

COLD SPRING DESIGN, LLC

222 SOUTH MAIN STREET - FORT ATKINSON, WI 53538
(920)568-9530 - WWW.COLDSPRINGDESIGN.NET

OCTAGON HOUSE

DRAWING INDEX:

STRUCTURAL

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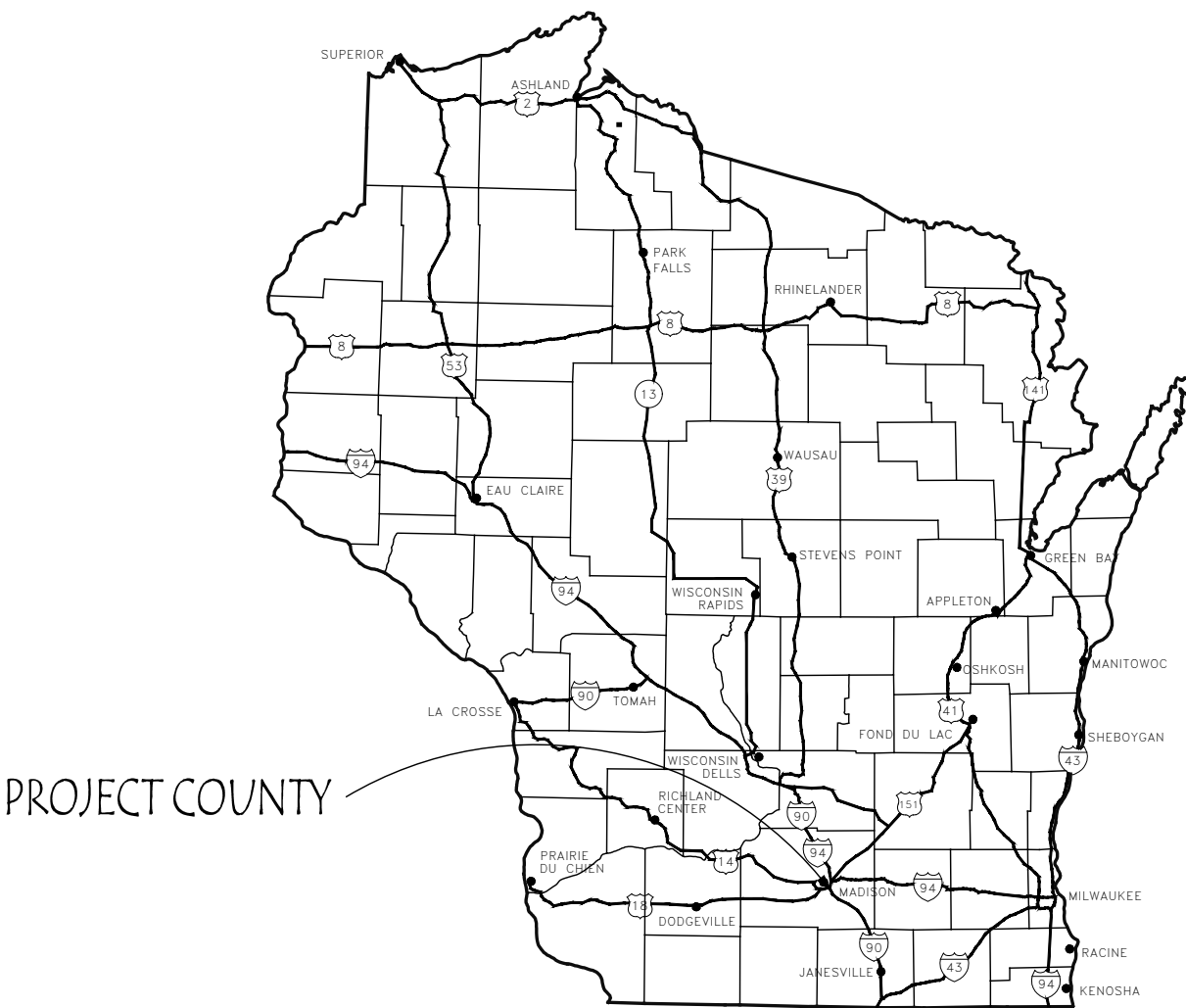
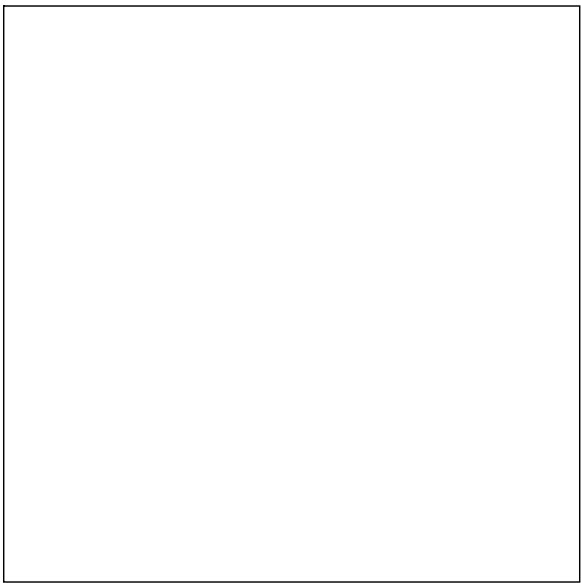
ARCHITECTURAL

- A2.1 EXTERIOR ELEVATIONS

CIVIL

- SITE PLAN

SEAL



LOCATION MAP

OWNER:

xxx
919 Charles St.
Watertown, WI 53094

CONTACT:

xxx
xxx@xxx.com
608-xxx-xxxx

ARCHITECT / ENGINEER:

COLD SPRING DESIGN, LLC
222 SOUTH MAIN STREET
FORT ATKINSON, WI 53538
PHONE: (920)568-9530
CONTACT: CONOR NELAN

PROJECT INFORMATION:

All requirements per 2015 IBC

Building Information:

Building Height: 1-STORY, SEE ELEVATIONS
Use & Occupancy Classification: OCCUPANCY TYPE B -
720 sq. ft. conditioned space

Construction Type: Type VB -
NON-SPRINKLERED



222 South Main Street
Fort Atkinson, WI 53538
P (920)568-9530
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ISSUE

#	DATE	DESCRIPTION

OCTAGON HOUSE
919 CHARLES ST.
WATERTOWN, WI 53094

CSD PROJECT #:

SCALE: AS NOTED
DATE: 7/31/2024
DRAWN BY: ATF
CHECKED BY: CFN

TITLE SHEET

TSO.1

1. USE CURRENT COMMERCIAL BUILDING CODE ADOPTED BY WISCONSIN.
2. CONSULT ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR LOCATION AND DIMENSIONS OF CURBS, PADS, INSERTS, SLEEVES, DRIPS, REGS, REVEALS, DEPRESSIONS, AND OTHER PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS.
3. SIZE AND LOCATION OF ALL ROOF, FLOOR, AND WALL OPENINGS TO BE VERIFIED WITH MECHANICAL AND ELECTRICAL CONTRACTORS REGARDING SUCH OPENINGS.
4. CONSULT ARCHITECT FOR ANY NECESSARY DIMENSIONS WHICH ARE NOT SHOWN ON PLANS. SCALING OF DRAWINGS IS NOT PERMITTED.
5. SIMILAR PORTIONS OF THE BUILDING SHALL HAVE SIMILAR DETAILING UNLESS NOTED OTHERWISE.
6. ELEVATIONS SHOWN ON PLAN ARE BASED ON 100'-0" AS FINISHED FIRST FLOOR ELEVATION.
7. ELEVATIONS SHOWN ON PLANS ARE TO TOP OF STEEL, CONCRETE, OR PLYWOOD SHEATHING, UNLESS NOTED OTHERWISE.
8. ALL WORK SHALL CONFORM TO OSHA REQUIREMENTS.
9. STRUCTURAL MEMBERS INCLUDING JOISTS, SLABS, BEAMS, TRUSSES, COLUMNS, AND WALLS ARE DESIGNED TO BE 12" MIN. THICK. CONTRACTOR IS RESPONSIBLE FOR BRACING WITHOUT OVER-STRESSING. ALL STRUCTURAL ELEMENTS AS REQUIRED BY ANY STATE OF CONSTRUCTION UNTIL COMPLETION OF THIS PROJECT.
10. IN NO CASE SHALL STRUCTURAL ALTERATIONS OR WORK AFFECTING A STRUCTURAL MEMBER BE MADE, UNLESS APPROVED BY THE ARCHITECT.
11. SUBMIT REPRODUCIBLE COPY OF ALL STRUCTURAL SHOP DRAWINGS.

