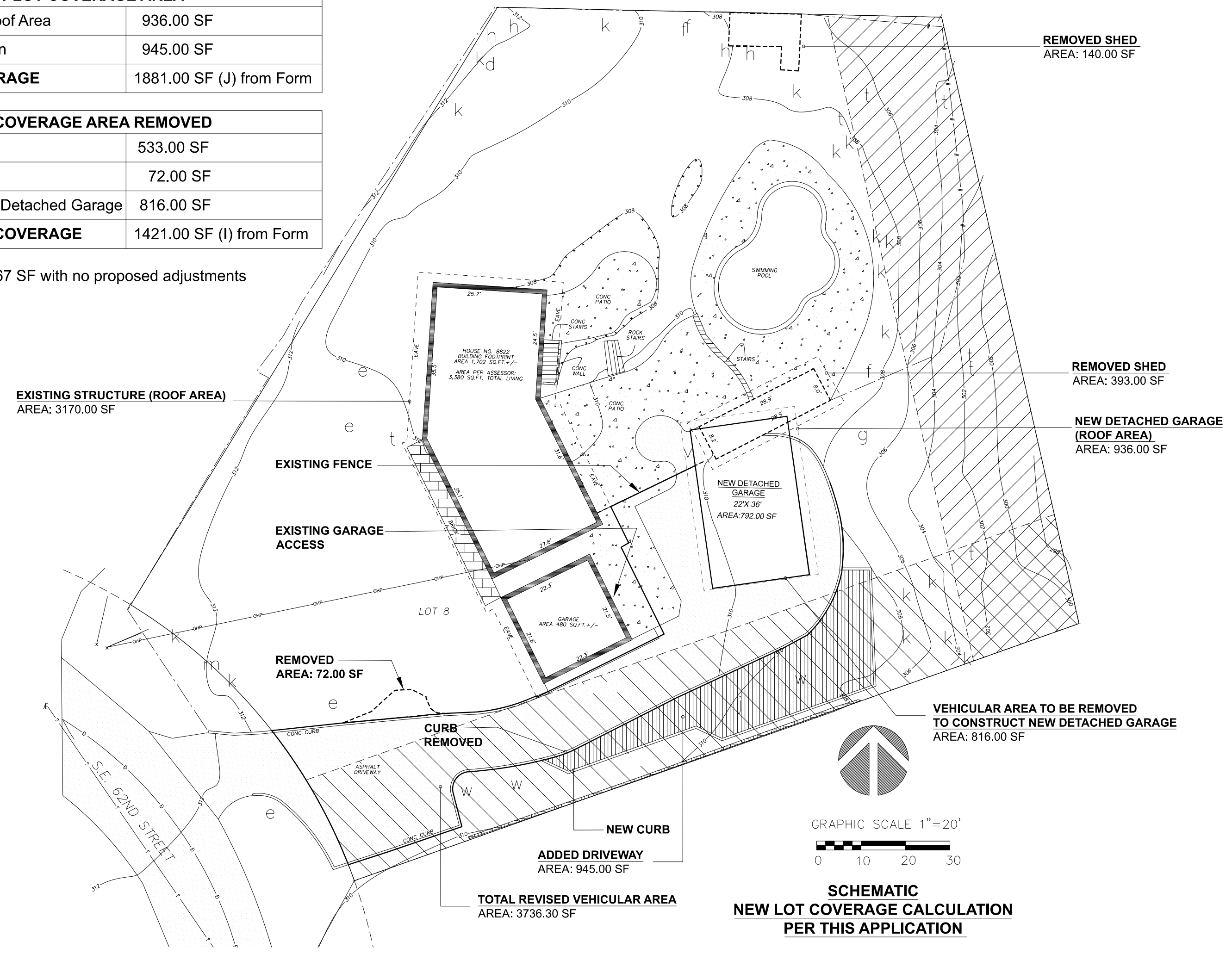


HARDSCAPE CALCULATION

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

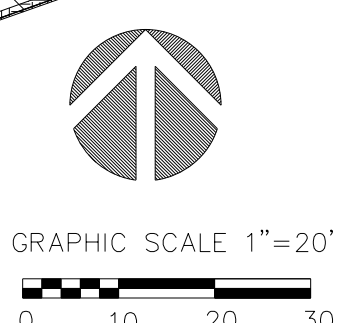
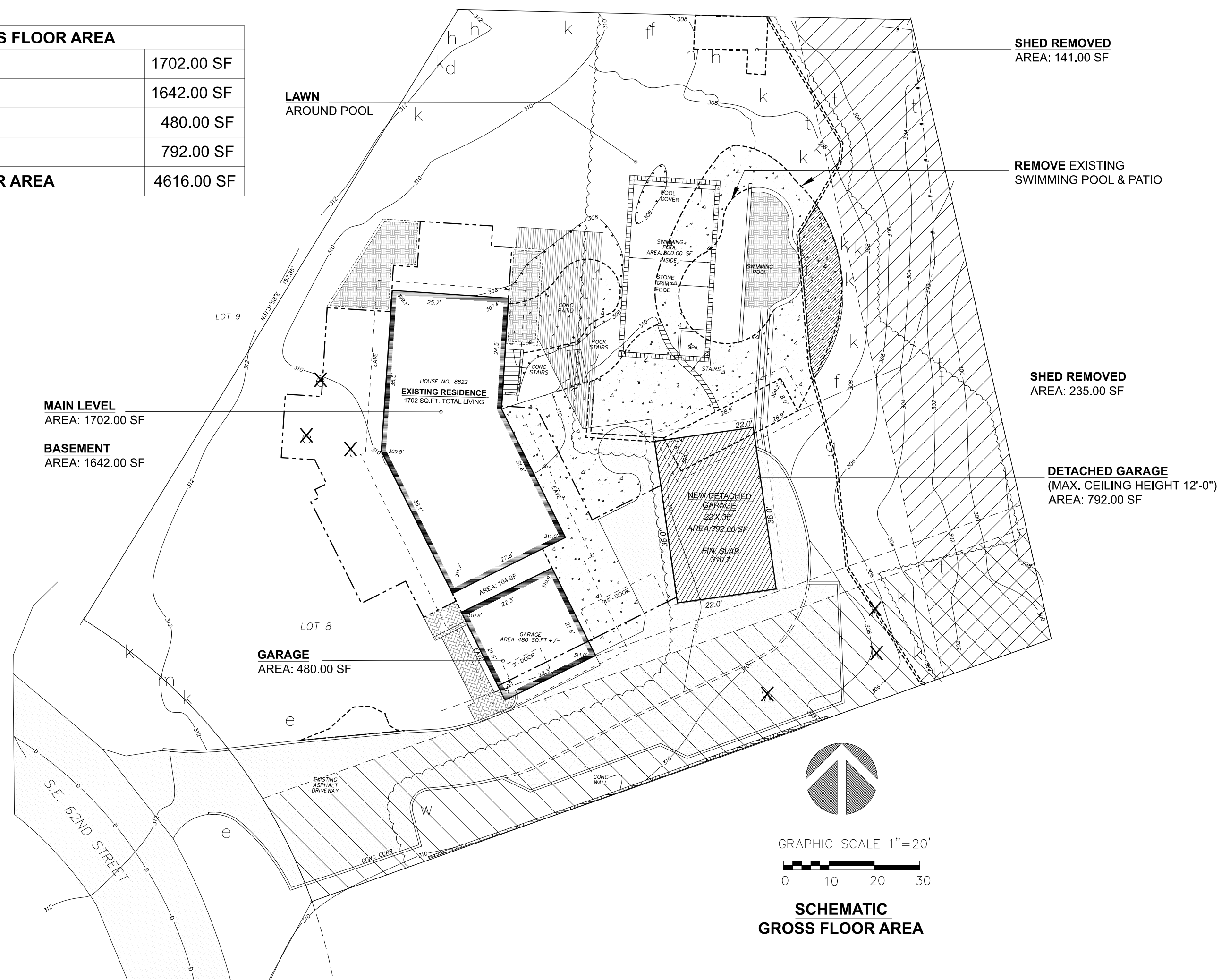
TOTAL LOT COVERAGE AREA REMOVED	
Exist. Shed Roof Area	533.00 SF
Paved Area at Entry	72.00 SF
Removed Paving for New Detached Garage	816.00 SF
<b>TOTAL REMOVED LOT COVERAGE</b>	<b>1421.00 SF (I) from Form</b>

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



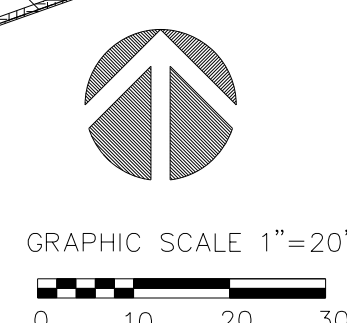
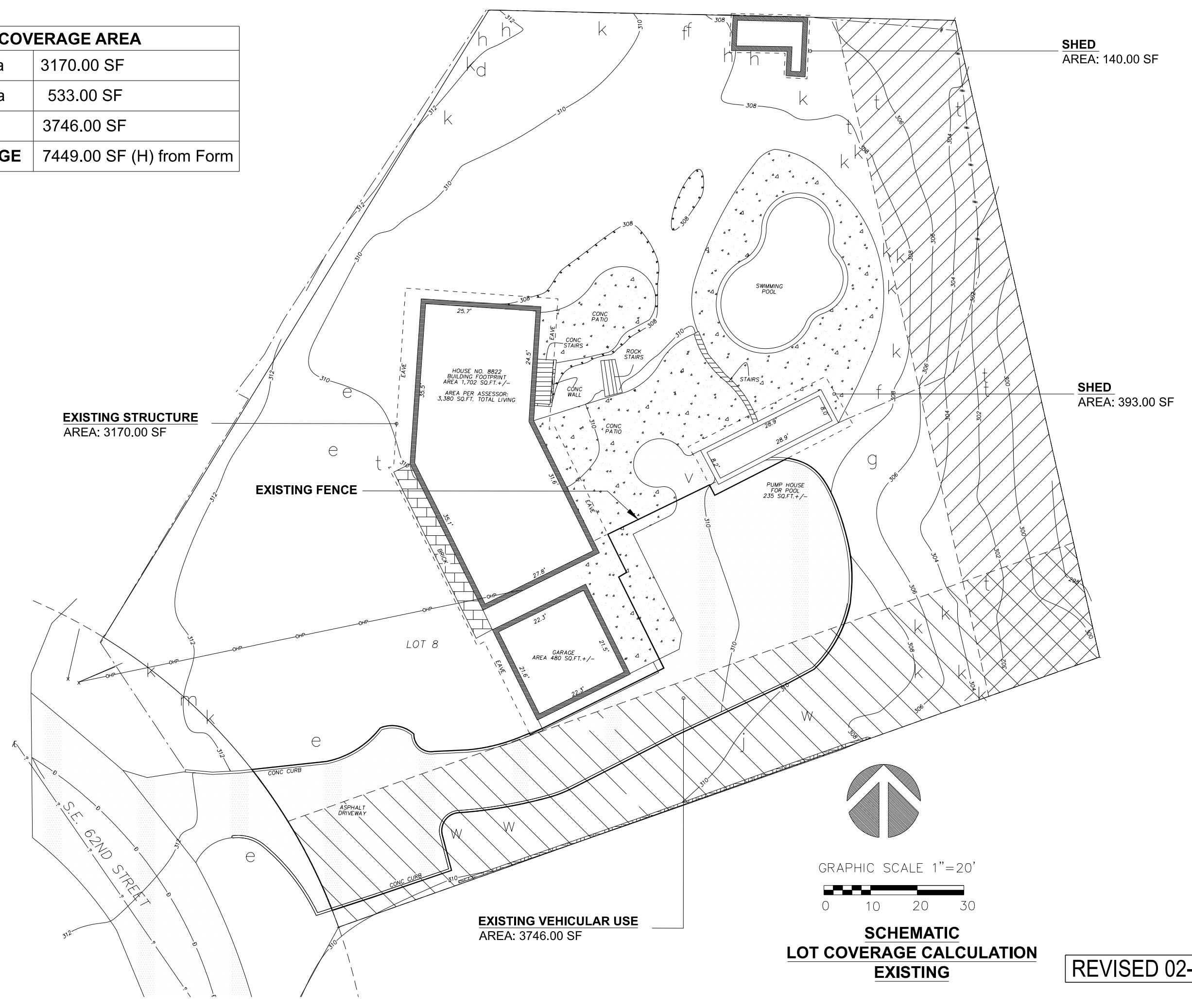
SCHEMATIC NEW LOT COVERAGE CALCULATION PER THIS APPLICATION

GROSS FLOOR AREA	
Main Level	1702.00 SF
Basement	1642.00 SF
Garage	480.00 SF
Detached Garage	792.00 SF
<b>TOTAL GROSS FLOOR AREA</b>	<b>4616.00 SF</b>



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
<b>TOTAL EXIST. LOT COVERAGE</b>	<b>7449.00 SF (H) from Form</b>



SCHEMATIC LOT COVERAGE CALCULATION EXISTING

REVISED 02-10-23

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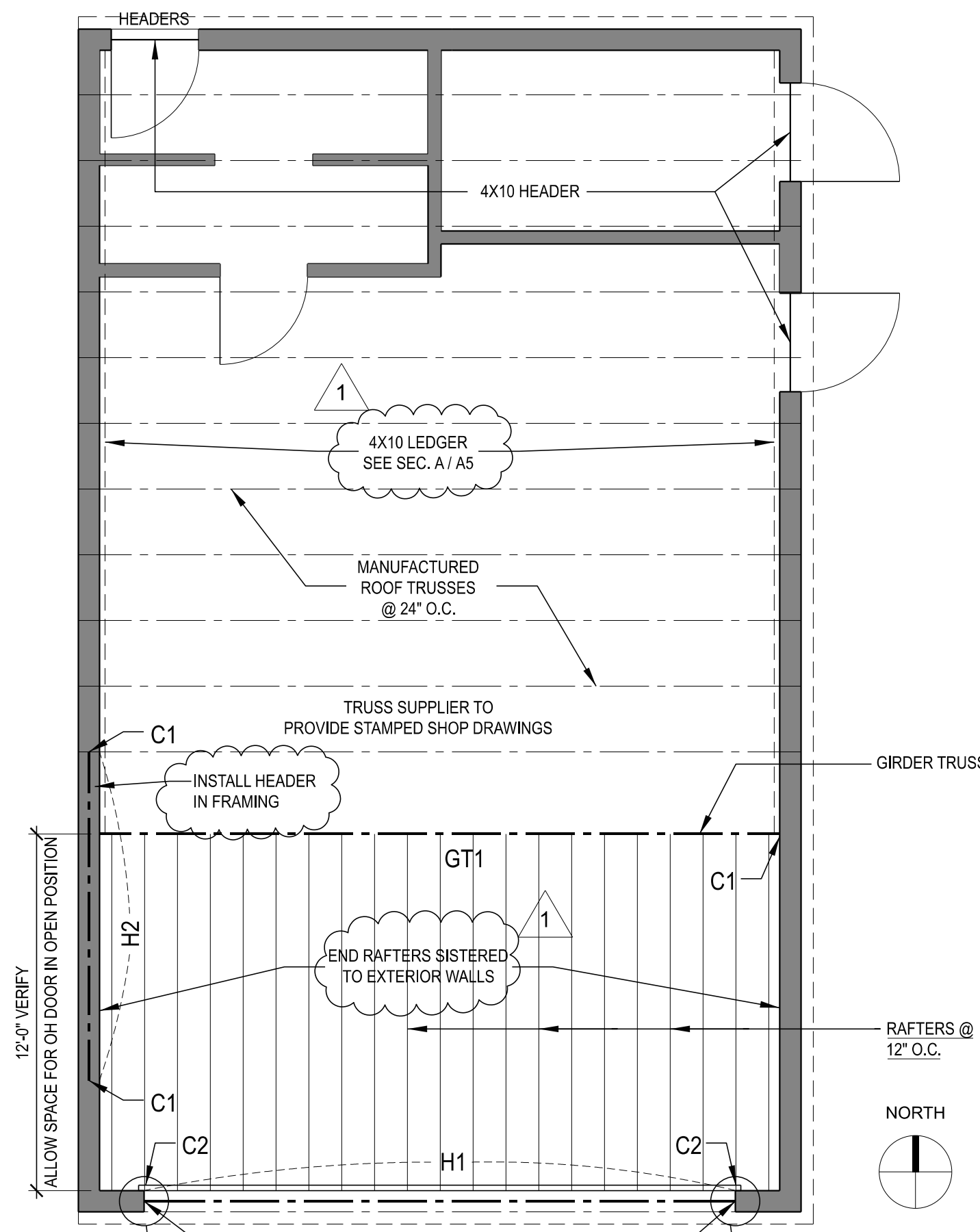
HEADRICK RESIDENCE  
8822 S.E. 62ND STREET,  
MERCER ISLAND, WA. 98040

REVISIONS:	
Mark	Date
△	02-10-23

DATE: 03-22-21

AREA SUMMARY  
LOT COVERAGE  
GROSS FLOOR AREA  
HARDSCAPE

SHEET:  
**A2.2**



MIN. DESIGN LOADS:  
ROOF DL= 15 PSF  
LL= 25 PSF MIN.