WOOD TRUSS SHIP DRAWINGS SHALL SHOW THE FOLLOWING INFORMATION

1. INFORMATION WHICH THE RESPONSIBLE BUILDING DESIGN PROFESSIONAL WILL CHECK FOR COMPLIANCE WITH CONTRACT DOCUMENTS:
 - a. ERECTION PLAN: SHOWING DIMENSIONS, BUILDING SECTIONS AND TRUSS IDENTIFICATION.
 - b. BEARING DESIGN: SHOWING BEARING LENGTH, WIDTH, AND DEPTH INDICATING CONFORMANCE TO TRUSS CALCULATIONS.
 - c. DESIGN LOADS: DEAD AND LIVE LOADS SHALL BE SHOWN ON THE FRAMING PLAN AND/OR TRUSS ELEVATION INDICATING CONFORMANCE TO TRUSS CALCULATIONS.
 - d. ALL PERMANENT BRACING: SHOW TOP OF BRACING, BRACING TYPE, BRACING MEMBER BRACING ON FRAMING PLAN AND TRUSS ELEVATION. SUPPLIER AND INSTALLER OF THIS BRACING SHALL ALSO BE INDICATED.
 - e. TRUSS DIMENSIONS: SHOW DEPTH, SPAN, BEARING, HEIGHT, AND SLOPES AT ALL CRITICAL POINTS.
2. INFORMATION THAT SHALL BE THE RESPONSIBILITY OF THE FABRICATOR AND TRUSS DESIGNER AND SHALL BE PROVIDED FOR INFORMATION WITH THE SHOP DRAWING SUBMITTAL.
 - a. MEMBER DESIGN: INCLUDING WEB CONFIGURATION, MEMBER SIZE, GRADE OF LUMBER, FABRICATED SPLICES, REACTIONS, AND MEMBER BRACING REQUIRED BY TRUSS DESIGN.
 - b. INTERIOR CONNECTIONS: DESIGN AND SHOP DETAIL OF WEB AND CHORD CONNECTIONS INCLUDING PLATE AND BOLT SIZES.
 - c. MEMBER CONNECTIONS: DESIGN AND INDICATE ALL NECESSARY HARDWARE FOR PROPER INSTALLATION OF TRUSSES INCLUDING, BUT NOT LIMITED TO: GIRDLER PLIES CONNECTIONS, TRUSS-TO-GUSSER CONNECTIONS, TIE-DOWNS, AND FIELD SPLICES.
 - d. STRUCTURAL DESIGN OF THE TRUSS: PROVIDE ALL NECESSARY CALCULATIONS AND OBTAIN ALL APPROVALS NECESSARY FOR CONFORMANCE TO BUILDING CODE. VERIFY SUBMITTAL AND APPROVAL BY SENDING COPY TO BUILDING DESIGN PROFESSIONAL.
 - e. PROVIDE CONTRACT INSTALLER WITH ALL DATA NECESSARY FOR PROPER INSTALLATION OF TRUSS. TRUSS SUPPLIER TO USE THE ARCHITECTURAL BUILDING SECTIONS A REFLECTED ELEVATION PLANS FOR LOCATIONS WHERE ROOF TRUSSES NEED TO BE ADJUSTED FOR CEILING HEIGHT REQUIREMENTS.

1. ALL BRACING SHOWN OR DESCRIBED SHALL BE MINIMUM 2x4 WITH 2- 16d IN EVERY TRUSS IT CROSSES.
2. ALL TRUSS TOP CHORDS SHALL BE CONTINUOUSLY BRACED BY THE ROOF DECKING.
3. ALL TRUSS WEB MEMBERS SHALL BE BRACED AT 4'-0" UNLESS CALCULATIONS SHOW OTHERWISE.
4. ALL HORIZONTAL BRACING SHALL BE STIFFENED AT 20' ON EITHER:
 - a. DIAGONAL BRACING EXTENDED TO A SHEAR WALL PARALLEL TO THE ORIGINAL BRACING. SEE BRACING DETAIL 63.1: FIGURES 1(a) THROUGH 1(d).
 - b. A 1/2" PLYWOOD SHEET EXTENDED TO ROOF DECK OR SHEAR WALL.
5. ALL TRUSS BOTTOM CHORDS SHALL BE BRACED AT 4'-0" UNLESS CALCULATIONS SHOW OTHERWISE. CONTINUOUS SHEATHING APPLIED TO BOTTOM CHORD WILL SATISFY THIS BRACING REQUIREMENT.

BUILDING OCCUPANCY CATEGORY	RESIDENTIAL
SNOW LOADS	
IMPORTANCE FACTOR - I_s	1.0
EXPOSURE FACTOR - C_e	1.0
THERMAL FACTOR - C_t	1.1
GROUND SNOW LOAD - P_g	SEE DESIGN CRITERIA
FLAT ROOF SNOW LOAD - P_f	SEE DESIGN CRITERIA
APPLY DESIGN DRIFT LOADS TO ROOF TRUSSES WHERE REQUIRED BY CODE.	
WIND LOADS	
IMPORTANCE FACTOR - I_w	1.00
BASIC WIND SPEED - V	115 mph
EXPOSURE CATEGORY	B
DEAD LOADS	
ROOF DEAD LOAD	20 psf (10 TOP CHORD & 10 BOTTOM CHORD)
FLOOR DEAD LOAD	20 psf (10 TOP CHORD & 10 BOTTOM CHORD) 15 psf PARTITION LOAD
DEFLECTION LIMITS	
ROOF	
LIVE LOAD	L/360
TOTAL LOAD	L/240
FLOOR	
LIVE LOAD	L/480
TOTAL LOAD	L/360

<p>4. ARCHITECT & CONTRACTOR SHALL DETAIL & CONSTRUCT BUILDING FINISHES TO ACCOMMODATE AN EXPECTED BUILDING SHRINKAGE OF APPROXIMATELY $\frac{1}{4}$" TO $\frac{3}{8}$" PER FLOOR OF WOOD CONSTRUCTION. PROPER CARE SHALL BE TAKEN TO PREVENT STORED OR INSTALLED LUMBER FROM THE ELEMENTS. DO NOT ALLOW LUMBER TO REST IN STANDING WATER.</p>	
<p>5. FRAMING MEMBERS: VERTICAL MEMBERS:</p>	<p>SEE BEARING WALL SCHEDULE, KD, MOISTURE CONTENT SHALL BE BETWEEN 15% AND 19%</p>
JOISTS:	<p>2x10 NO 1 NO 2 SPF, UNO SIZE & SPACING PER PLANS</p>
JOISTS (EXPOSED TO WEATHER):	<p>2x10 NO 1 NO 2 TREATED SOUTHERN YELLOW PINE, UNO SIZE & SPACING PER PLANS</p>
POSTS:	<p>NO 2 SPF (INTERIOR), UNO NO 2 TREATED SOUTHERN YELLOW PINE (EXTERIOR), UNO</p>
<p>3. SEE WOOD BOG BUILT SCHEDULE FOR BOTTOM PLATE & DOUBLE TOP PLATE INFORMATION.</p>	
<p>4. FLOOR SHEATHING SHALL BE $\frac{3}{4}$" ATRA RATED, T&G SHEATHING, GLEUE & NAILED TO FLOOR FRAMING W/ 8d COMMON OR BOX NAILS @ 8" OC ALONG EDGES AND 12" OC ALONG INTERMEDIATE MEMBERS. STAGGER PANEL EDGES.</p>	
<p>5. ROOF SHEATHING SHALL BE $\frac{3}{4}$" ATRA RATED OSB SHEATHING ATTACHED TO THE ROOF FLOOR FRAMING MEMBERS W/ 8d COMMON OR BOX NAILS @ 8" OC ALONG EDGES AND 12" OC ALONG INTERMEDIATE MEMBERS (1" MINIMUM ENHANCEMENT) INTO FRAMING MEMBERS. STAGGER PANEL EDGES.</p>	
<p>6. EXTERIOR WALLS SHALL BE SHEATHED W/ $\frac{1}{2}$" ATRA RATED SHEATHING, ATTACH DIRECTLY TO THE OUTSIDE FACE OF EXTERIOR STUD WALLS WITH 8d COMMON OR BOX NAILS @ 8" OC ALONG EDGES AND 12" OC ALONG INTERMEDIATE MEMBERS, UNO.</p>	

- DESIGNATED AS A BEAR WALL, SHALL BE CONSTRUCTED WITH A MINIMUM OF 1 LAYER 5" GYPSUM BOARD ATTACHED W/ 6" COOLER NAILS @ 8" OC ALONG EDGES & 12" OC AT INTERMEDIATE MEMBERS. UNDO.
8. DISK UNDERLIFT ON ROOF TRUSSES AS INDICATED IN THE DESIGN CRITERIA. PROVIDE THE DOWN CUPL AT EACH TRUSS, AT EVERY POINT OF BEARING.
9. TYPICAL TRUSS SPACING = 2'-0" EXCEPT WHERE SPECIFICALLY NOTED.
10. COORDINATE WALL STUD LOCATIONS TO ALIGN WITH TRUSS BEARING LOCATIONS @ ALL WALLS.
11. PROVIDE EQUIVALENT SIZE SOLID BLOCKING & VERTICAL MEMBERS THROUGH UNDERLYING FLOORS / WALLS BELOW MULTIPLE BLOCKING OR POSTS CARRYING CONCENTRATED LOADS.
12. COLUMN SIZES SHOWN ARE MIN. CONTRACTOR MAY USE LARGER SECTION IF REQ'D TO FULLY SUPPORT MEMBERS.
13. AS A MINIMUM, ALL CONNECTIONS SHALL CONFORM TO FASTENING SCHEDULE TABLE 230A.8.1 WEGOB 2006. DRAWING DETAILS SHALL COVER IF THEIR CONNECTION CAPACITY IS GREATER THAN THOSE SPECIFIED IN TABLE 230A.8.1.
14. WHERE BUILT-UP SECTIONS OF DIMENSIONAL LUMBER ARE INDICATED, FASTENING SHALL BE IN ACCORDANCE WITH NDS 15.3.3. MULTIPLE LVL SECTIONS SHALL BE FASTENED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
15. USE JOIST HANGERS DESIGNED FOR GIVEN MEMBER SIZE TO SUPPORT ALL JOIST/HEADERS FRAMING INTO SIDES OF OTHER MEMBERS.
16. PROVIDE CROSS BRIDGING/BLOCKING BETWEEN FLOOR JOISTS PER NATIONAL DESIGN SPECIFICATION 4.4.1.
17. DO NOT CUT, NOTCH, OR DRILL HOLES IN IRRADIATED LVL OR JOISTS WITHOUT ENGINEER APPROVAL.
18. ALL HEADERS NOT ABOVE DOORS OR WINDOWS TO BE FLUSH WITH CEILING UNDO.

21. ALL CONNECTORS (I.E., SIMPSON HANGERS, ETC.) TO BE GALVANIZED WHEN USED FOR EXTERIOR PURPOSES.

22. GENERAL CONTRACTOR TO COORDINATE WOOD TRUSS, PLUMBING, AND HVAC LOCATIONS.

1. CONTRACTOR SHALL PROVIDE FROST AND MOISTURE PROTECTION FOR FOOTINGS EXPOSED DURING CONSTRUCTION.
2. REFER TO ARCHITECTURAL DRAWINGS OR PLUMBING DRAWINGS FOR SPECIFIC FLOOR DRAIN LOCATIONS AND ELEVATIONS.
3. REFER TO FOUNDATION DETAILS SHEET FOR MISCELLANEOUS DETAILS NOT CUT ON PLAN.
4. FOOTING EXCAVATIONS SHALL BE EXAMINED BY THE GEOTECHNICAL ENGINEER TO CONFIRM THAT THE SOILS AT THE BOTTOM OF THE EXCAVATION ARE CAPABLE OF PROVIDING THE ALLOWABLE BEARING CAPACITY NOTED IN THE DESIGN CRITERIA. CONTACT THE ARCHITECT OR ENGINEER IF UNABLE TO ATTAIN THIS SOIL BEARING PRESSURE.
5. NO PROVISION HAS BEEN MADE FOR FUTURE EXPANSION.
6. VERIFY SIZES OF ALL STOPS WITH ARCHITECT PRIOR TO CONSTRUCTION.

ALT	- ANCHOR BOLT	ID	- INSIDE DIAMETER
ALT	- ALTERNATE	IF	- INSIDE FACE
AGG	- AGGREGATE	INSUL	- INSULATION
ALUM	- ALUMINUM	INT	- INTERIOR
ARCH	- ARCHITECT/		
ARCHITECTURAL		JBE	- JOIST BEARING ELEVATION
		JT	- JOINT
B.L.D.	- BUILDING		
BLK	- BLOCK (CMU)	L	- STEEL ANGLE DESIGNATION
BM	- BEAM	LG	- LENGTH/LONG
BTM	- BOTTOM	LH	- LONG LEG HORIZONTAL
BTM	- BOTTOM	LV	- LONG LEG VERTICAL
C	- CHANNEL	LP	- LONG POINT
		LVL	- LAMINATED YEMBER LUMBER
CB	- CATCH BASIN	MAX	- MAXIMUM
CI	- CAST IRON	MBW	- MASONRY BEARING WALL
CIJ	- CAST-IN-PLACE	MIN	- MINIMUM
CON	- CONSTRUCTION CONTROL	MSW	- MASONRY SHEAR WALL
CON	- CONSTRUCTION CONTROL	MTL	- METAL
CL	- CENTER LINE		
CL	- CEILING	N/C	- NOT IN CONTRACT
CLR	- CLEAR DISTANCE	NOM	- NOMINAL
CMU	- CONCRETE MASONRY UNIT	NTS	- NOT TO SCALE
COL	- COLUMN	N/S	- NORTH-SOUTH DIRECTION
CONC	- CONCRETE		
CONT	- CONTINUOUS		
CONTR	- CONTRACTOR	OC	- ON CENTER

DBA	- DECK BEARING ANGLE	OH	- OVER HEAD
DD	- DIAMETER	OPP	- OPPOSITE
DDM	- DIMENSION		
DP	- DOWN	PERM	- PERIMETER
DP	- DOWNED PIER	PC	- PRECAST / PRESTRESSED
DP	- DETAIL	PL	- STEEL PLATE DESIGNATION
DWG	- DRAWING	PT	- POINT
DWL	- DOWEL	PT	- POST TENSIONING
		R	- RADIUS
EA	- EACH	RD	- ROAD DRAIN
EC	- ELECTRICAL CONNECTOR	RE	- REINFORCING / REINFORCEMENT
EJ	- ELEVATION	REQD	- REQUIRED
EL	- ELEVATION		
ELEV	- ELEVATOR	SCHED	- SCHEDULE
ENG	- ENGINEER	SM	- SIMILAR
EQ	- EQUAL	SHT	- SHEET
EW	- EACH WAY	SPA	- SPACE / SPACES
E-W	- EAST-WEST DIRECTION	SPC	- SPECIFICATION
EXIST	- EXISTING	SQ	- SQUARE
EXP	- EXPANSION	SS	- STAINLESS STEEL
EXT	- EXTERIOR	STR	- STRUCTURAL
		STL	- STRUCTURAL
FD	- FLOOR DRAIN	THK	- THICK
FDN	- FOUNDATION	TL	- TOP OF LEDGE ELEVATION
FE	- FIRE EXTINGUISHER	TP	- TOP OF PIER ELEVATION
FF	- FINISH FLOOR	TS	- SEE HSS DESIGNATION
FT	- FLOOR TRUSS	TYP	- TYPICAL
FTG	- FOOTING	TW	- TOP OF WALL ELEVATION
FUT	- FUTURE		
FLV	- FLOOR VERIFY		
		UD	- URINAL SLAB DEPRESSION
GA	- GAUGE	UNO	- UNLESS NOTED OTHERWISE
GALV	- GALVANIZED		

HM	- HOLLOW METAL	W/O	- WITH
HORIZ	- HORIZONTAL	W/O	- WITHOUT
HP	- HIGH POINT	WD	- WOOD
HSS	- HOLLOW STRUCTURAL SECTION (REPLACES "TS" DESIGNATION)	WF	- WIDE FLANGE DESIGNATION
HT	- HEIGHT	W/P	- WORKING POINT
HVAC	- HEATING, VENTILATING, &	WSBW	- WOOD STUD BEARING WALL
		WNW	- WELDED WIRE FABRIC

REINFORCING SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 (CURRENT EDITION).

- ALL LAPLS SHALL BE CLASS 'B' PER ACI 318 UNLESS OTHERWISE NOTED ON THE DESIGN DRAWINGS, OR UNLESS THE DETAILER TAKES SPECIAL CARE TO PROVIDE STAGGERED LAPLS. USE TOP BAR LAP LENGTHS FOR ALL HORIZONTAL WALL SPECIAL CARES AND FOR TOP BARS IN SLABS AND BEAMS OVER 12 INCHES DEEP.
- LAP LENGTH SHALL BE SPECIFICALLY NOTED ON PLACING DRAWINGS WHERE MORE THAN ONE BAR MAKES UP A CONTINUOUS STRING.
- CORNER BARS WITH CLASS 'B' PER ACI 318 LAPLS SHALL BE PROVIDED AT ALL WALL CORNERS AND INTERSECTIONS PER DETAIL 152.1.
- HORIZONTAL BARS, EXCEPT FOR CONTINUOUS STRINGS FROM ONE CORNER TO ANOTHER, SHALL BE DETAILED TO SHOW THE DISTANCE FROM AT LEAST ONE END OF THE BAR TO THE NEAREST BUILDING GRID LINE OR WALL.

The diagram illustrates a horizontal reinforcement bar with a lap joint. A dimension line labeled 'L' indicates the lap length. Another dimension line labeled 'S MIN.' indicates the minimum distance from the end of the bar to the lap joint.

- WELDING WIRE FABRIC SHALL BE LAPPED AND/OR ANCHORED TO DEVELOP F_y PER ACI 315.

The diagram illustrates a horizontal reinforcement bar with a lap joint. A dimension line labeled 'L' indicates the lap length. Another dimension line labeled 'S MIN.' indicates the minimum distance from the end of the bar to the lap joint.

- PROVIDE MINIMUM COVER PER ACI 318 7.2.1.
- PROVIDE REINFORCING AT CONCRETE OPENINGS PER DETAIL 252.1.
- PROVIDE TYPICAL VERTICAL WALL JOINTS PER DETAIL 352.1.
- PROVIDE ISOLATION BOARD WHERE SLABS ABUT VERTICAL SURFACES PER DETAIL 452.1.
- PROVIDE FOOTING STEPS PER DETAIL 552.1.
- PROVIDE SLAB ON GRADE CONSTRUCTION AND CONTROL JOINTS PER DETAILS 6 & 752.1.