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

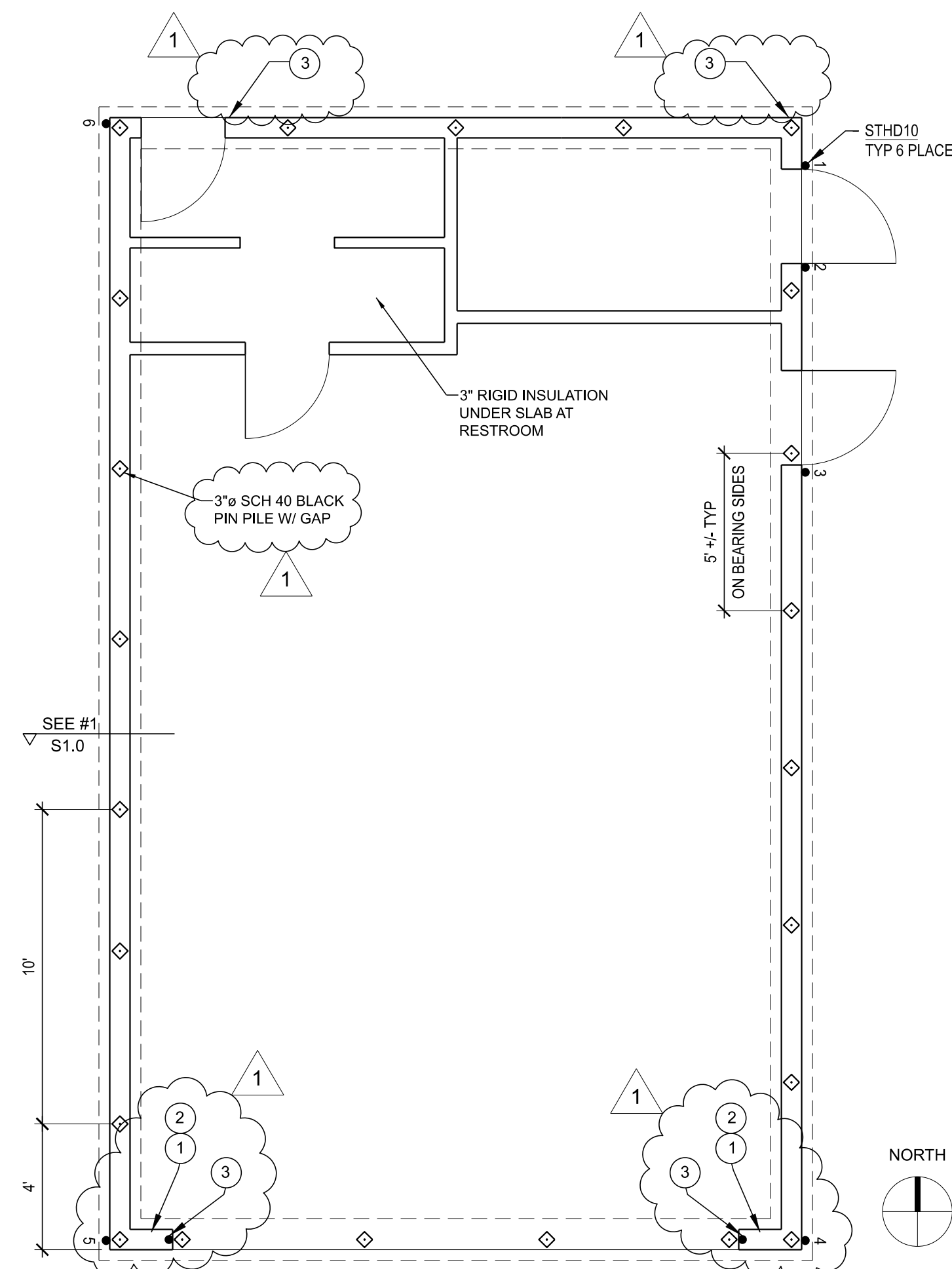
RAFTERS: 1 3/4 X 7 1/4 LVL @ 12" O.C.  
NOTE: PROVIDE H/7 HANGERS @ ALL FLUSH FRAMED ENDS

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

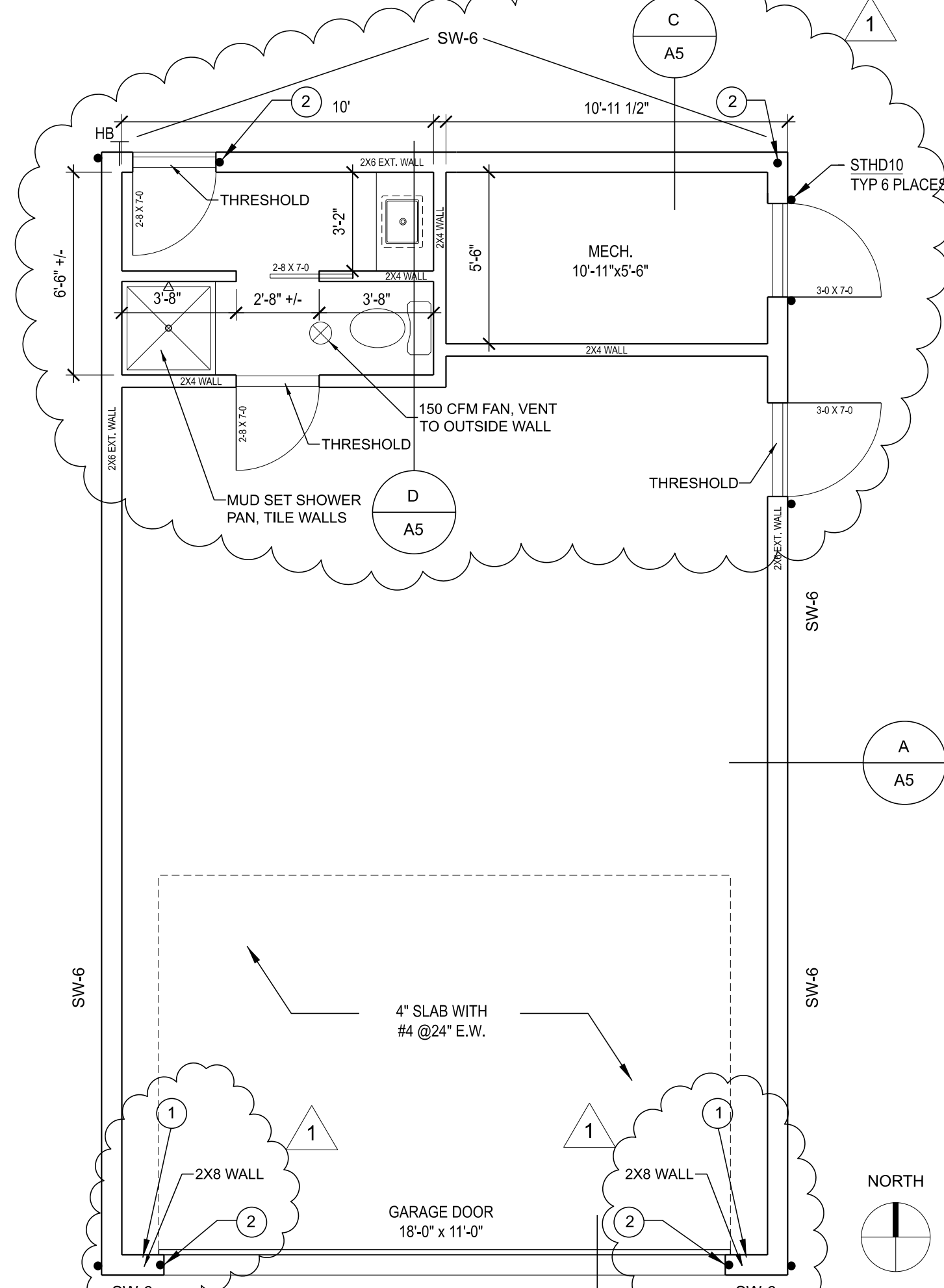
HANGERS:  
HGR1: HUCQ612  
HGR2: HUCQ610  
HGR3: HUC410

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



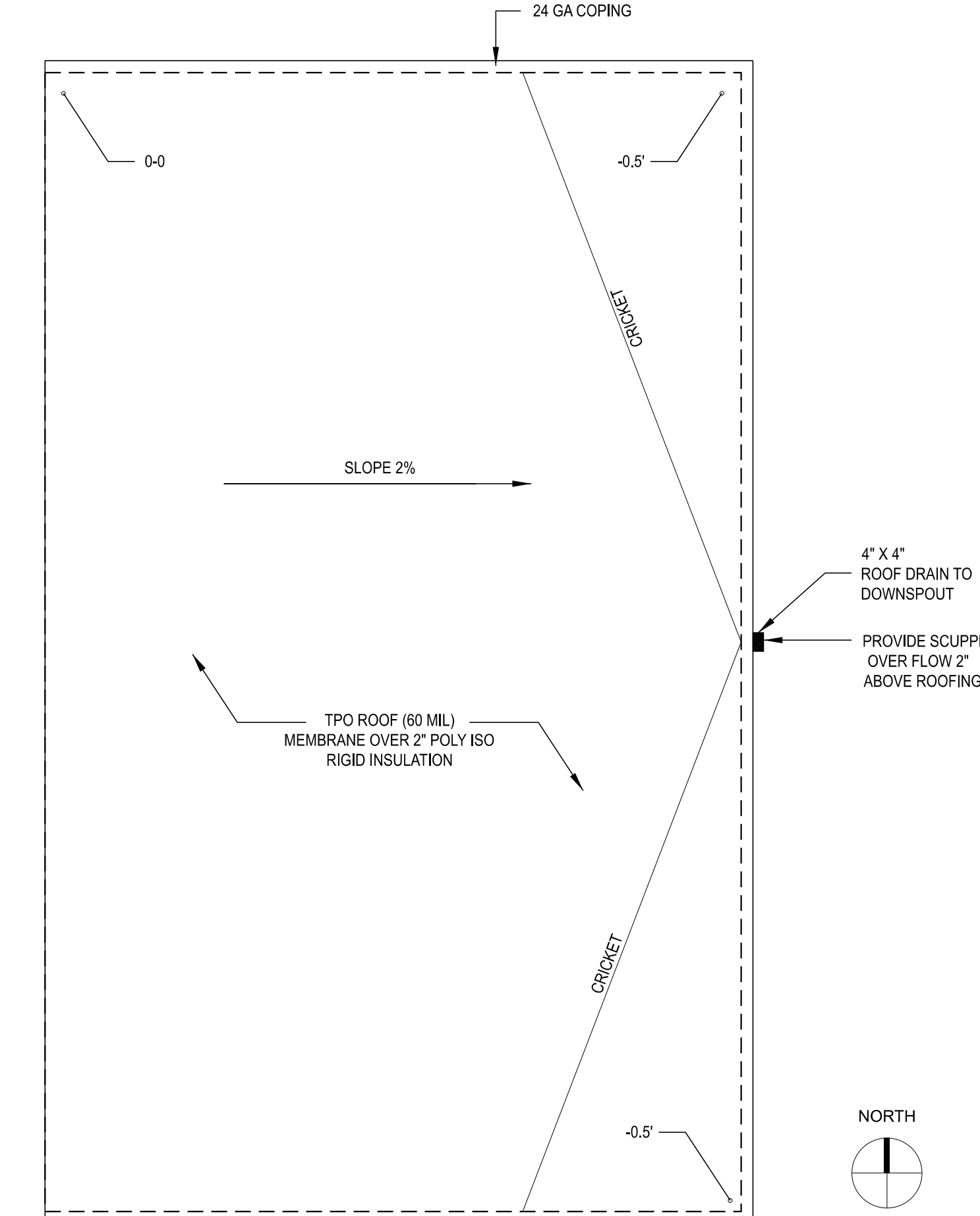
- CONCRETE STEM WALL TO BE 4'-0" MIN. ABOVE GARAGE SLAB.
  - 3" X 3" X 1/4" PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF SHEATHING.
  - SSTB28 FOR HDQ8 ABOVE, SEE DETAIL C.
- NOTE: USE 5/8" Ø ANCHOR BOLTS W/ 3" X 3" X 1/4" WASHERS @ 4'-0" O.C. U.N.O.

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



- ADD CS16 BLOCKING TO DOOR HEADER, SEE DETAIL B.
  - HDQ8, SEE DETAIL C.
- NOTE: ALL EXTERIOR WALLS TO BE SW-6 U.N.O., SEE S1.0.

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

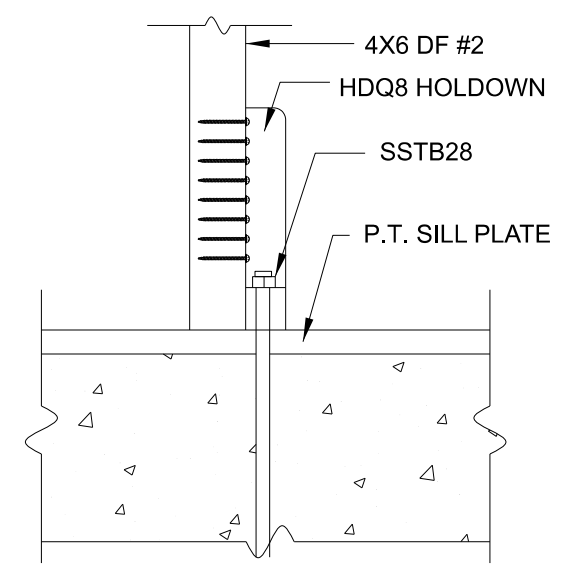


NOTE: TYPICAL ROOF FRAMING CONSISTS OF 23/32" APA RATED T&G SHEATHING (INDEX 48/24), LAID FACE GRAIN PERPENDICULAR OVER PRE-FABRICATED ROOF TRUSSES AND 2X FRAMING @ 24" O.C. NAIL ROOF SHEATHING TO FRAMING WITH 8d NAILS AT 6" O.C. AT ALL PANEL EDGES AND 8d NAILS @ 12" O.C. AT ALL INTERMEDIATE FRAMING MEMBERS. SEE DETAIL 12/S1.0.

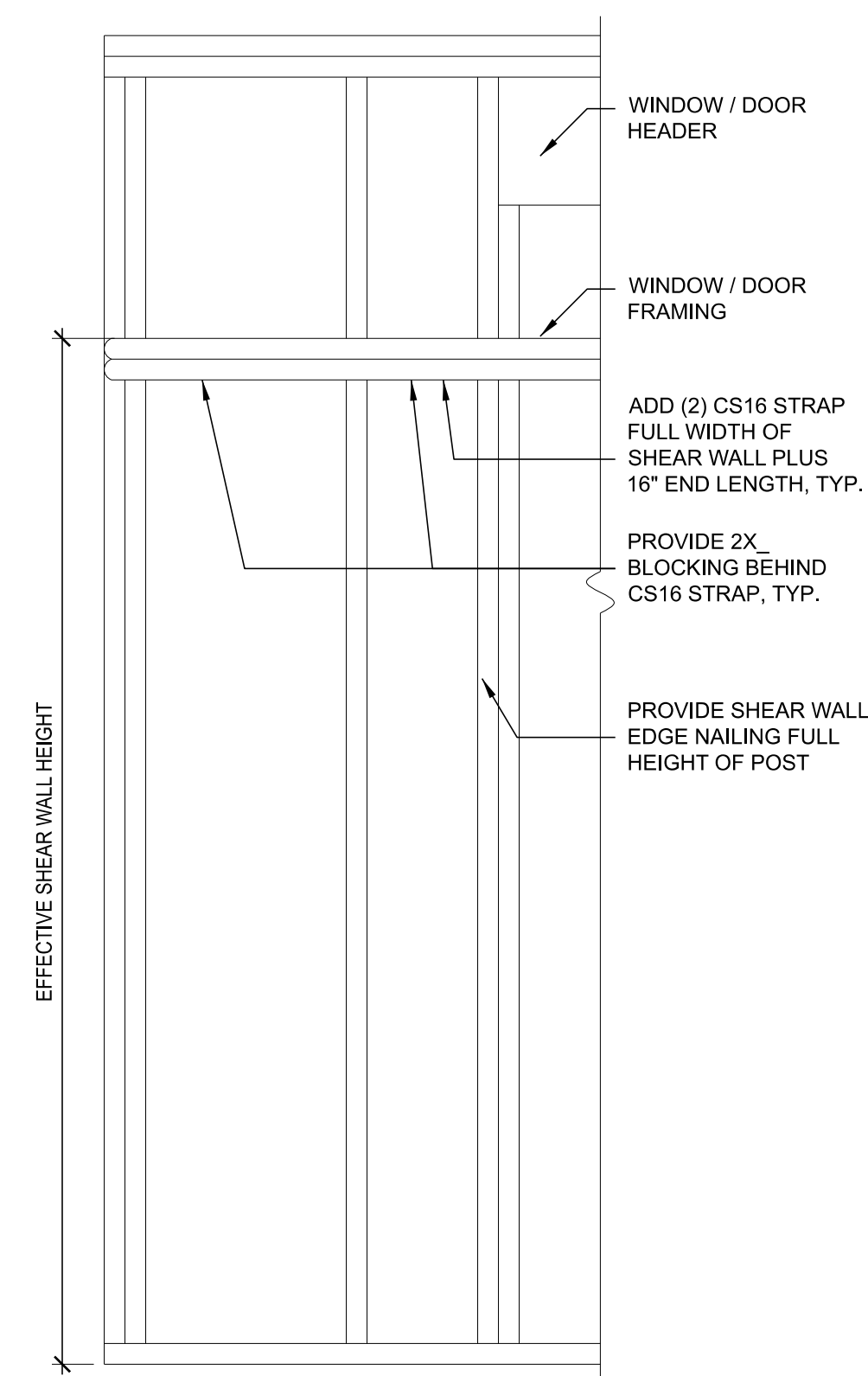
REFER TO S1.0 STRUCTURAL DETAILS

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

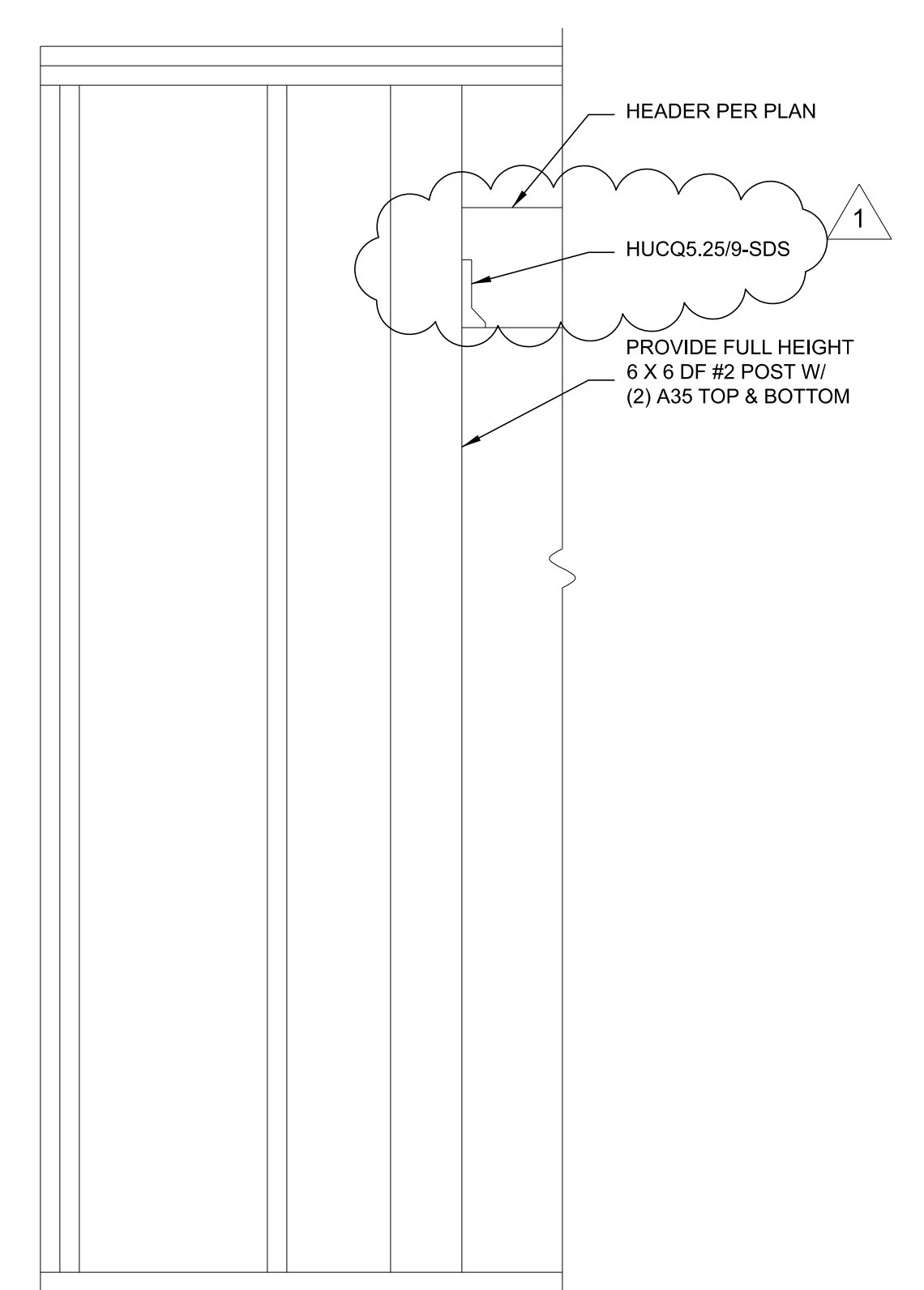
DETAIL C  
1" = 1'-0"



DETAIL B  
1" = 1'-0"



DETAIL S1  
1" = 1'-0"



REVISIONS:

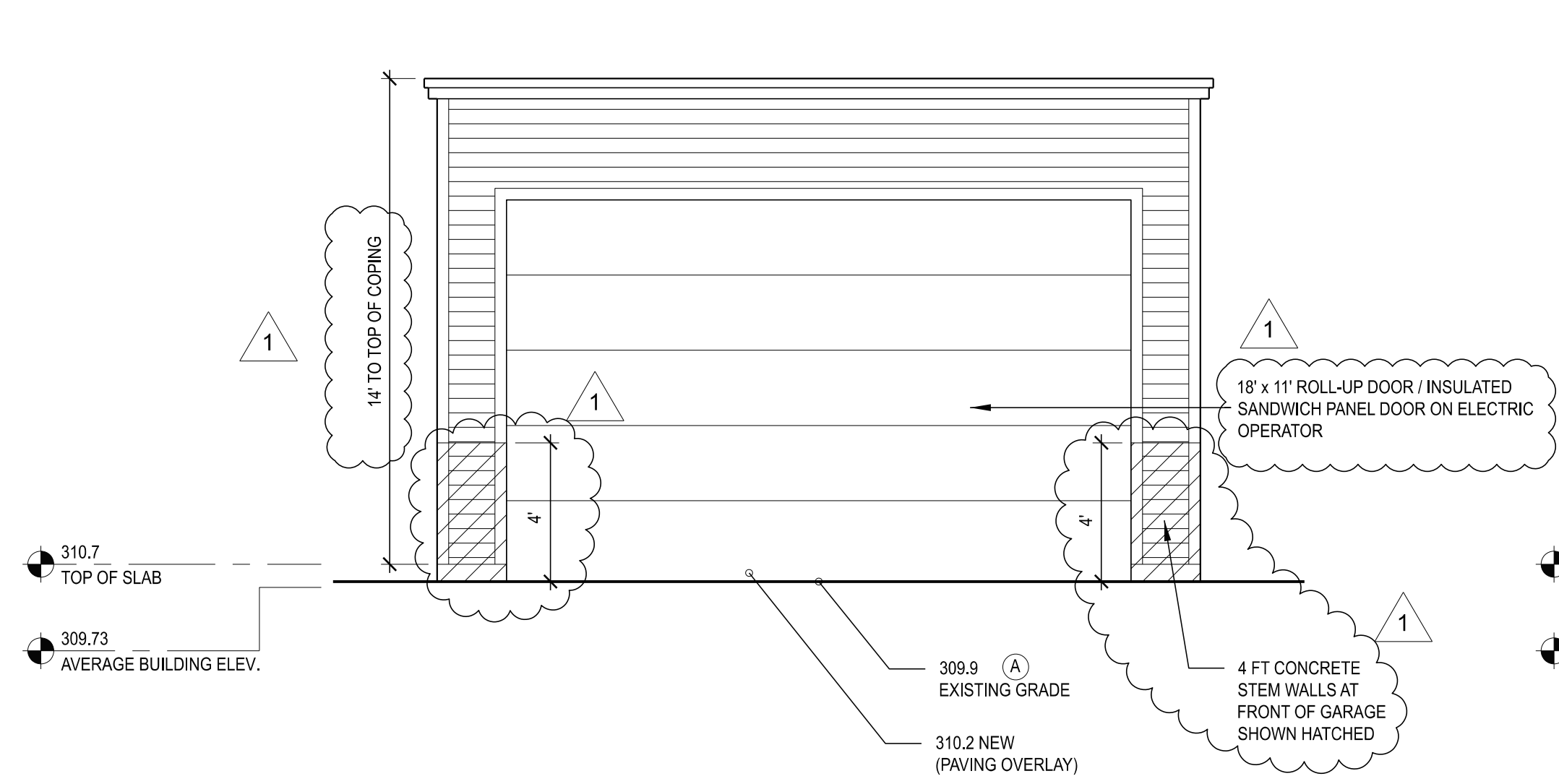
Mark	Date
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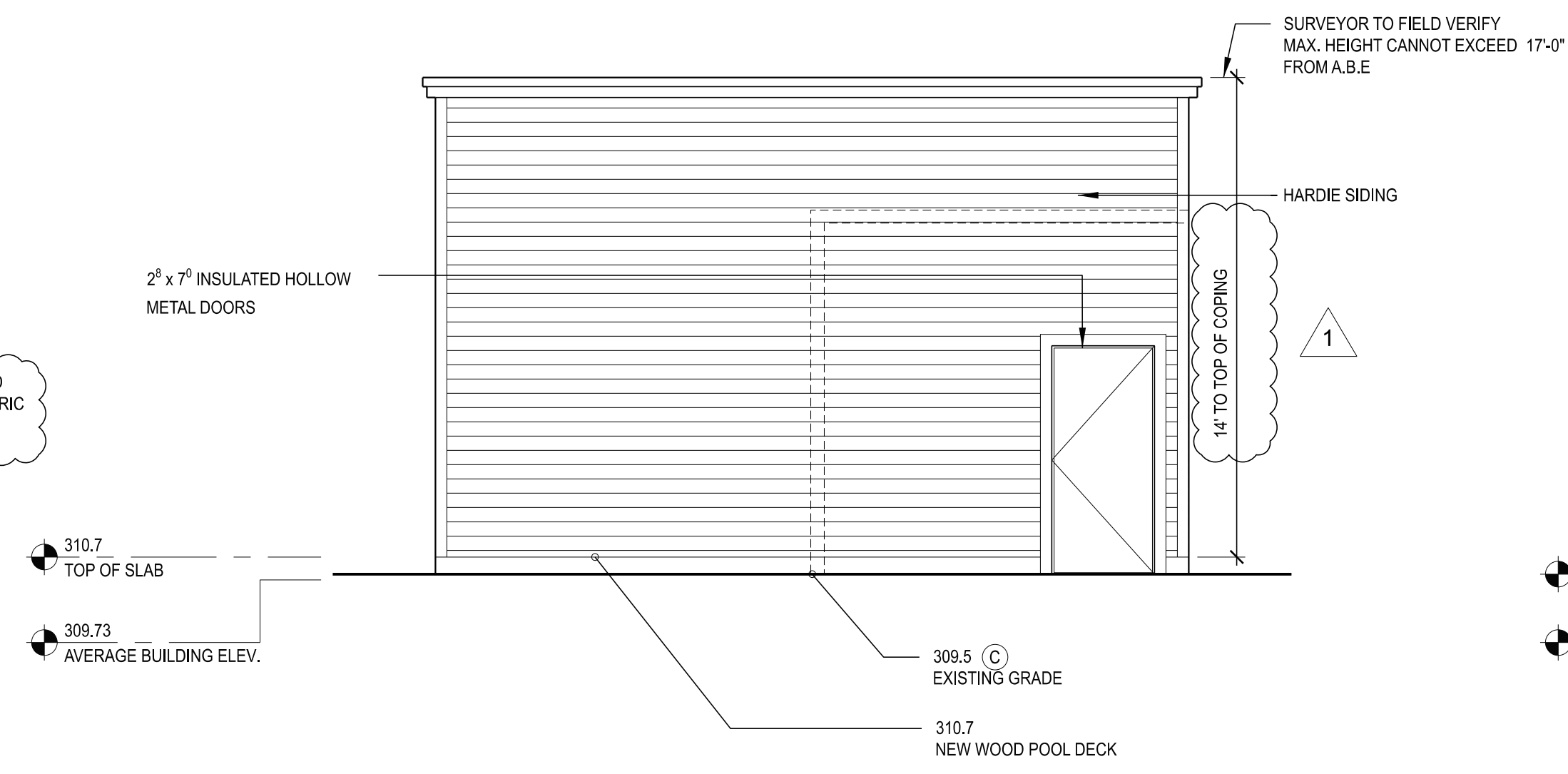
GARAGE FLOOR PLAN  
FOUNDATION PLAN  
ROOF FRAMING PLAN  
DETAILS

REVISED 02-10-23

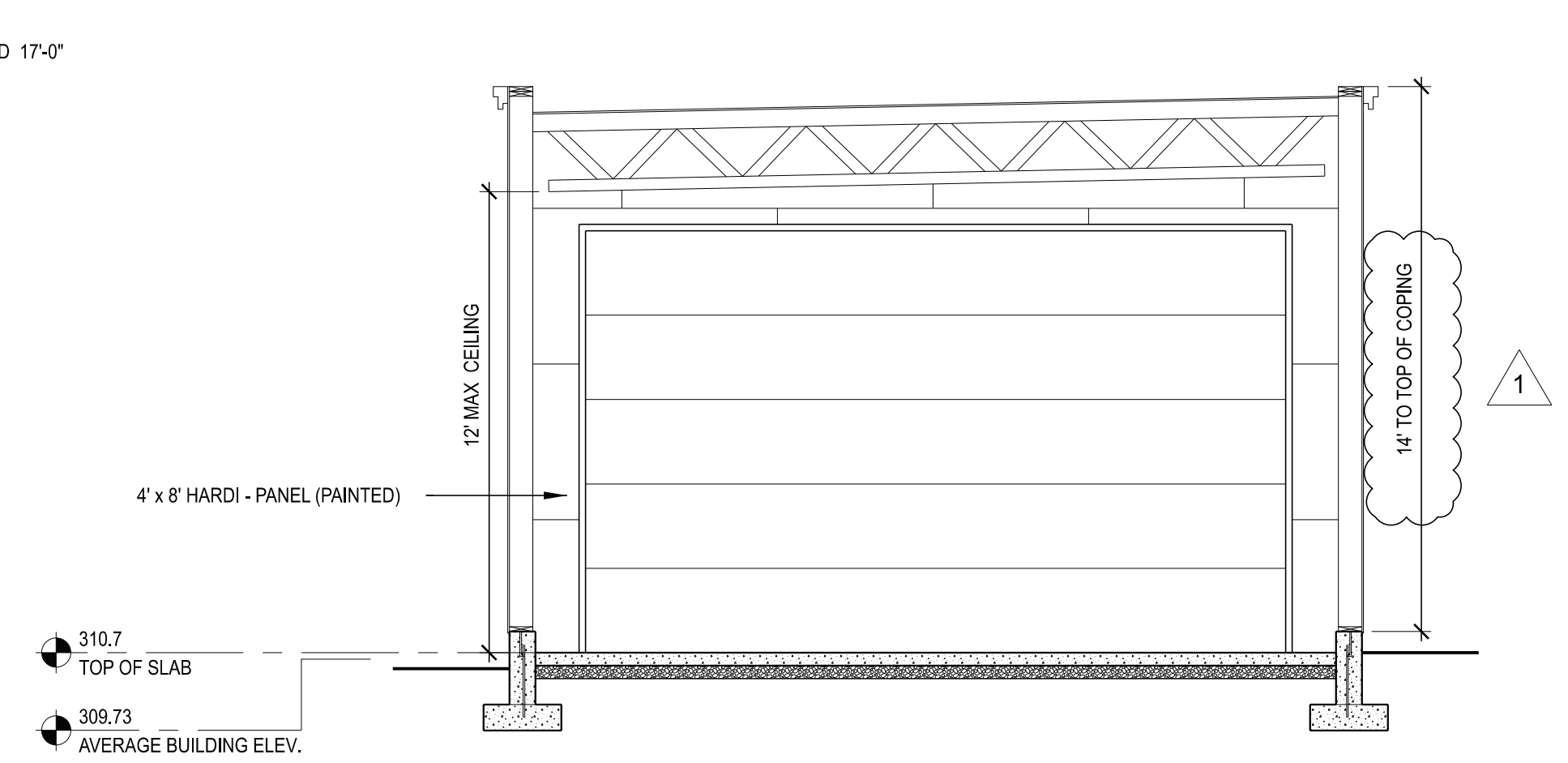




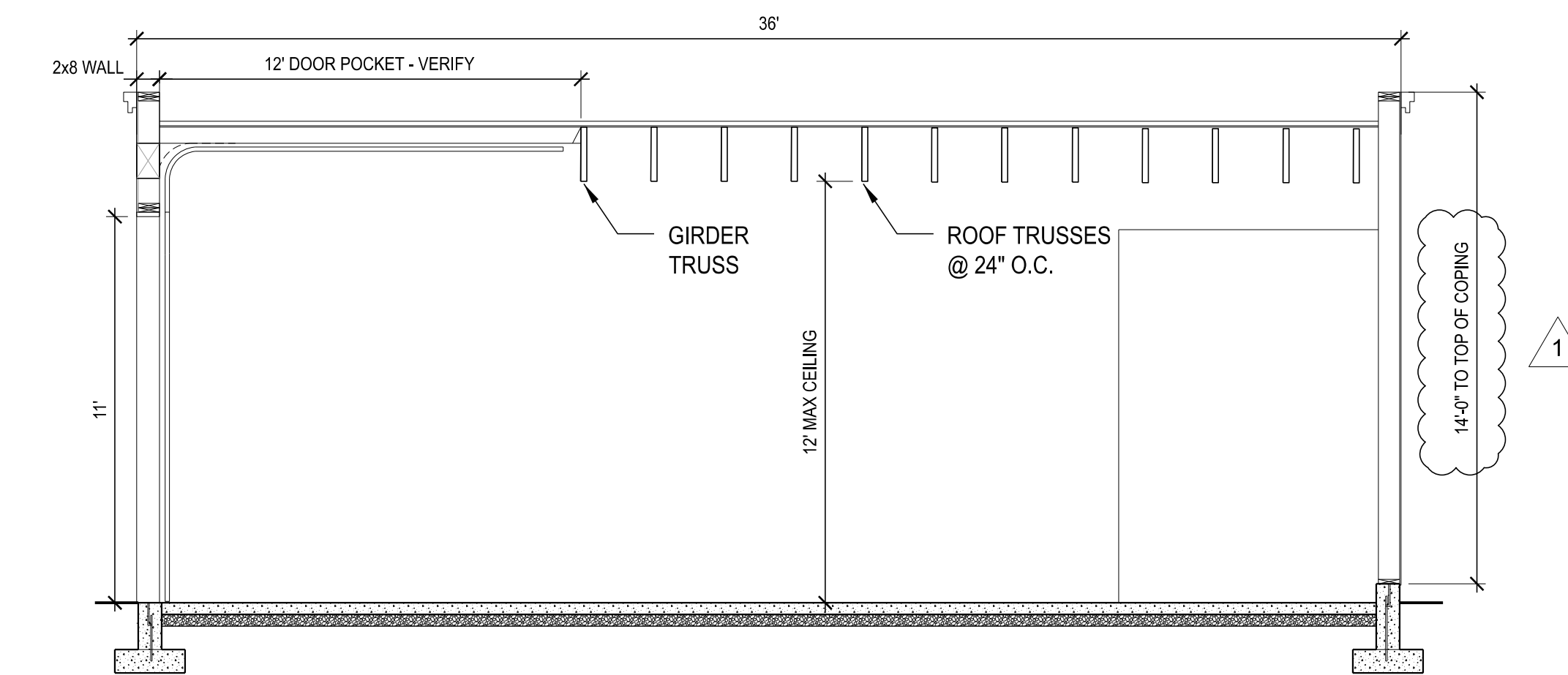
**SOUTH ELEVATION**  
1/4" = 1'-0"