CONCRETE CAST AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH FOOTINGS	3' MIN
CONCRETE EXPOSED TO EARTH OR WEATHER	
WALLS, COLUMNS, & BEAMS	
BARS UP TO #5	1/2" MIN
#6 BARS AND UP	2" MIN
CONCRETE NOT EXPOSED TO EARTH OR WEATHER	
WALLS	
BARS UP TO #11	3/4" MIN
#14 BARS AND UP	1/2" MIN
ELEVATED SLABS	
TOP BARS	3/4" MIN
BOTTOM BARS	1" MIN
BEAMS	
ALL BARS	1/2" MIN
COLUMNS	
ALL BARS	1/2" MIN

DESIGN CODE			
INTERNATIONAL BUILDING CODE 2015 w/ WISCONSIN AMENDMENTS			
DESIGN LOADS			
LIVE LOAD INFORMATION			
CORRIDOR		100 psf	
DECK - RESIDENTIAL		40 psf	
MECHANICAL		125 psf	
PUBLIC AREA		100 psf	
STAIR		170 psf	
STORAGE		125 psf	
SNOW LOAD INFORMATION			
GROUND SNOW LOAD - Pg		30.0 psf	
SNOW EXPOSURE FACTOR - Ce		1.00	
SNOW LOAD IMPORTANCE FACTOR - Is		1.00	
THERMAL FACTOR - Ct		1.10	
FLAT ROOF SNOW LOAD - Pf		25.0 psf	
DRIFT LOAD		SEE SNOW DRIFT DIAGRAM ON UPPER ROOF PLAN	
SOIL LOAD INFORMATION			
ALLOWABLE NET SOIL BEARING CAPACITY - Qa		2,000 psf (ASSUMED)	
WIND LOAD INFORMATION			
BASIC WIND SPEED		115 mph	
BUILDING CODE OCCUPANCY CATEGORY		R	
WIND LOAD IMPORTANCE FACTOR - Iw		1.00	
WIND EXPOSURE		B	
INTERNAL PRESSURE COEFFICIENTS		±0.18	
COMPONENTS AND CLADDING WIND PRESSURES			
WIDTH OF PRESSURE COEFFICIENT ZONE - a		17.1 ft	
TRIANGULAR WIND LOAD AREAS	10.5F	990.5F	
ROOF			
NEGATIVE ZONE 1	-16.6 psf	-15.2 psf	-
NEGATIVE ZONE 2	-27.9 psf	-18.0 psf	-
NEGATIVE ZONE 3	-27.9 psf	-18.0 psf	-
POSITIVE ALL ZONES	10.0 psf	10.0 psf	-
WALLS			
ZONE 4	-16.5 psf	-	-12.7 psf
ZONE 5	-20.3 psf	-	-12.7 psf

MAPPED SPECTRAL RESPONSE ACCELERATION - S ₀	0.1170
MAPPED SPECTRAL RESPONSE ACCELERATION - S ₁	0.0470
SPECTRAL RESPONSE COEFFICIENT - S _{0s}	0.125
SPECTRAL RESPONSE COEFFICIENT - S ₀₁	0.075
SEISMIC DESIGN CATEGORY	B
BASIC SEISMIC FORCE RESISTING SYSTEM	LIGHT FRAME WALLS w/ SHEAR PANELS
RESPONSE MODIFICATION FACTOR	2
SEISMIC RESPONSE COEFFICIENT - C _s	0.062
DESIGN BASE SHEAR	0.062W
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE

ANCHORING STEEL STRENGTHS		
BARS-ASTM A615, GRADE 60		Fy = 60,000 psi
WVF - ASTM A165		Fy = 65,000 psi
BOLT STRENGTHS		
ANCHOR BOLTS - ASTM A307 OR A36		Ft = 4,000 psi
HIGH STRENGTH BOLTS - ASTM A429		Ft = 4,000 psi
EXPANSION BOLTS - WEDGE TYPE		Ft = 4,000 psi
CAST-IN-PLACE CONCRETE STRENGTHS		
FOOTINGS		f'c = 3,000 psi
WALLS		f'c = 4,000 psi
SLAB ON GRADE		f'c = 4,000 psi
PRECAST CONCRETE TOPPING		f'c = 4,000 psi
SLIP PAVEMENT - CURBS		f'c = 3,000 psi
STRUCTURAL STEEL STRENGTHS		
WF SHAPES - ASTM A992		Fy = 50,000 psi
SHAPES - L SHAPES, PLATES & BARS-ASTM A36		Fy = 36,000 psi
TS OR HSS SHAPES - ASTM A500, GRADE B		Fy = 46,000 psi
CONCRETE MASONRY STRENGTHS		
CMU - ASTM C90, GRADE N		f'm = 1,500 psi
CONCRETE BRICK - ASTM C55, GRADE N		f'm = 2,500 psi
CLAY HOLLOW BRICK - ASTM C520, GRADE SW		f'm = 1,500 psi
MORTAR - ASTM C270		
TYPE M - BELOW GRADE		ts = 2,500 psi
TYPE S - ABOVE GRADE		ts = 1,800 psi
GROUT - ASTM C476		
BOND-BEAMS		f'c = 3,000 psi
WALLS AND PIERS		f'c = 3,000 psi

CANADIAN DIMENSIONAL LUMBER STRENGTHS - BASE VALUES
2" TO 4" THICK AND WIDER
BASE VALUES IN psi - TO BE USED WITH ADJUSTMENT FACTORS

SPECIES	GRADE	EXT FIBER	TENSION	COMP		COMP MODULUS OF GRAINELASTICITY
		STRESS IN BARS	PARALLEL TO GRAIN	HORIZ SHEAR	4 TO 1 RATIO	
		F _B	F _T	F ₄₋₁	F ₂	E
SPRUCE	SEL STR	1250	675	70	425	140 1.5
PINE FR	N0 1NO 2	875	425	70	425	114
	N0 3	500	250	70	425	625 1.2
	STUD	675	325	70	425	675 1.2
DOUGLAS FIR LARCH (N)	SEL STR	1300	800	95	625	1900 1.9
	N0 1NO 2	825	500	95	625	1350 1.6
	N0 3	475	300	95	625	775 1.4
	STUD	650	375	95	625	850 1.4
HEM FIR (N)	SEL STR	1300	775	75	370	1650 1.7
	N0 1NO 2	1000	550	75	370	1450 1.6
	N0 3	575	375	75	370	850 1.4
	STUD	775	425	75	370	925 1.4
NORTHERN SPECIES	SEL STR	950	450	65	350	1100 1.1
	N0 1NO 2	675	275	65	350	625 1.1
	N0 3	350	150	65	350	475 1.0
	STUD	450	200	65	350	525 1.0

REQUIRED ATTACHMENT	
W1	1½" 16 GAGE STAPLES @ 6" OC EDGE AND 12" OC FIELD
W2	1½" 16 GAGE STAPLES @ 4" OC EDGE AND 12" OC FIELD

RK	TYPE	SHOULDER STUDS, UNO		REMARKS
		BASEMENT	1st	
1	SPF NO 1 NO2 2- 2x6	2	1	
2	2- 2x4 LVL	3	2	
3	2- 1x6 LVL	3	2	
4	3- 1x6 LVL	3	2	

HEADER SCHEDULE NOTES

1. ALL HEADERS SHALL BE NOT LESS THAN THE CORRESPONDING WALL WIDTH, THE HEADER SHALL BE MODIFIED ACCORDING TO 15.5.3.

2. SEE DETAIL 23/31 FOR MULTI-PLY CONNECTION ASSEMBLIES.

3. SEE DETAIL 30/33 FOR TYPICAL HEADER FRAMING ELEVATION.

4. SEE SHEET 30/34 FOR FLOOR JOIST DETAIL AND CONNECTION TO BEARING WALLS.

5. HEADERS IDENTIFIED AS "NO" TO BE RECESSED (I.E. TOP OF HEADER IS UNDERSIDE OF SHOUTER MINIMUM REQUIRED LVL BEARING TO BE 240 PLY).

6. SHOUTER IDENTIFIED AS "NO" TO BE RECESSED (I.E. TOP OF SHOUTER IS UNDERSIDE OF BEARING WALLS (NO).

7. WALL OPENINGS SHOWN WITHOUT HEADERS ARE CONSIDERED NON-BEARING WALLS. MINIMUM 2"x6" HEADER REQUIRED W/ 1" SHOUTLER STUD EA SIDE.

8. PROVIDE 1/4" HIGHT SPC KING STUDS ADJACENT TO EACH HEADER/BEARING WALL. MINIMUM 2" FOLLOWING.

OPENINGS 6" - 6' 0"	1 KING STUD
6' 0" - OPENING 12' 0"	2 KING STUDS
12' 0" - OPENING 16' 0"	3 KING STUDS

9. REFER TO ARCHITECTURAL FLOOR SCHEDULE SHEET FOR DOOR AND FRAME HEIGHTS AT HEADERS.

10. OPENINGS, REFER TO ARCHITECTURAL WINDOW TYPES SHEETS FOR WINDOW HEIGHTS AT HEADERS.

11. HEADERS IDENTIFIED AS "NO" TO BE RECESSED (I.E. TOP OF HEADER IS UNDERSIDE OF SHOUTER). HEADER HEIGHTS WILL CREATE TRUSS BEARING HEIGHTS HIGHER THAN THE BOTTOM CHORD.

LOCATION	TYPE		REMARKS
	BASEMENT	1st	
EXTERIOR WALLS	-	SPF NO1/NO2 2x6 @ 12" OC	
FINISHING WALLS (NON-BRIG LOCATIONS)	SPF STUD GR 2x @ 24" OC	SPF STUD GR 2x @ 24" OC	SEE ARCH FOR WALL SIZES & LOCATIONS
①	SPF NO1/NO2 2x6 @ 12" OC	SPF NO1/NO2 2x6 @ 12" OC	
②	SPF NO1/NO2 2x6 @ 16" OC	SPF NO1/NO2 2x6 @ 16" OC	

WOOD STUD BEARING WALL SCHEDULE NOTES

- SEE SHEET S.O.0 FOR WOOD DESIGN PROPERTIES & MINIMUM STRESS REQUIREMENTS.
- ALL PLATES IN CONTACT WITH CAST-IN-PLACE CONCRETE OR CMU TO BE PRESSURE TREATED.
- BOTTOM PLATES & DOUBLE TOP PLATES TO BE SPF MATERIAL - MINIMUM BENDING STRESS TO BE 2,000 PSI.
- ALL STUD WIDTHS NOTED ARE MINIMUM. CONTRACTOR CAN UPsize FRAMING MEMBERS & KEEP SAME SPACING AS NOTED IF REQUIRED. COORDINATE w/ ARCH PRIOR TO INSTALLATION.
- CORING OF STUD BEARING WALLS IS NOT PERMITTED. IF NECESSARY, CONTACT ENGR FOR FURTHER BRACING INFORMATION.