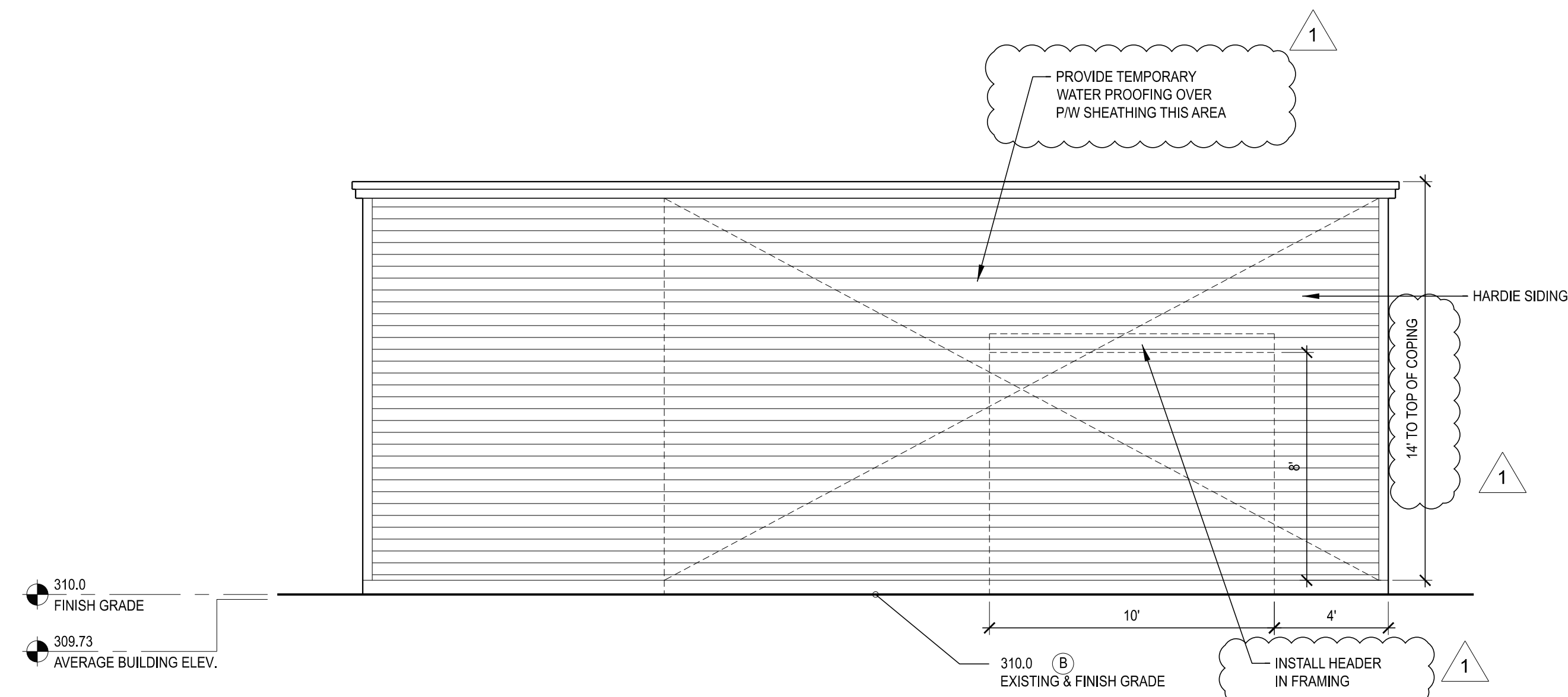
**NORTH ELEVATION**  
1/4" = 1'-0"



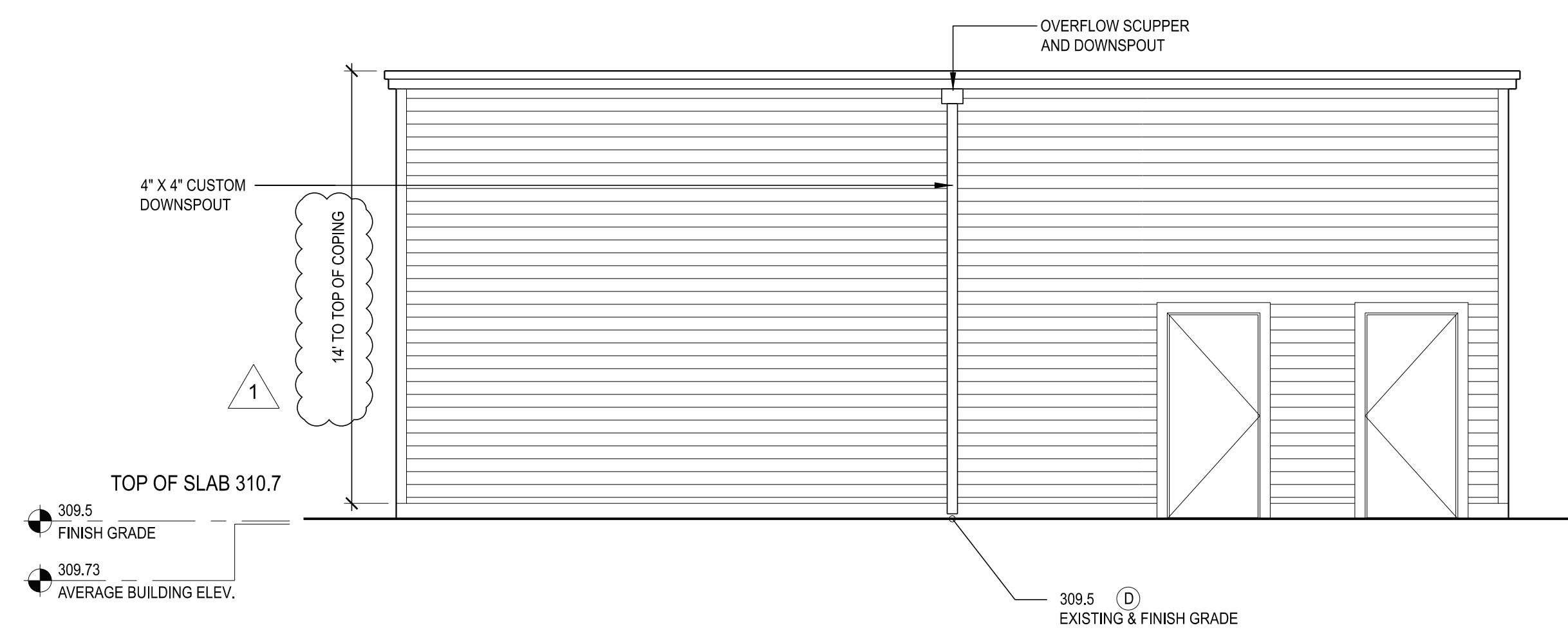
**NORTH SECTION**  
1/4" = 1'-0"



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



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



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

REFER TO S1.0 STRUCTURAL DETAILS

REVISED 02-10-23

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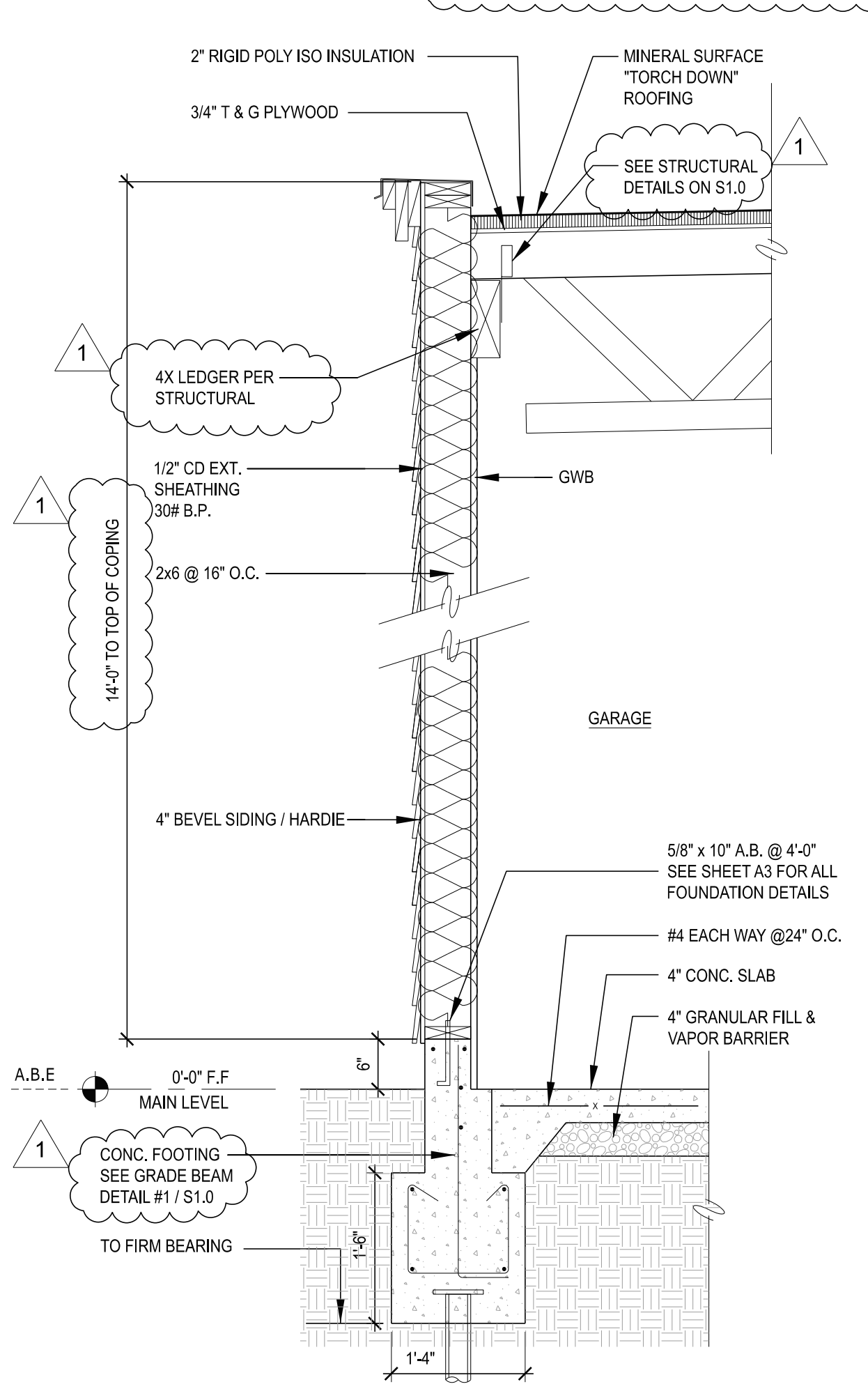
ELEVATIONS  
SECTION

SHEET:

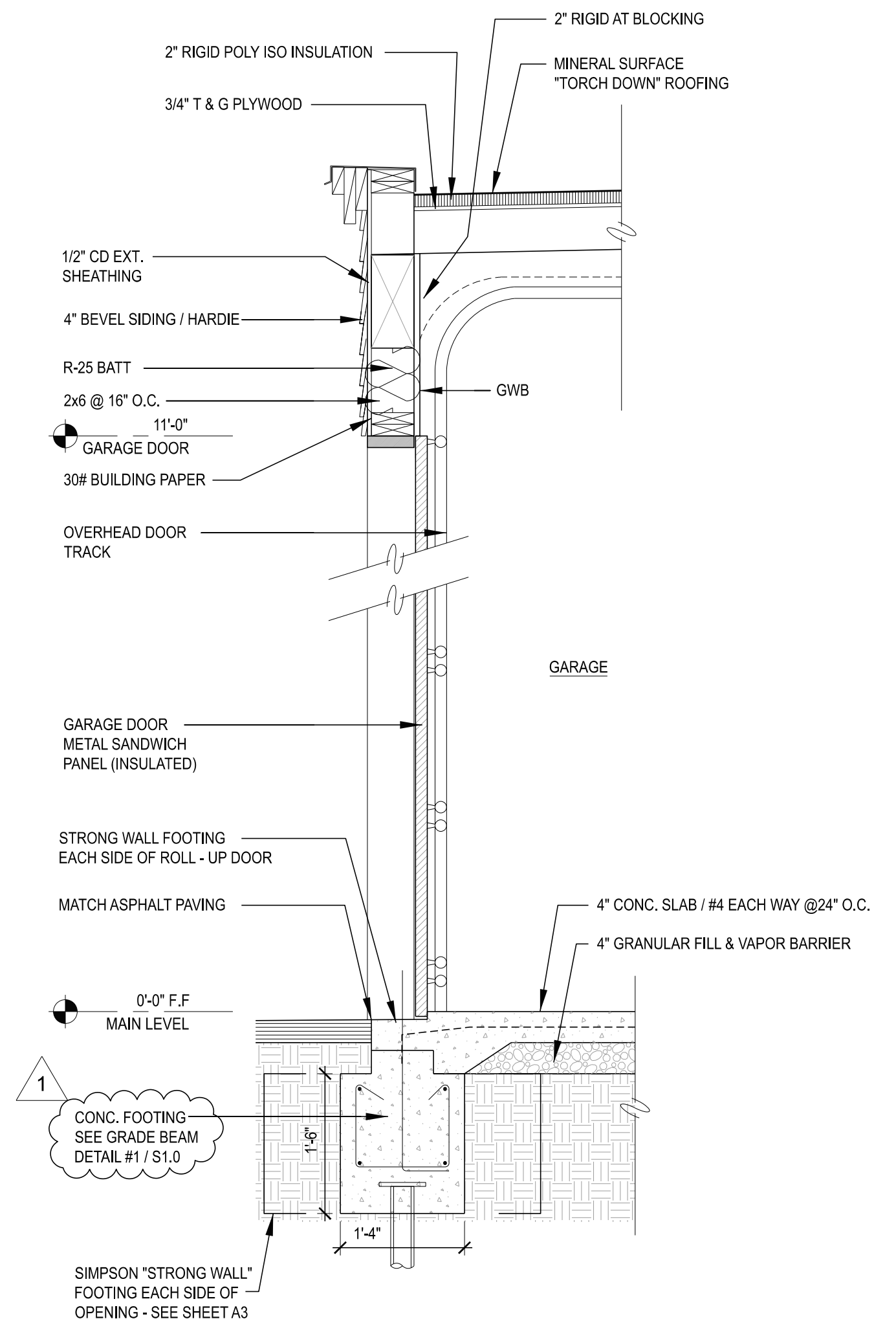
**A4**

**NOTE: SOIL BEARING CONFIRMATION FOR GARAGE FOOTINGS AND POOL FOOTINGS**

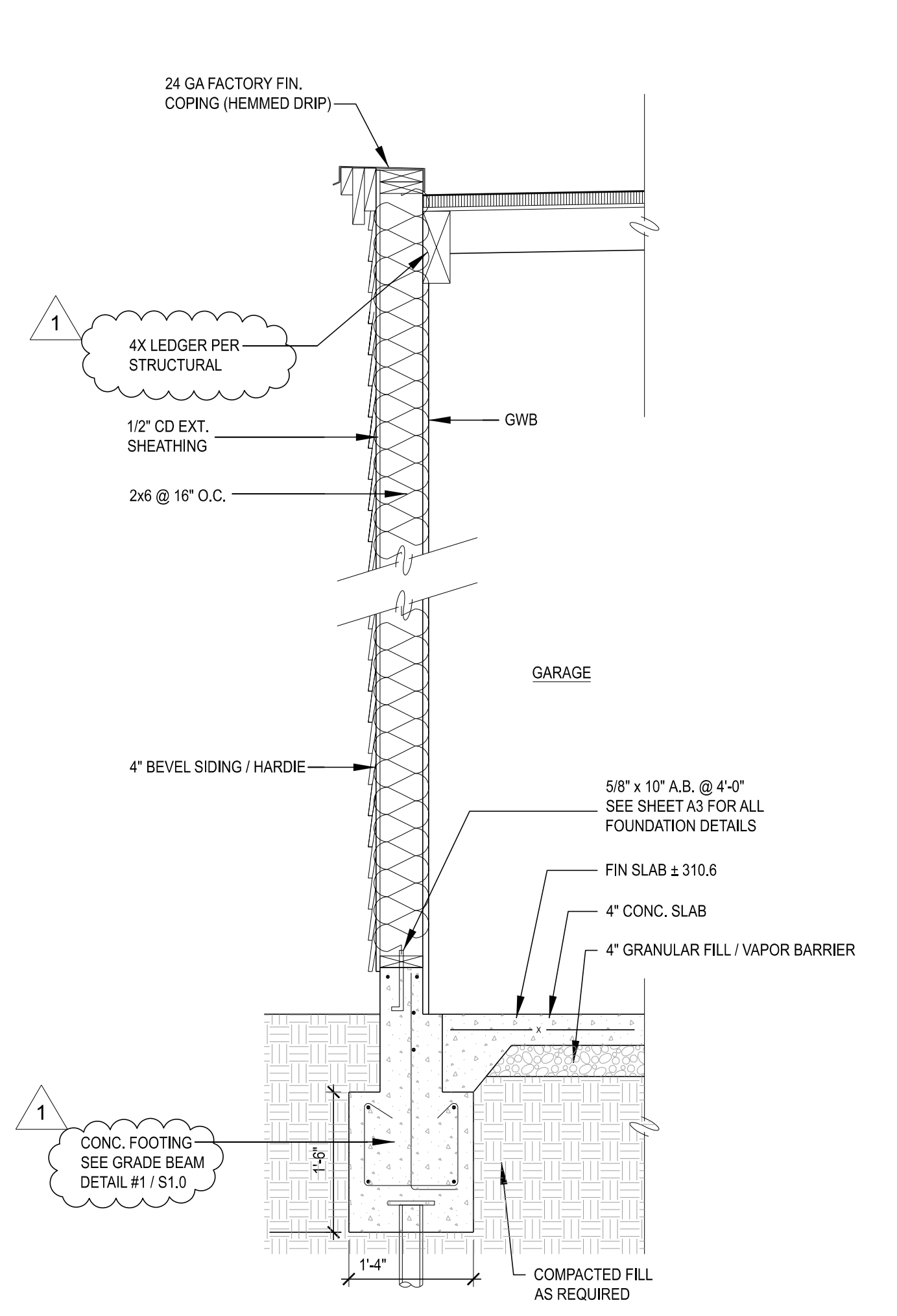
BEARING TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING EXCAVATION AND PRIOR TO ANY PLACEMENT OF REINFORCING STEEL / FOUNDATION BOARDS.



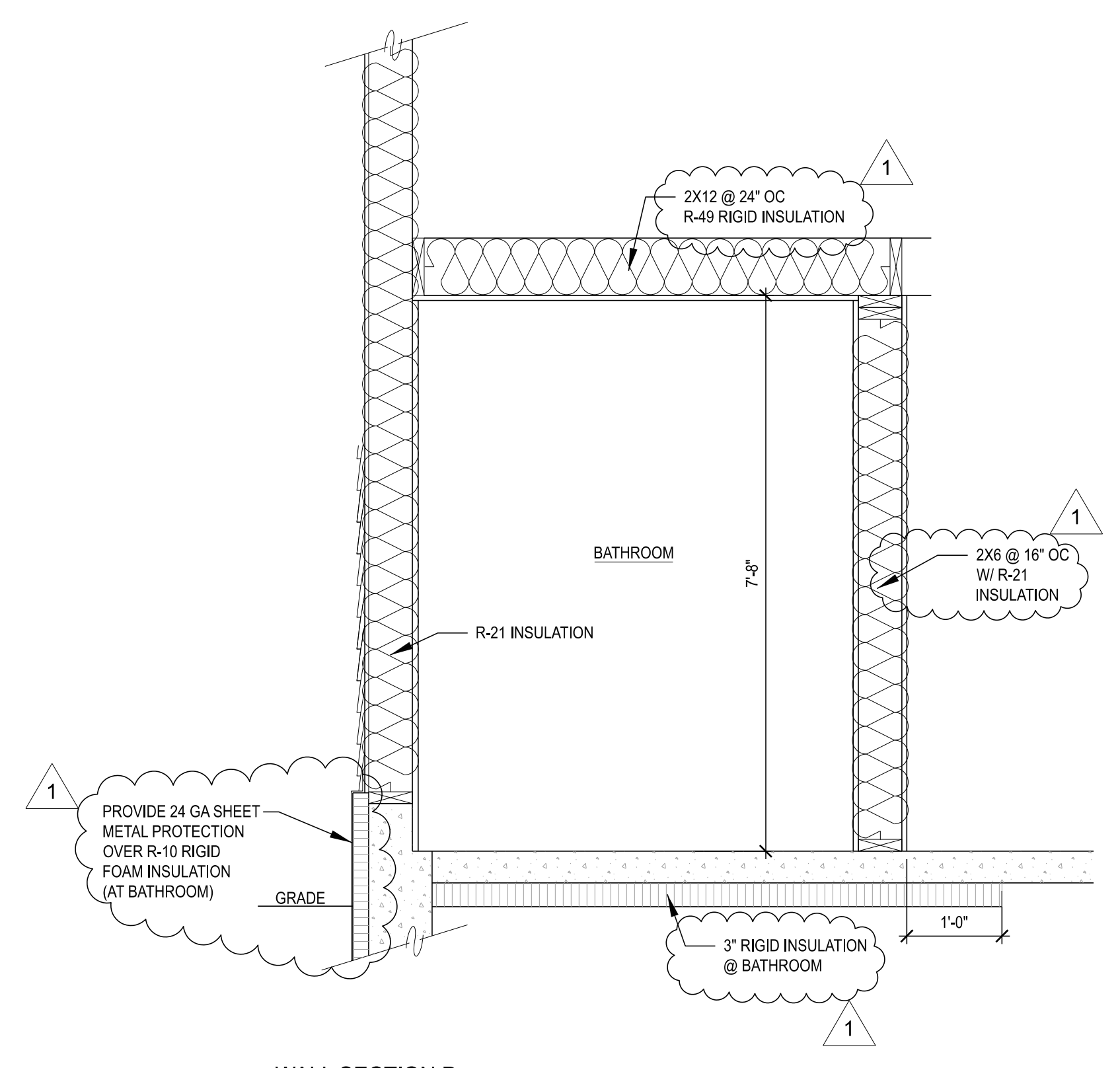
WALL SECTION A  
3/4" = 1'-0"



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



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



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

REFER TO S1.0 STRUCTURAL DETAILS

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REVISIONS:

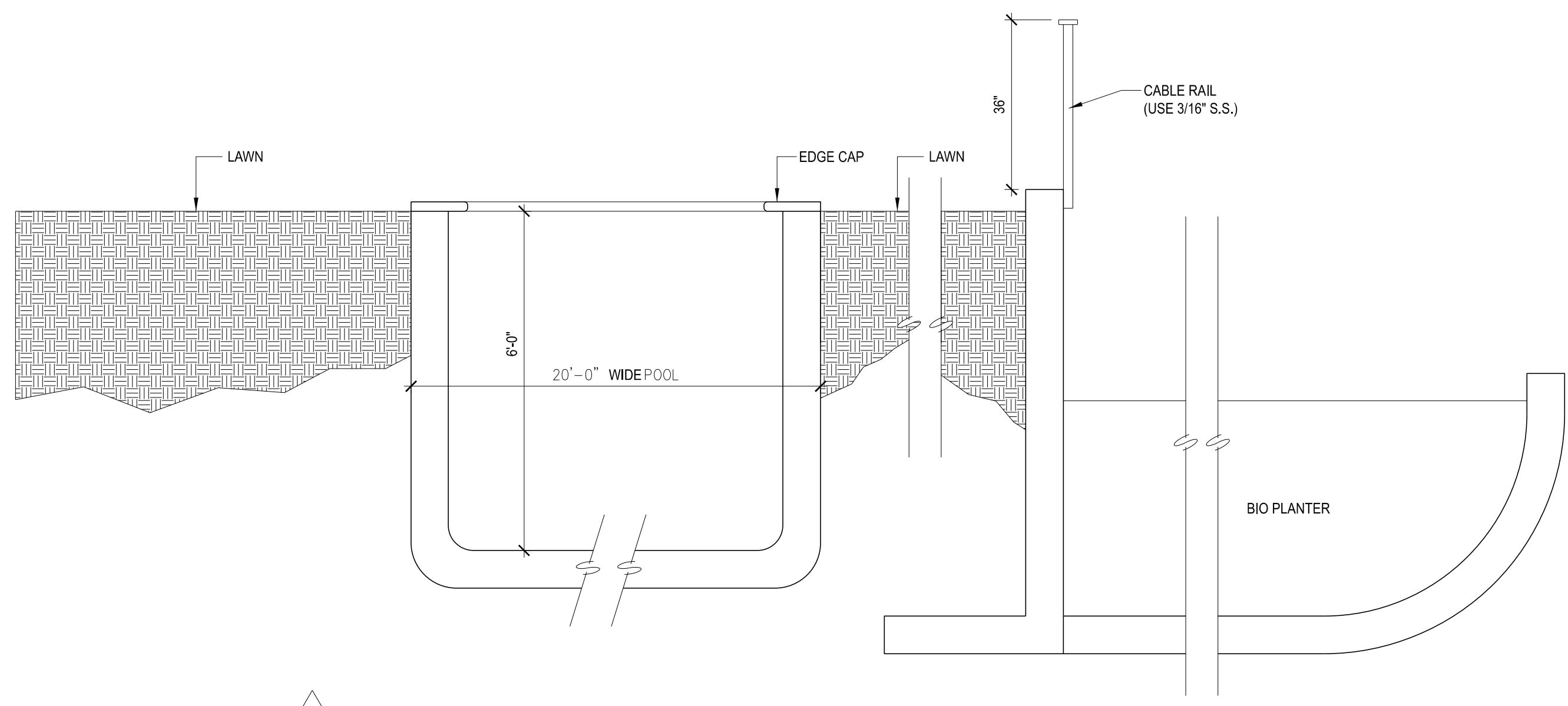
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DATE: 03-22-21

GARAGE  
 WALL SECTIONS

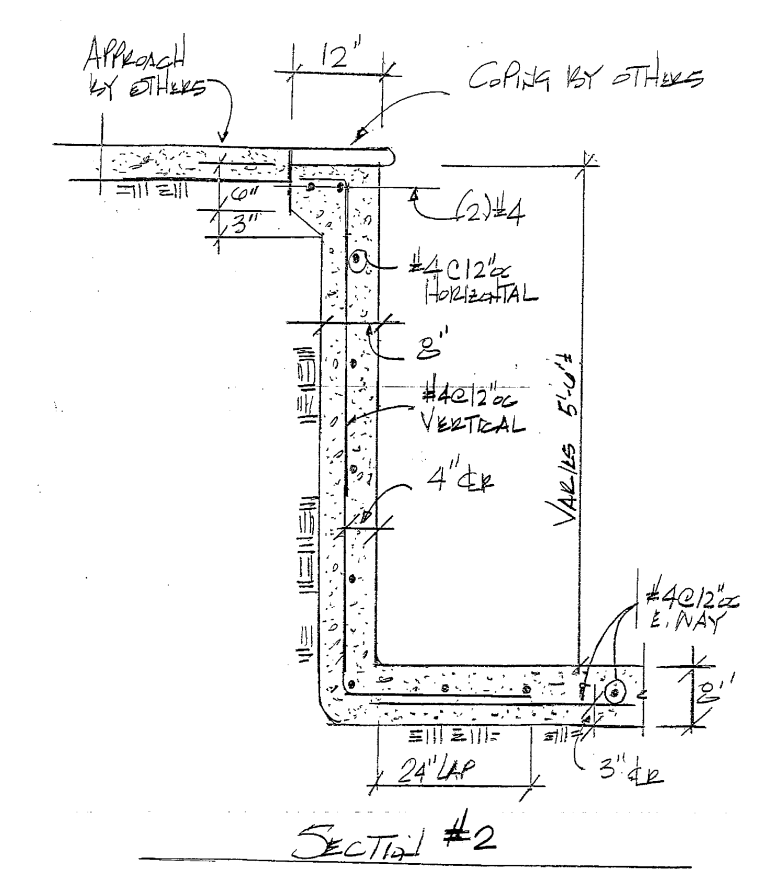
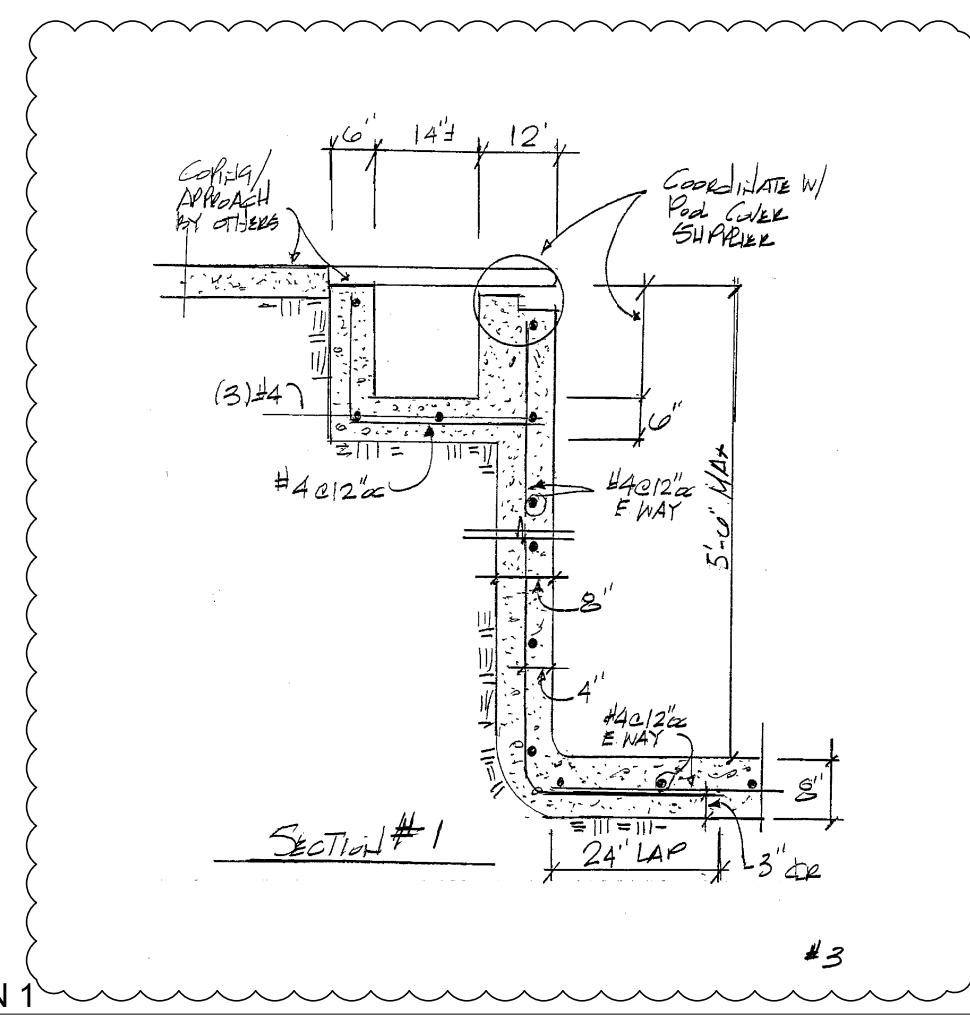
SHEET:  
**A5**