Cold Spring Design

South Main Street
Atkinson, WI 53538
(20)568-9530
(20)568-9531

[illegible]

OCTAGON HOUSE
919 CHARLES ST.
WATERTOWN, WI 53094

PROJECT #: .

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GENERAL NOTES AND SCHEDULES

SO.1

ISSUE

#	DATE	DESCRIPTION

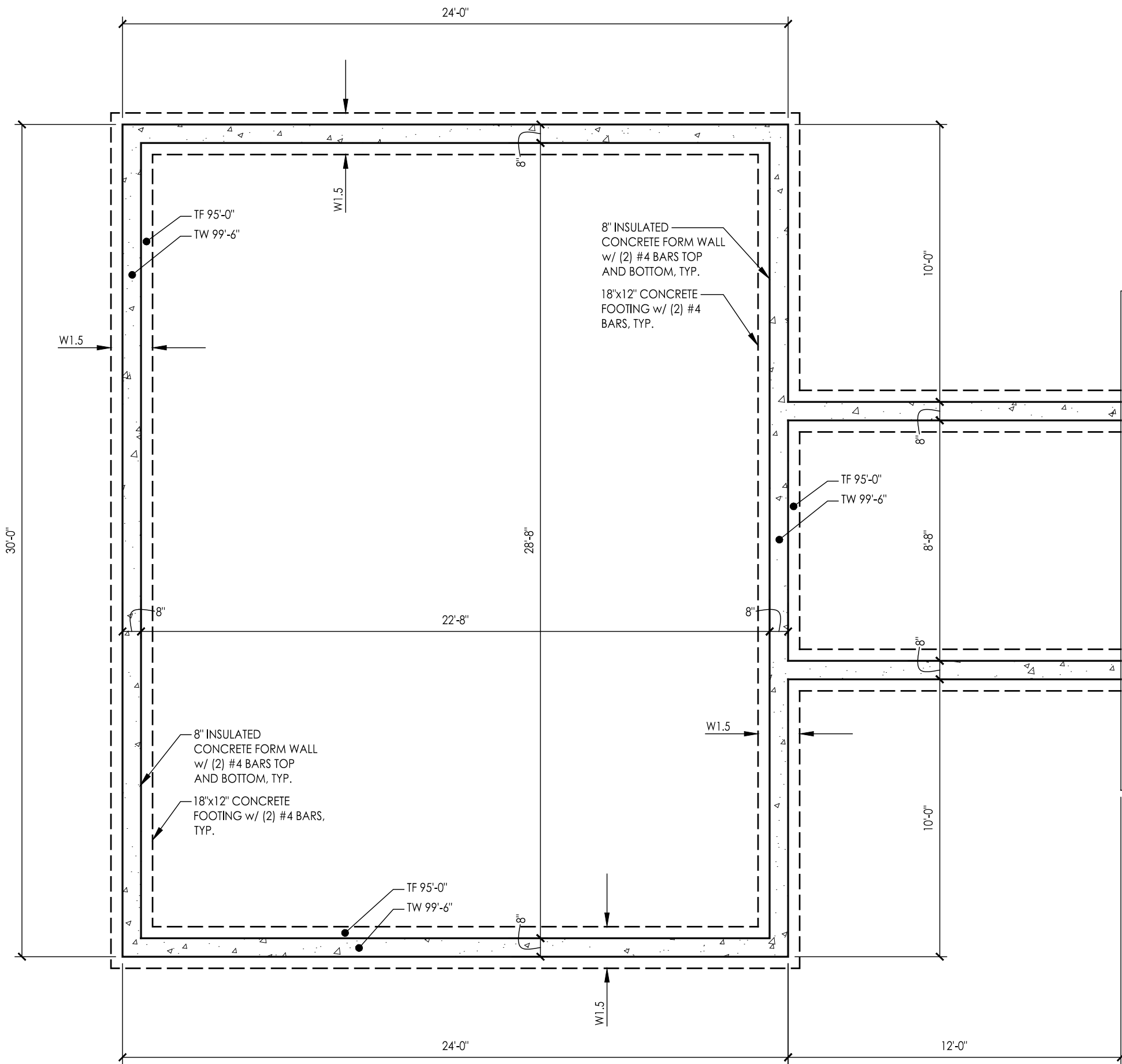
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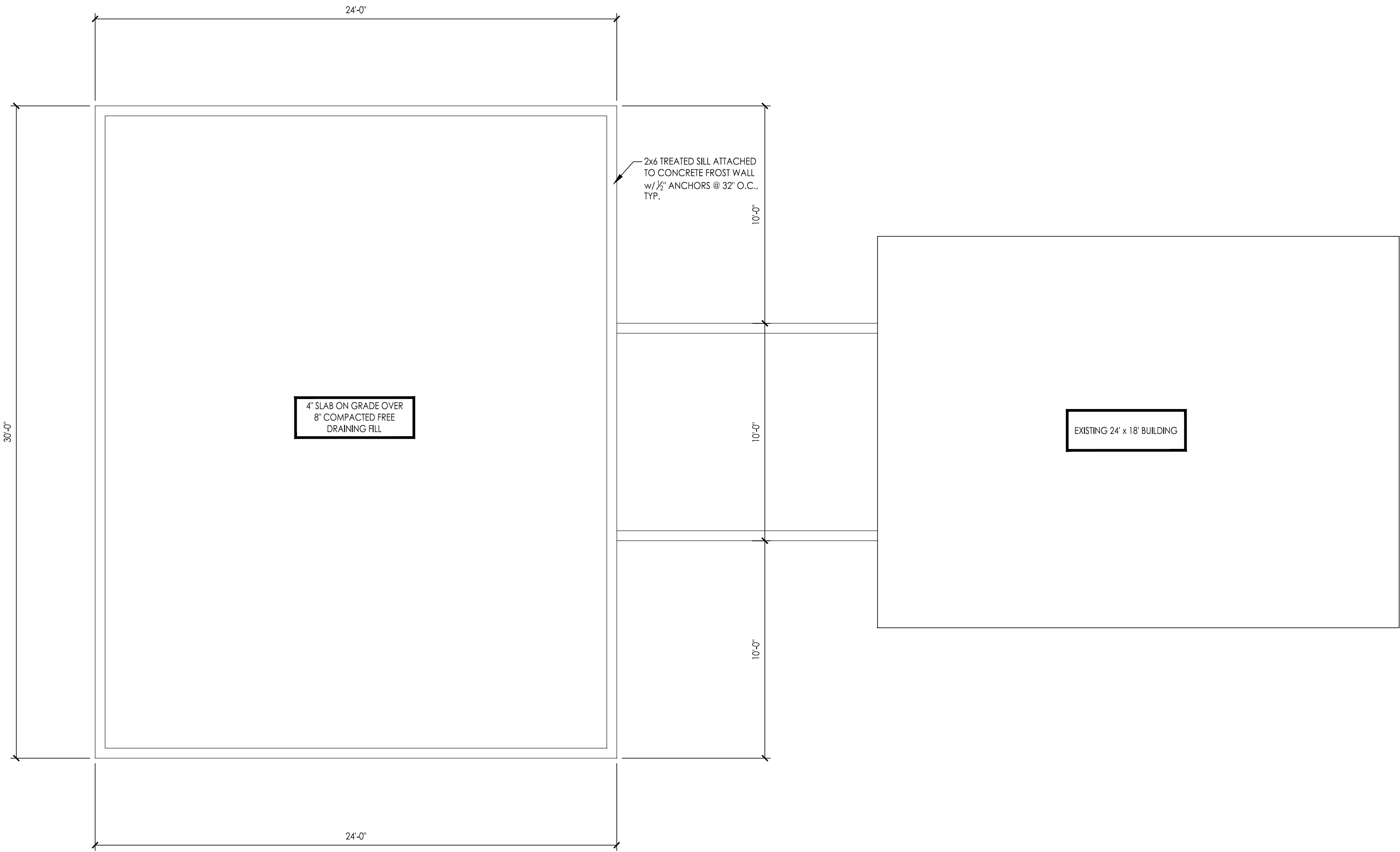
FOUNDATION
AND FLOOR
FRAMING PLAN

S1.1



1 PROPOSED FOUNDATION PLAN
SCALE: 1/4" = 1' - 0"

NOTES:
1. ALL DIMENSIONS ARE FROM FACE OF CONCRETE OR STUD TO FACE OF CONCRETE OR STUD,
UNLESS NOTED OTHERWISE.



2 PROPOSED FLOOR FRAMING PLAN
SCALE: 1/4" = 1' - 0"

NOTES:
1. ALL DIMENSIONS ARE FROM FACE OF CONCRETE OR STUD TO FACE OF CONCRETE OR STUD,
UNLESS NOTED OTHERWISE.

[illegible]

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S1.2



NOTES:
1. ALL DIMENSIONS ARE FROM FACE OF CONCRETE OR STUD TO FACE OF CONCRETE OR STUD, UNLESS NOTED OTHERWISE.

ISSUE

#	DATE	DESCRIPTION

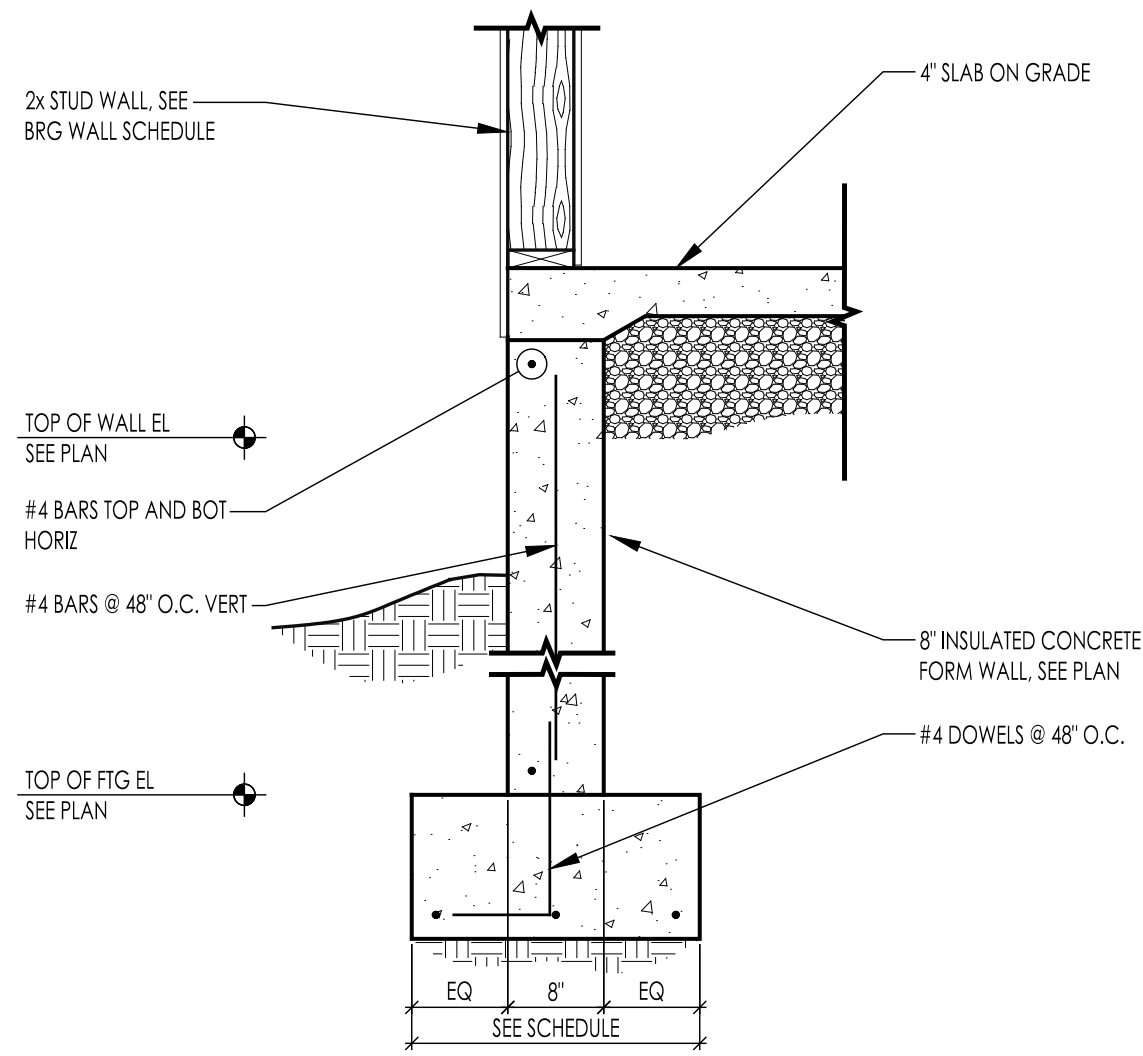
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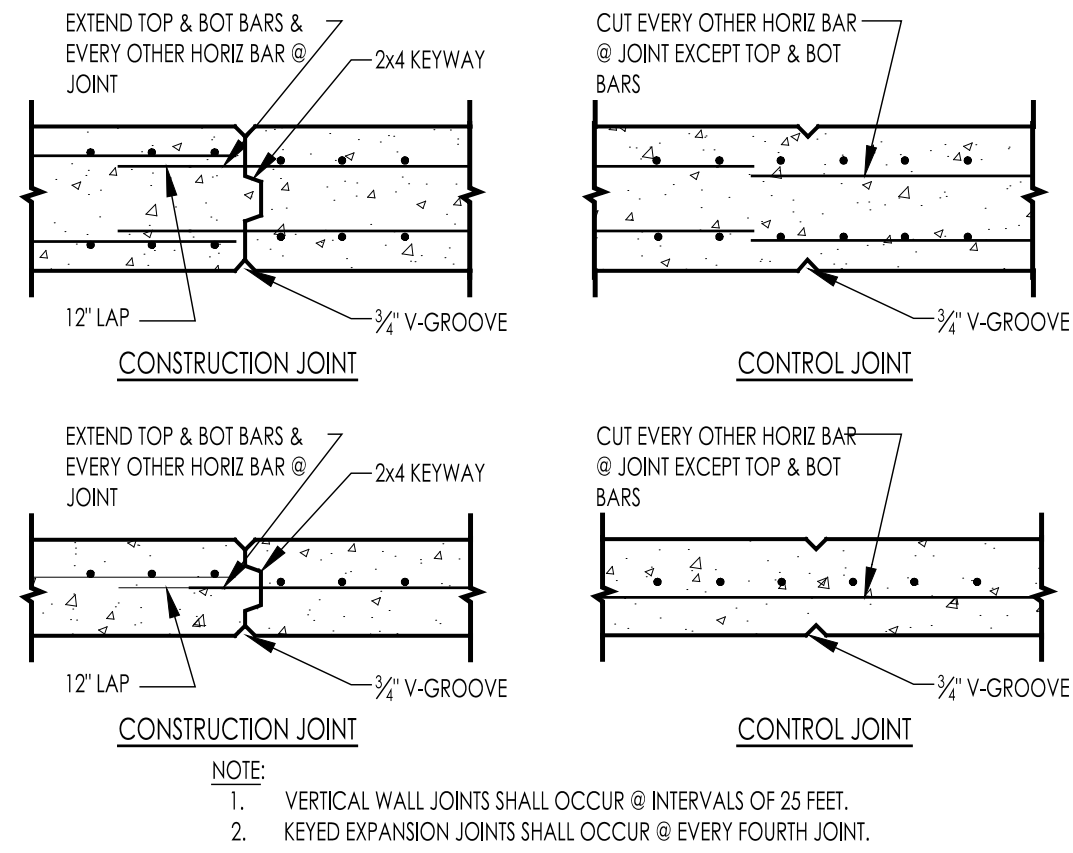
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DATE: 7/31/2024
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FOUNDATION
DETAILS