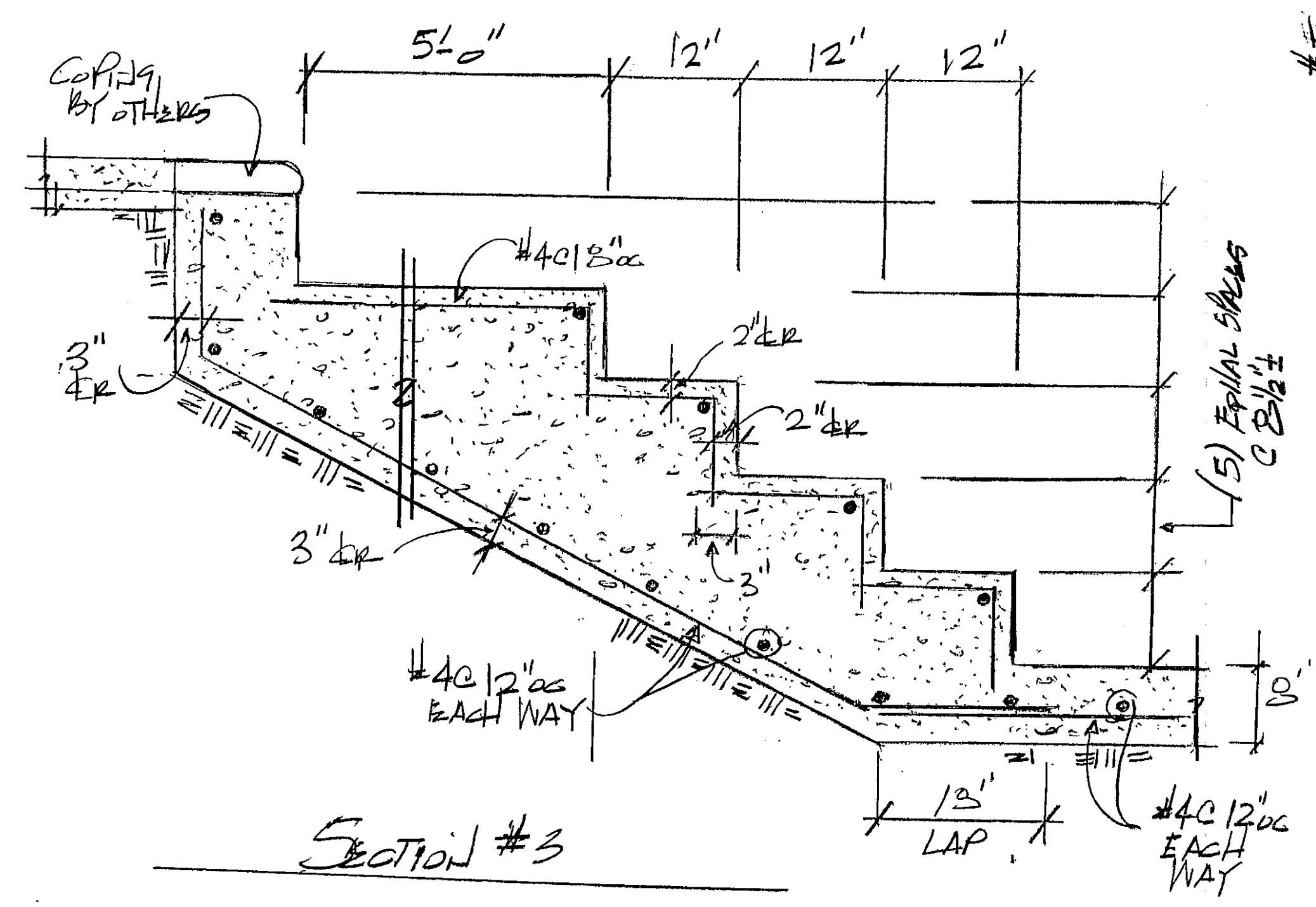


POOL DECK SECTION  
1/2" = 1'-0"

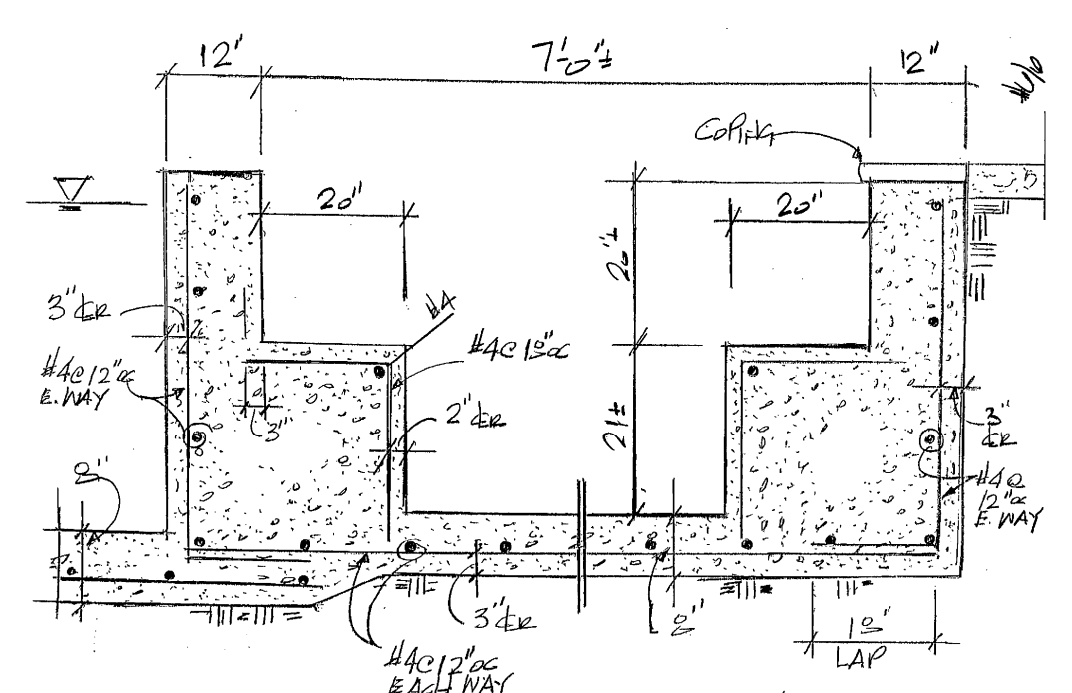
SECTION 1  
1/2" = 1'-0"



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



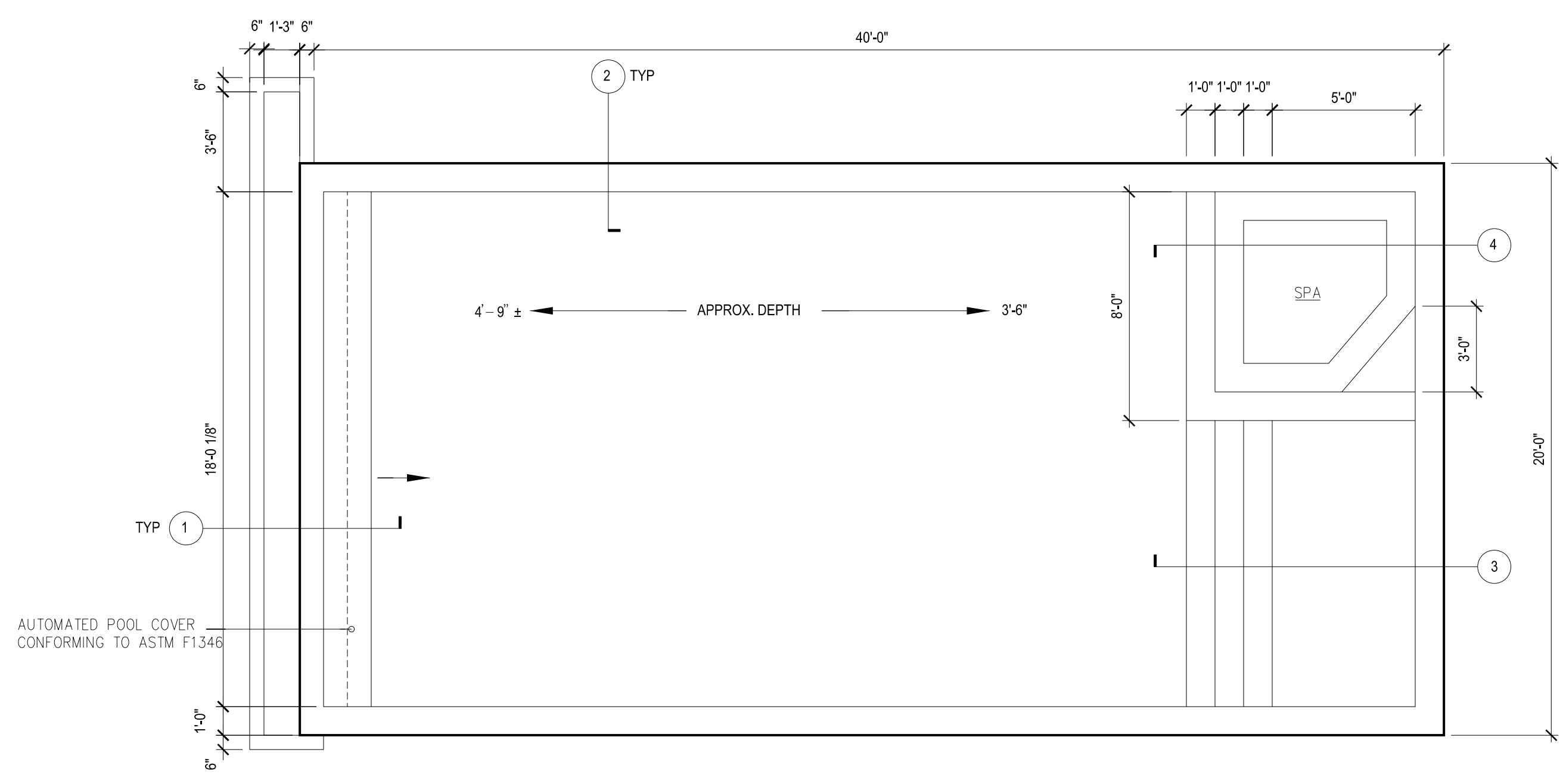
SECTION #3  
1/2" = 1'-0"



SECTION #4  
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  $f_y = 40,000$  PSI.



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

POOL ENGINEERING FROM:  
MITCHELL ENGINEERING

REVISED 02-10-23

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REVISIONS:

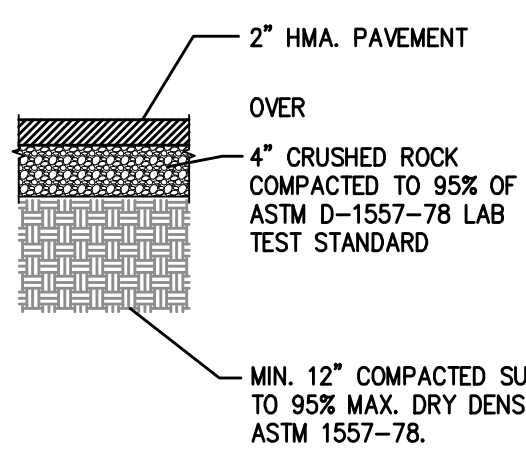
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DATE: 03-22-21

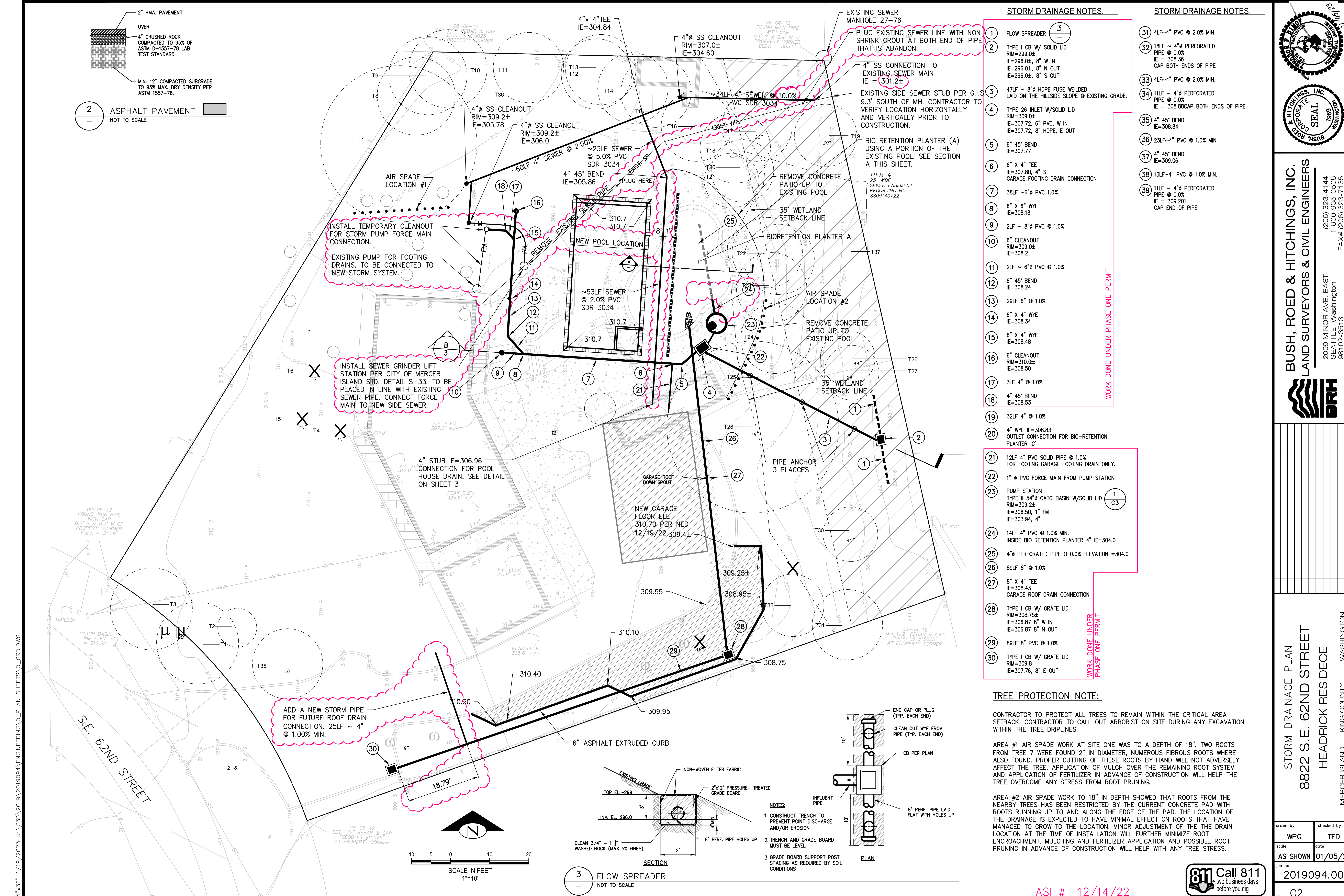
POOL & DECK  
DETAILS

SHEET:  
**A6**

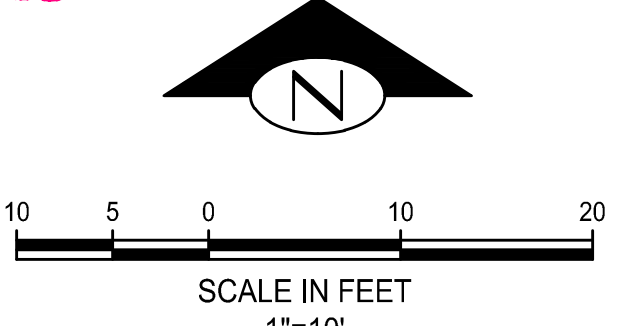




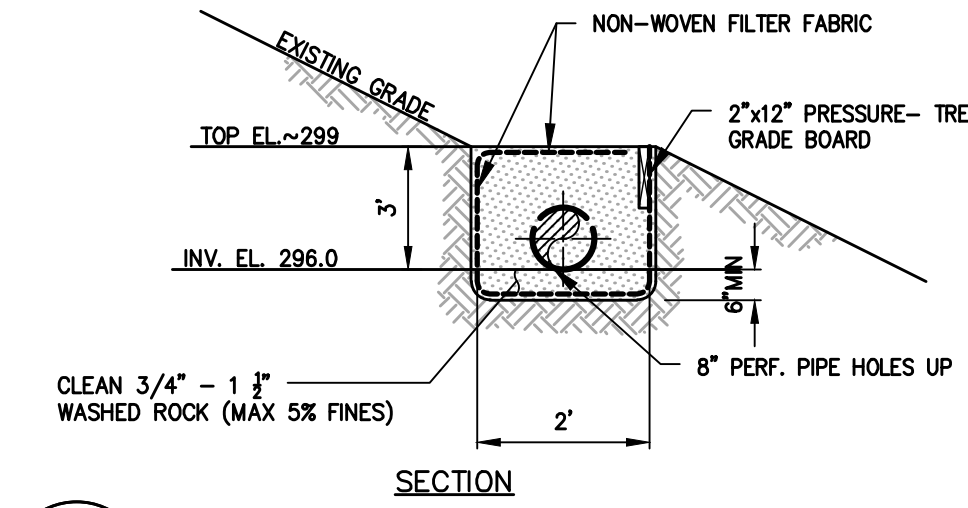
2 ASPHALT PAVEMENT  
NOT TO SCALE



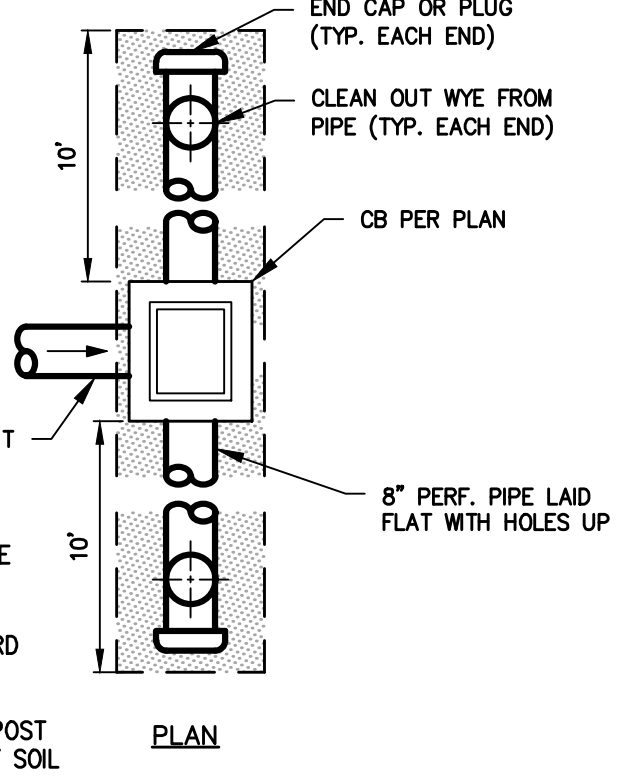
24"x36" 1/19/2023 U:\CSD\2019\2019084\ENGINEERING\0-PLAN\_SHEETS\0-GRD.DWG



SCALE IN FEET  
1"=10'



3 FLOW SPREADER  
NOT TO SCALE



- NOTES:
- 1. CONSTRUCT TRENCH TO PREVENT POINT DISCHARGE AND/OR EROSION
- 2. TRENCH AND GRADE BOARD MUST BE LEVEL
- 3. GRADE BOARD SUPPORT POST SPACING AS REQUIRED BY SOIL CONDITIONS

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 47L ~ 8" HDPE FUSE WELDED 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" PVC 1.0%
- 8 6" X 6" WYE IE=308.18
- 9 2LF ~ 8" PVC @ 1.0%
- 10 6" CLEANOUT RIM=309.0± IE=308.2
- 11 2LF ~ 6" 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=308.48
- 16 6" CLEANOUT RIM=310.0± IE=308.50
- 17 3LF 4" @ 1.0%
- 18 4" 45' BEND IE=308.53
- 19 32LF 4" @ 1.0%
- 20 4" WYE IE=308.83 OUTLET CONNECTION FOR BIO-RETENTION PLANTER 'C'
- 21 12LF 4" PVC SOLID PIPE @ 1.0% FOR FOOTING GARAGE FOOTING DRAIN ONLY.
- 22 1" PVC FORCE MAIN FROM PUMP STATION
- 23 PUMP STATION TYPE II 54" CATCHBASIN W/SOLID LID RIM=309.2± IE=306.50, 1" FM IE=303.94, 4"
- 24 14LF 4" PVC @ 1.0% MIN. INSIDE BIO RETENTION PLANTER 4" IE=304.0
- 25 4" 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

WORK DONE UNDER PHASE ONE PERMIT

WORK DONE UNDER PHASE ONE PERMIT

STORM DRAINAGE NOTES:

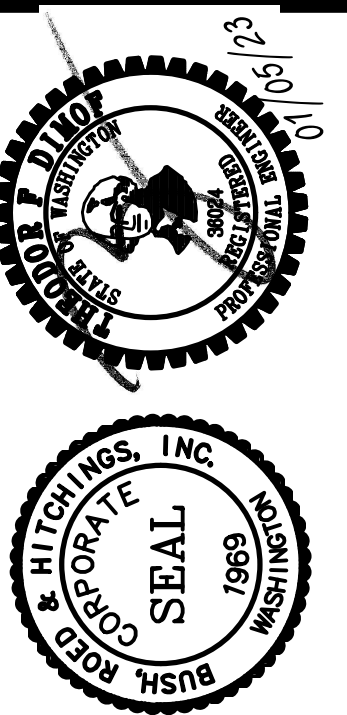
- 31 4LF ~ 4" PVC @ 2.0% MIN.
- 32 18LF ~ 4" PERFORATED PIPE @ 0.0% IE = 308.36 CAP BOTH ENDS OF PIPE
- 33 4LF ~ 4" PVC @ 2.0% MIN.
- 34 11LF ~ 4" PERFORATED PIPE @ 0.0% IE = 308.88 CAP BOTH ENDS OF PIPE
- 35 4" 45' BEND IE=308.84
- 36 23LF ~ 4" PVC @ 1.0% MIN.
- 37 4" 45' BEND IE=309.06
- 38 13LF ~ 4" PVC @ 1.0% MIN.
- 39 11LF ~ 4" PERFORATED PIPE @ 0.0% IE = 308.201 CAP END OF PIPE

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 WERE 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 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.



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



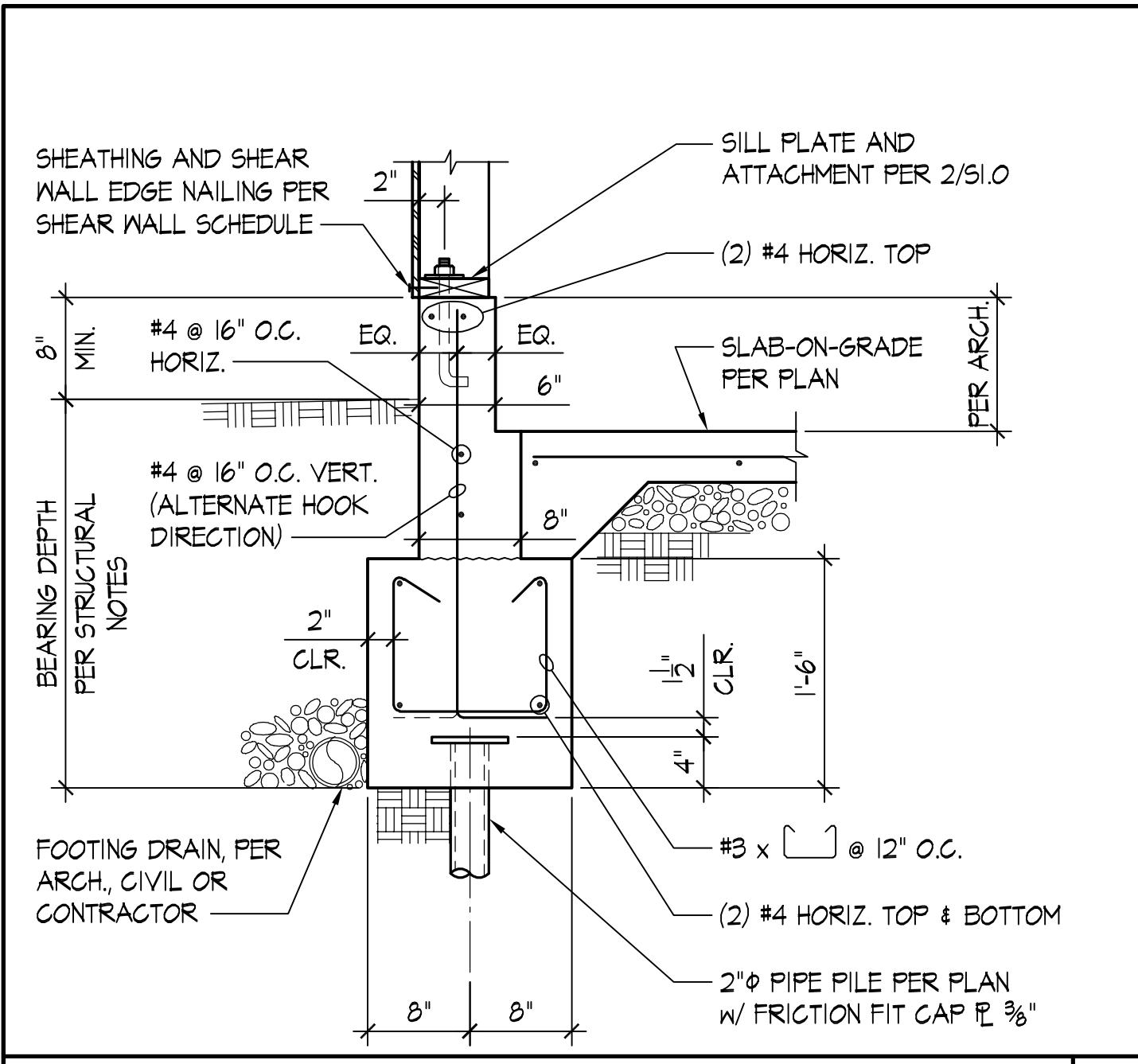
NO.	REVISION	DATE

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

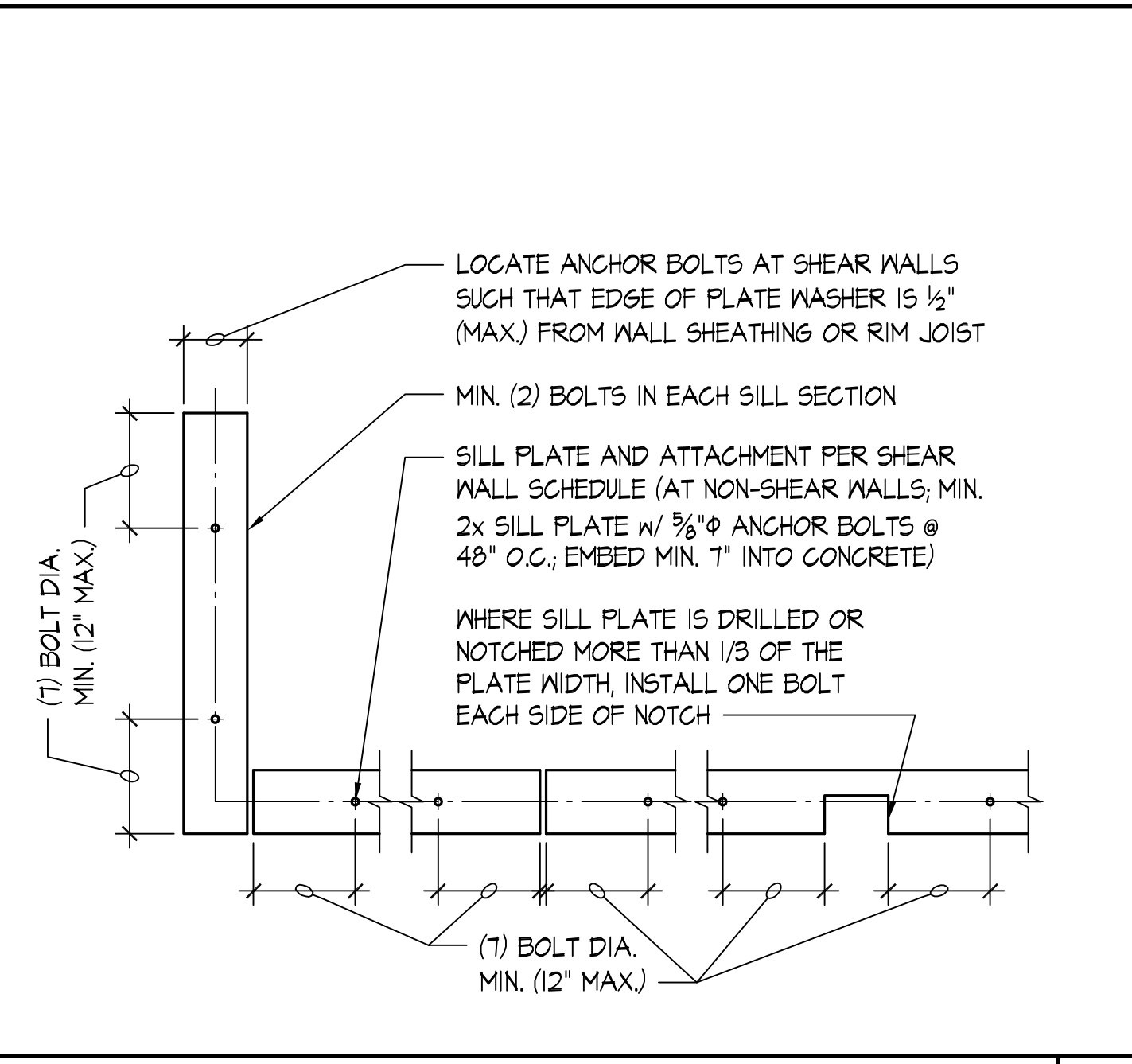
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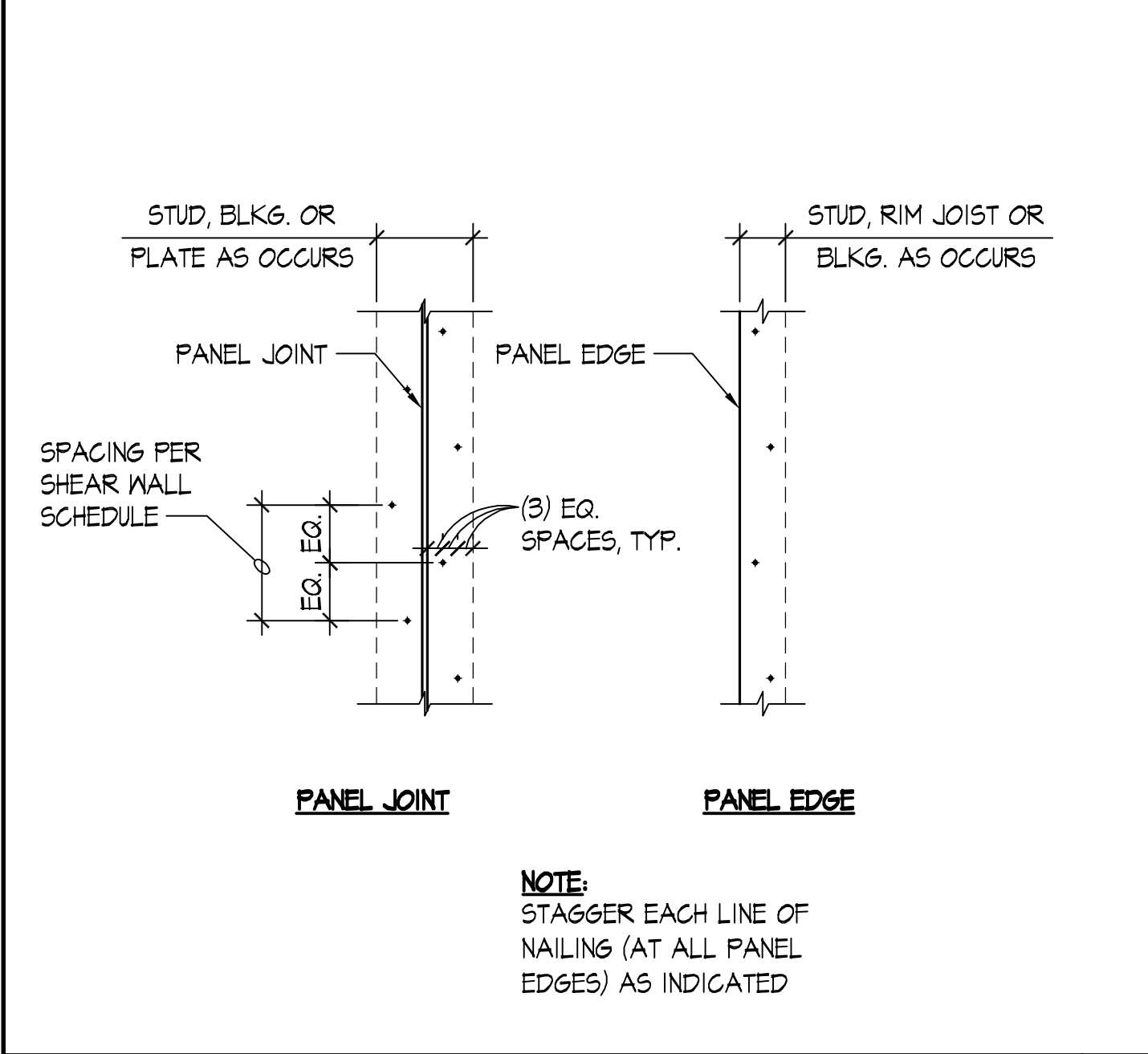
TYPICAL PIPE PILE FOUNDATION - EXTERIOR SCALE: NONE 1