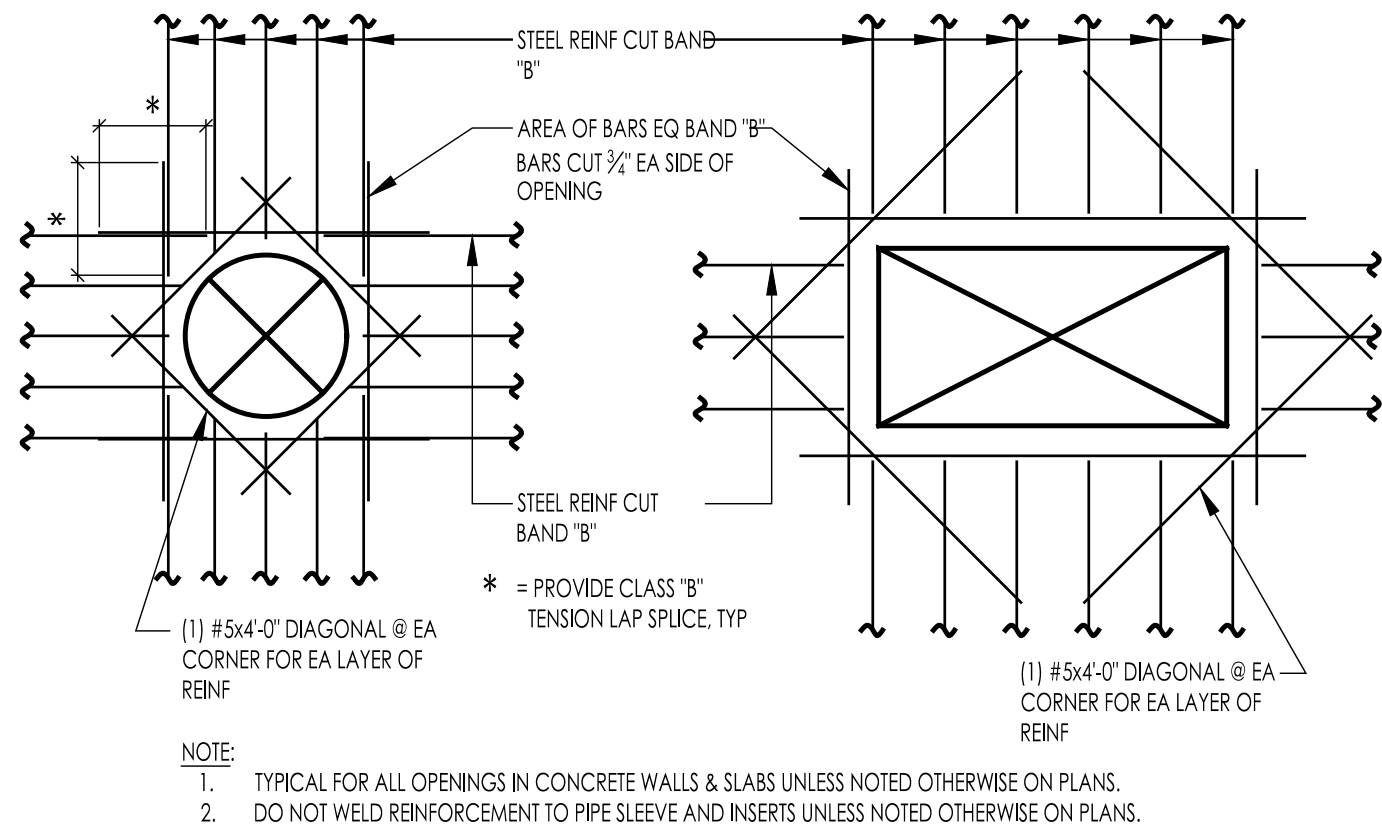
S2.1



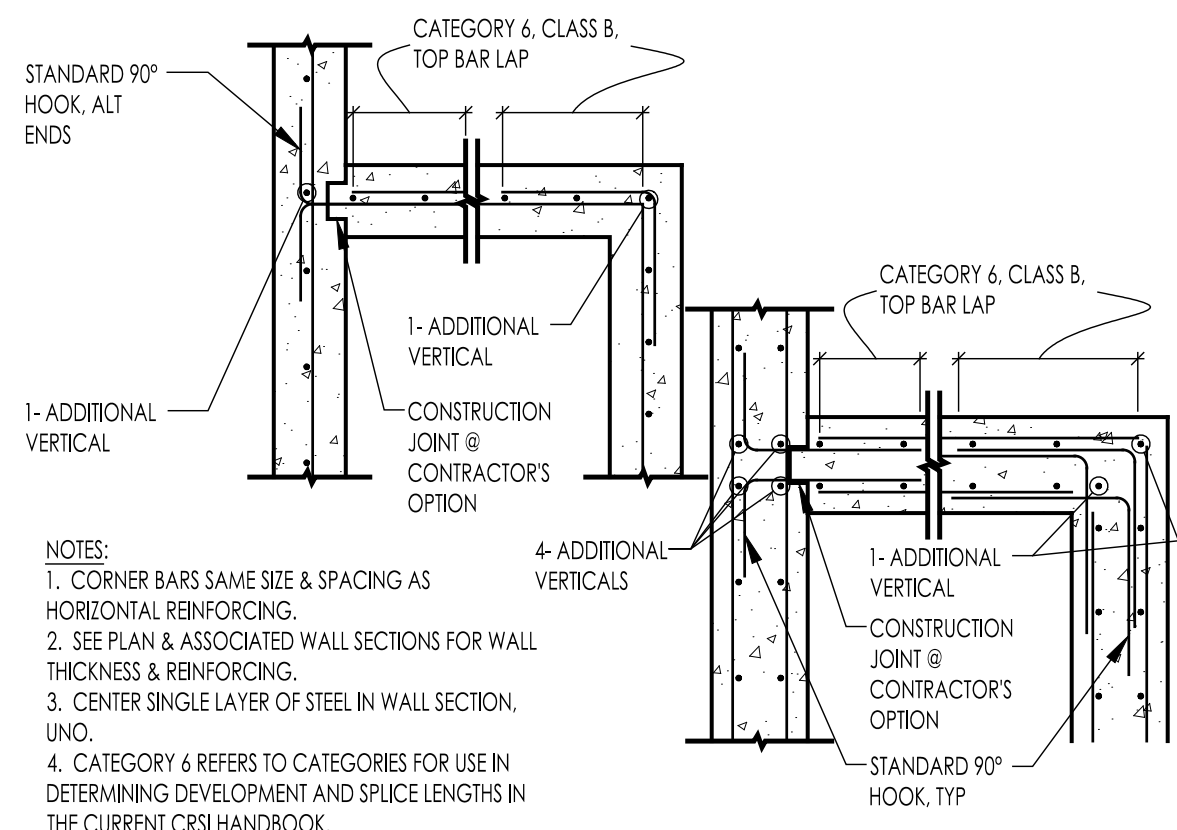
4 TYPICAL FROST WALL
SCALE: NTS



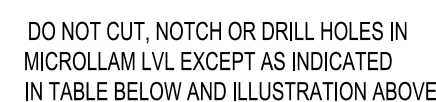
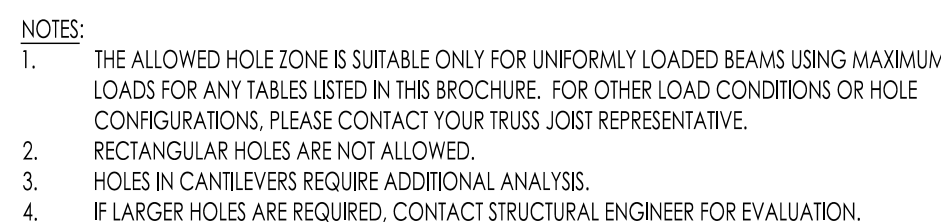
3 TYPICAL VERTICAL WALL JOINTS
SCALE: NTS



2 REINFORCING @ CONCRETE OPENINGS
SCALE: NTS



1 REINFORCING @ CONC WALL CORNERS
SCALE: NTS



BEAM DEPTH	MAXIMUM ROUND HOLE SIZE
5½"	1¾"
7¼" TO 18"	2"

4
S3.1



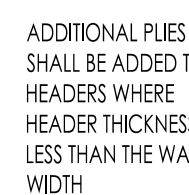
JOST SIZE	(A) MAXIMUM NOTCH LENGTH	(B) MAXIMUM NOTCH DEPTH	(C) MAXIMUM END NOTCH DEPTH	(D) MAXIMUM HOLE DEPTH	(E) MINIMUM BEARING LENGTH	(1)
2x6	1½"	¾"	1½"	1½"	0½"	3"
2x8	2½"	1½"	1¾"	2½"	½"	3"
2x10	3½"	1½"	2½"	3½"	½"	3"
2x12	3½"	1½"	2¾"	3½"	½"	3"

NOTE:
1. MINIMUM BEARING: 1-1/2" ON WOOD OR STEEL: 3" BEARING ON MASONRY.

3
S3.1



2
S3.1



NOTES:
ACCEPTABLE MODIFICATIONS TO ACHIEVE REQUIRED HEADER THICKNESS INCLUDE THE
ADDITION OF LVL, 2x DIMENSIONAL LUMBER, AND OR PLYWOOD OF MATCHING (OR
BETTER) GRADE & SPECIES OF THE CORRESPONDING HEADER AND WALL STUDS.

1
S3.1

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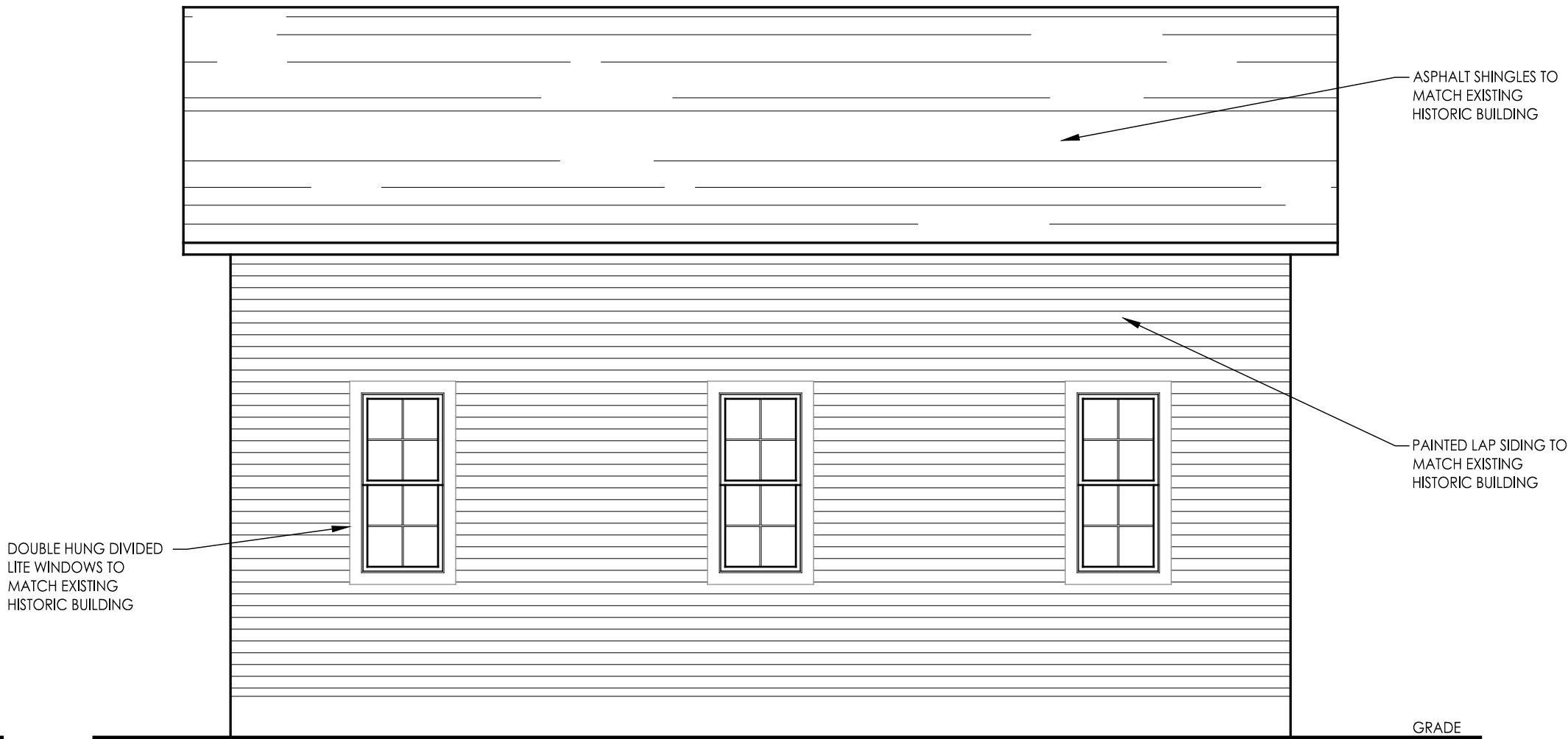
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EXTERIOR
ELEVATIONS