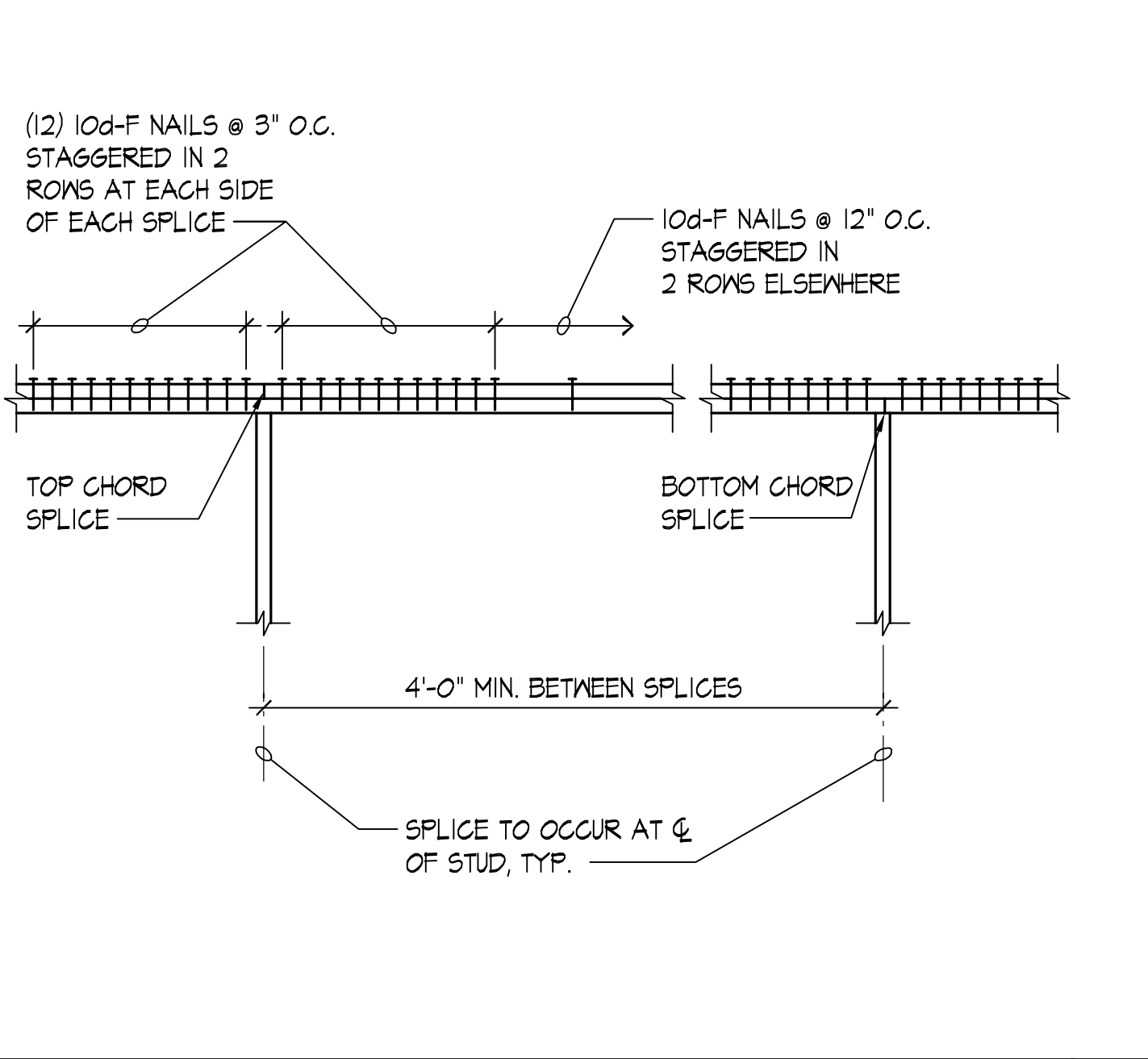
TYPICAL SILL PLATE BOLTING - PLAN VIEW SCALE: NONE 2

SHEAR WALL SCHEDULE							
SHEAR WALL TYPE	SHEAR WALL SHEATHING ①	PANEL EDGE FRAMING ②⑦	PANEL EDGE NAILING ③	BOTTOM PLATE ATTACHMENT		TOP PLATE ATTACHMENT	
				2x BOTTOM PLATE CONNECTION TO RIM JOIST OR BLOCKING BELOW	ANCHOR BOLTING OF SILL PLATE TO CONCRETE BELOW ④⑤	RIM JOIST OR BLOCKING CONNECTION TO TOP PLATE ⑥	
				3x PLATE	2x PLATE	INTERIOR WALL	EXTERIOR WALL
SW-6	7/16" APA ONE-SIDE SHTG.	2x	0.131"φx2 1/2" @ 6" O.C.	0.148"φx3 1/4" @ 6" O.C. ⑧	5/8"φ @ 48" O.C.	5/8"φ @ 48" O.C.	A35 @ 16" O.C. LTP4 @ 16" O.C.

- NOTES:**
- INSTALL PANEL SHEATHING EITHER HORIZONTALLY OR VERTICALLY FOR THE ENTIRE LENGTH OF THE WALL PER PLAN. WALL STUD SPACING SHALL BE 16" O.C. MAXIMUM.
  - ALL INTERMEDIATE WALL STUDS SHALL BE PER PLAN. PROVIDE BACKING FRAMING AT ALL PANEL EDGES INCLUDING HORIZONTAL BLOCKING PER THE SCHEDULE.
  - PROVIDE NAILING TO ALL PANEL EDGES, TOP & BOTTOM PLATES AND HORIZONTAL BLOCKING. PROVIDE THE SAME NAILING PATTERN TO EACH MULTIPLE STUD OF THE BUILT-UP HOLD DOWN POST. NAIL PANEL TO INTERMEDIATE FRAMING MEMBERS w/ 0.131"φ x 2-1/2" @ 12" O.C.
  - EMBED CAST-IN-PLACE 5/8"φ ANCHOR BOLTS 7" MIN. (OR EMBED ADHESIVE ANCHOR BOLTS 5 1/2" IN (E) CONCRETE; SEE STRUCTURAL NOTES). PROVIDE PLATE WASHER 3" x 3" x 1/4" AT EACH ANCHOR BOLT. SILL PLATES SHALL BE TREATED PER GENERAL NOTES, AND SHALL BE 2x OR 3x PER THE SCHEDULE. SEE DETAIL 2/51.0 FOR OTHER REQUIREMENTS.
  - PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.
  - PROVIDE 0.131"φ x 1-1/2" LONG NAILS FOR CLIPS DIRECTLY ATTACHED TO FRAMING MEMBERS; PROVIDE 0.131"φ x 2-1/2" LONG NAILS FOR CLIPS INSTALLED OVER FLOOR OR WALL SHEATHING ON FRAMING MEMBERS. SEE 6/51.0 FOR TOP PLATE SPLICE.
  - ALTERNATIVE TO 3x STUDS AND 3x HORIZ. BLOCKING IS (2) 2x STUDS/BLKG. NAILED TOGETHER WITH 0.148"φ x 3" LONG NAILS WITH THE SAME SPACING AS THE PANEL EDGE NAILING PER THE SCHEDULE (STAGGER).
  - RIM JOIST/BLOCKING MINIMUM WIDTH OF 1 3/4". STAGGER NAILS PER 5/51.0 WHERE SPACING IS LESS THAN 6" O.C.

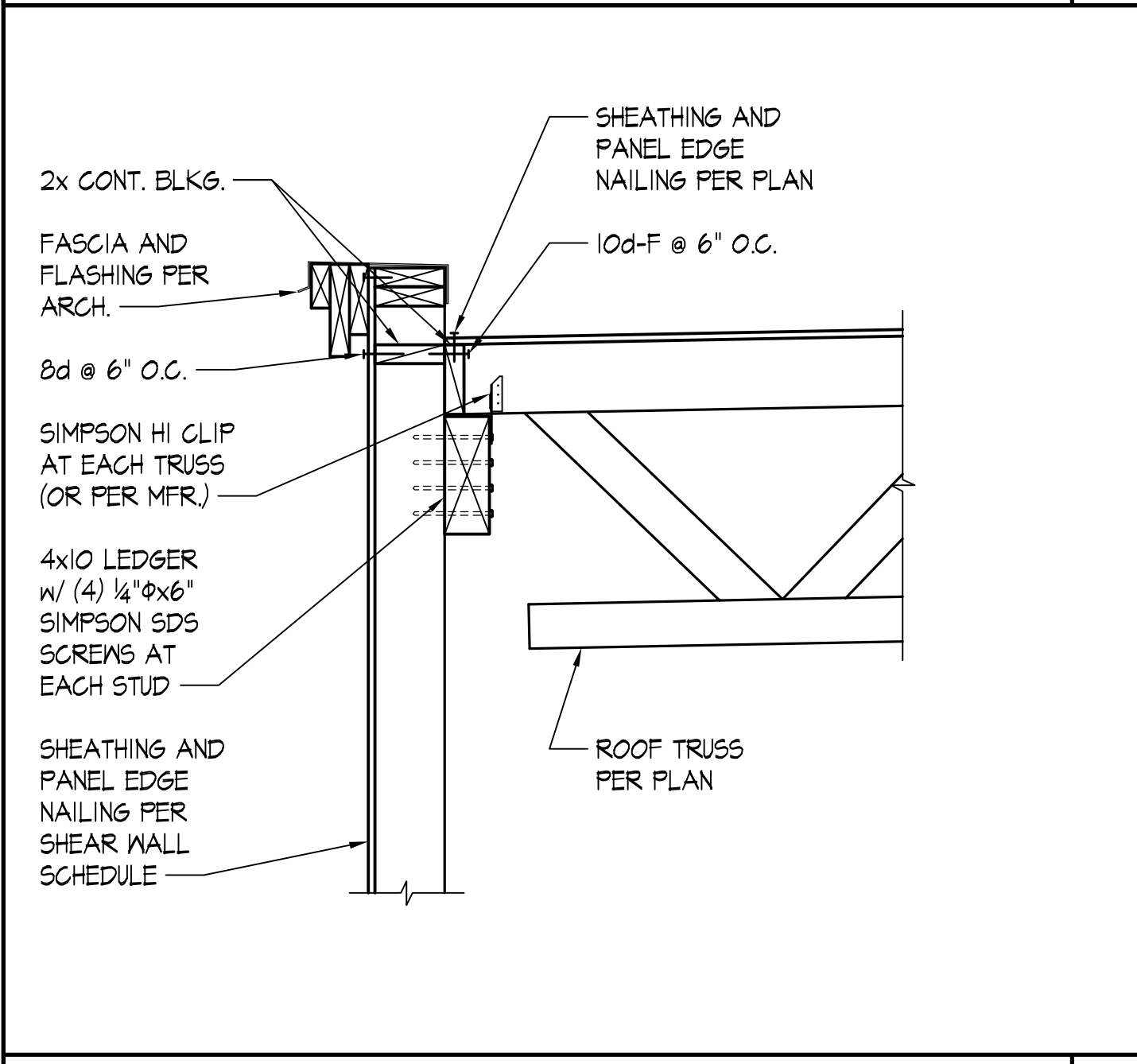


TYPICAL STAGGERED NAILING SCALE: NONE 5

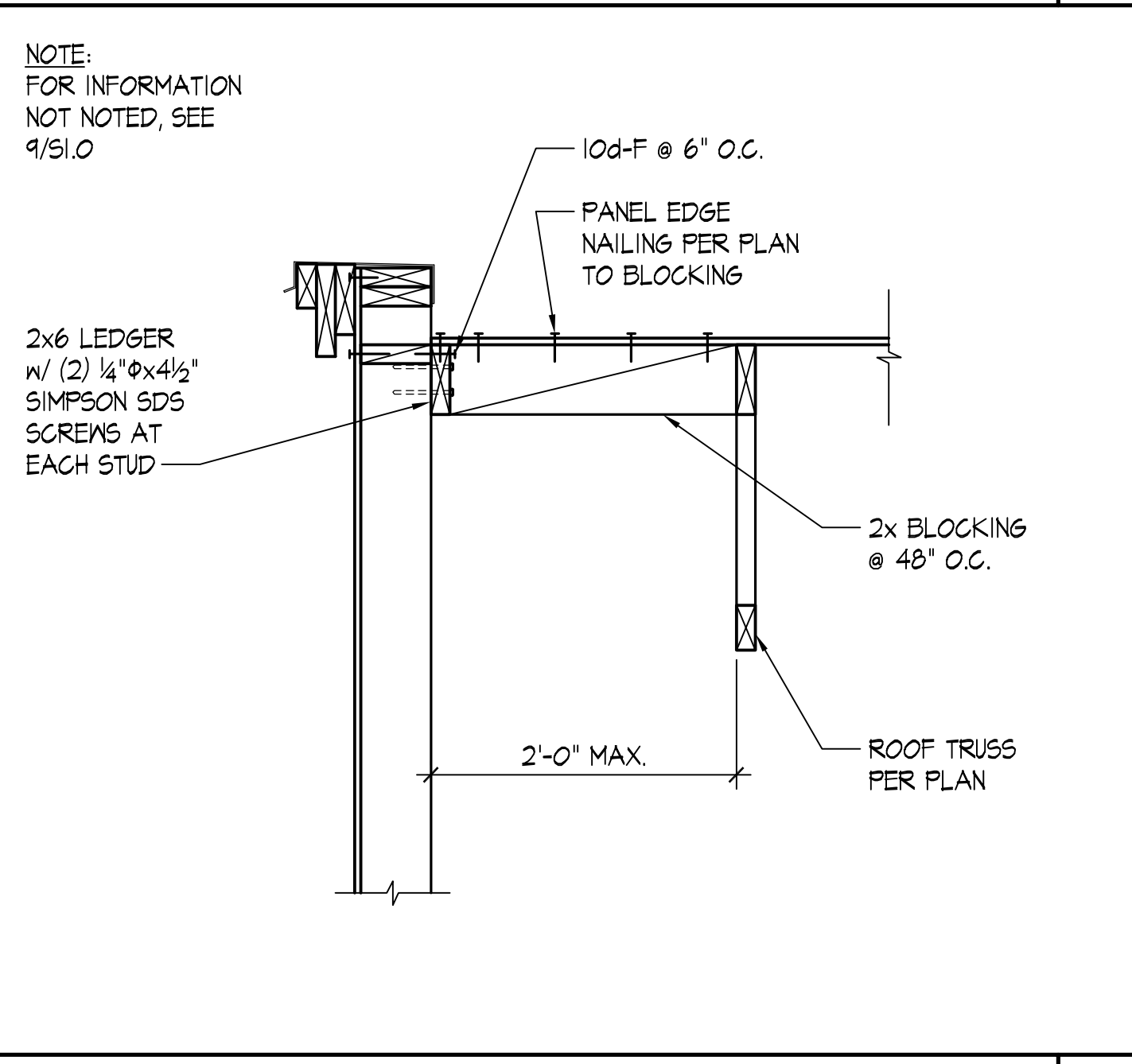


TYPICAL TOP PLATE SPLICE SCALE: NONE 6

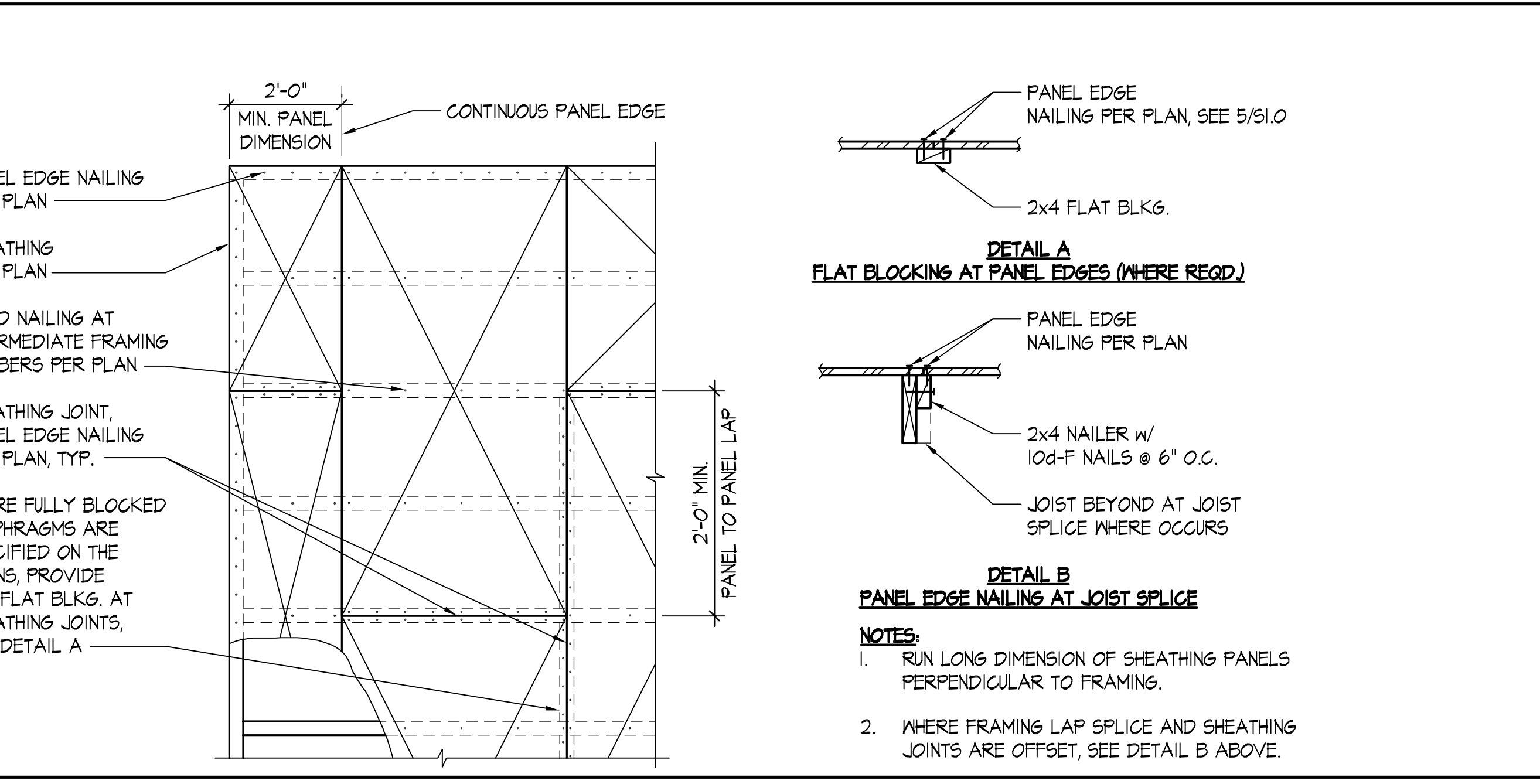
SHEAR WALL SCHEDULE - 8d NAILS SCALE: NONE 8



TYPICAL EXTERIOR WALL - ROOF TRUSS PERPENDICULAR SCALE: NONE 9



TYPICAL EXTERIOR WALL - ROOF TRUSS PARALLEL SCALE: NONE 10



TYPICAL ROOF DIAPHRAGM SHEATHING SCALE: NONE 12

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REVISIONS:

Mark	Date

PERMIT SET 02-04-22

TYPICAL FOUNDATION & WOOD DETAILS

SHEET: S1.0