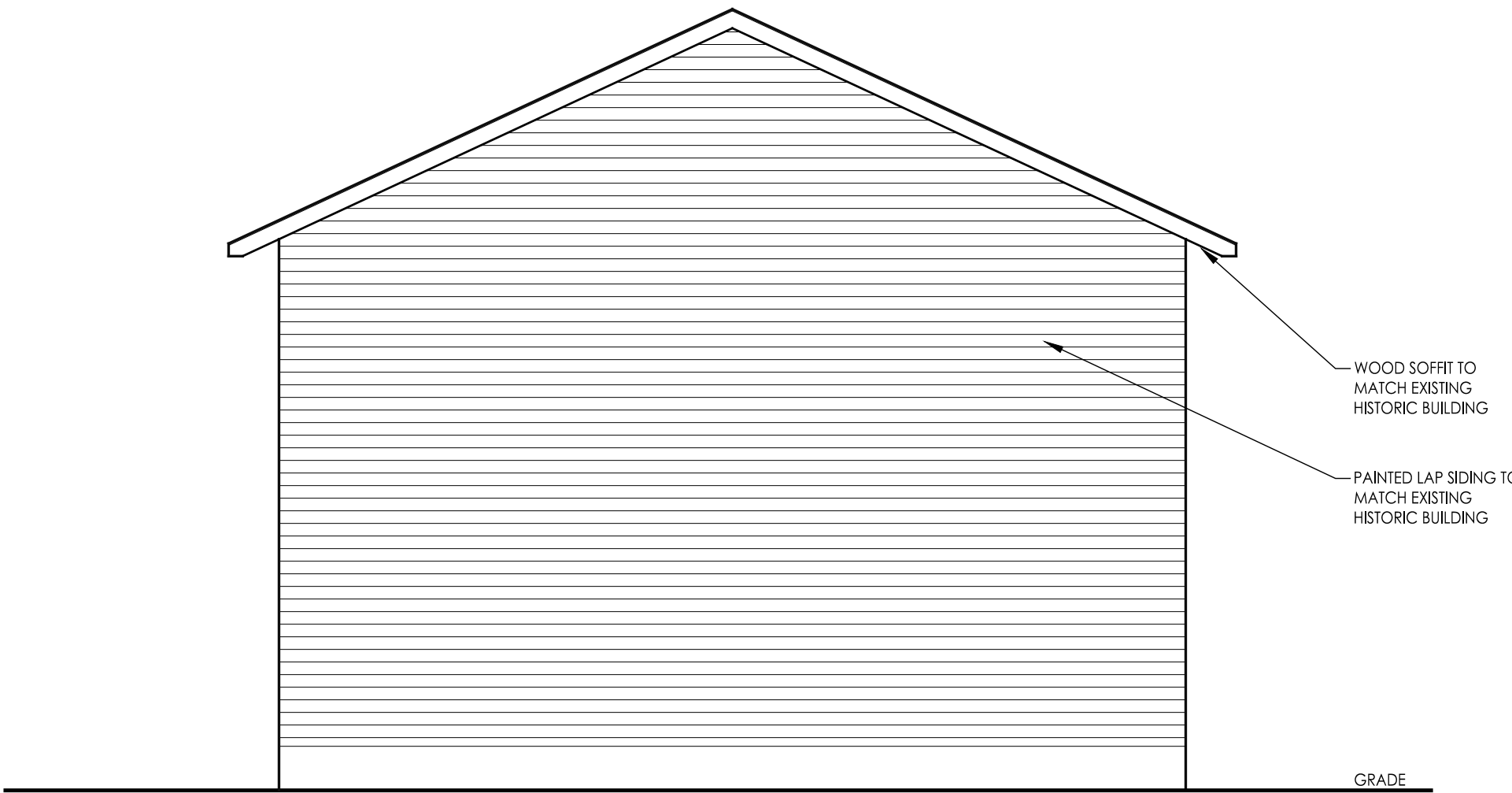
A2.1



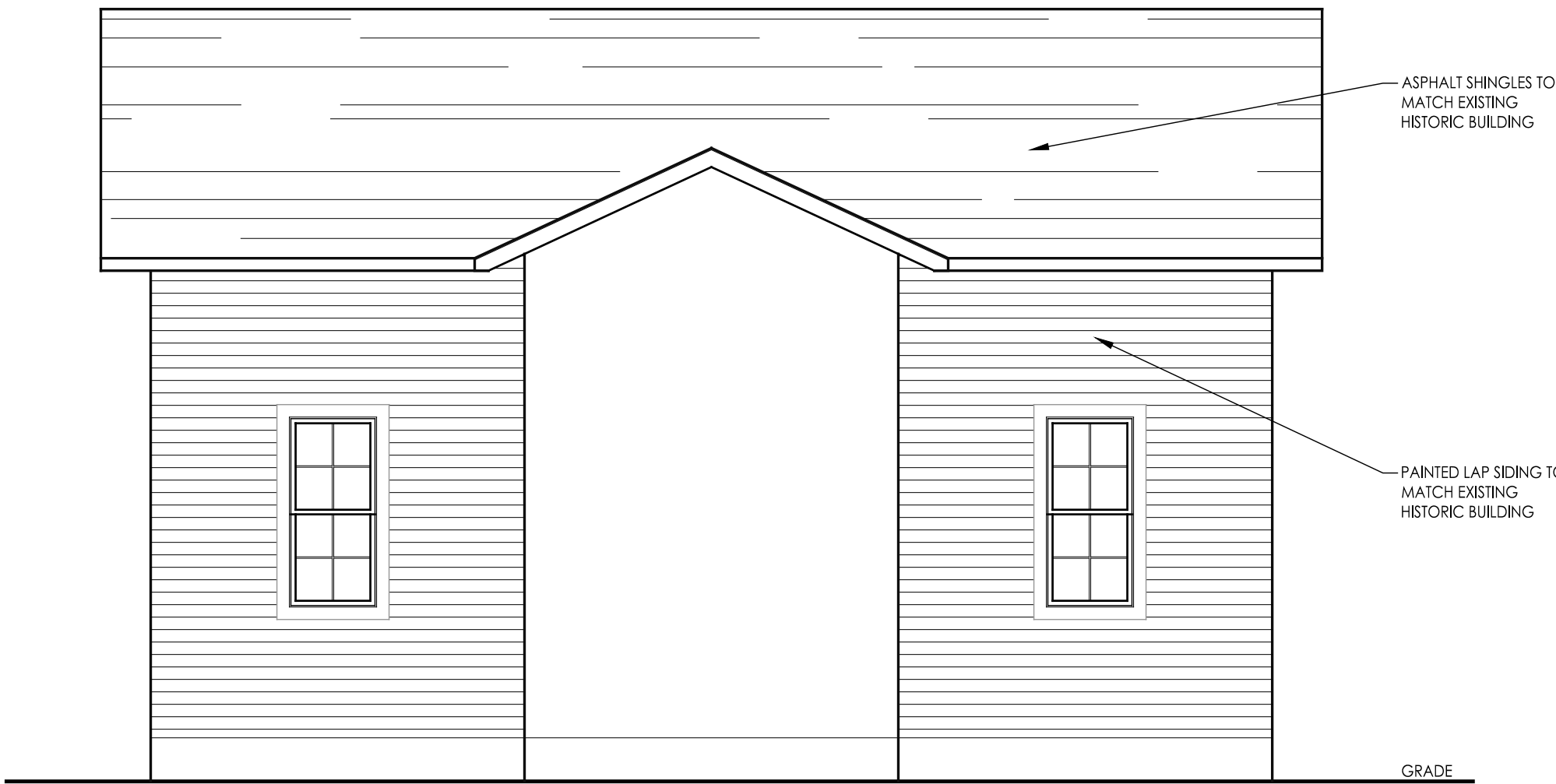
1 PROPOSED WEST ELEVATION
A2.1 SCALE: 1/4" = 1' - 0"



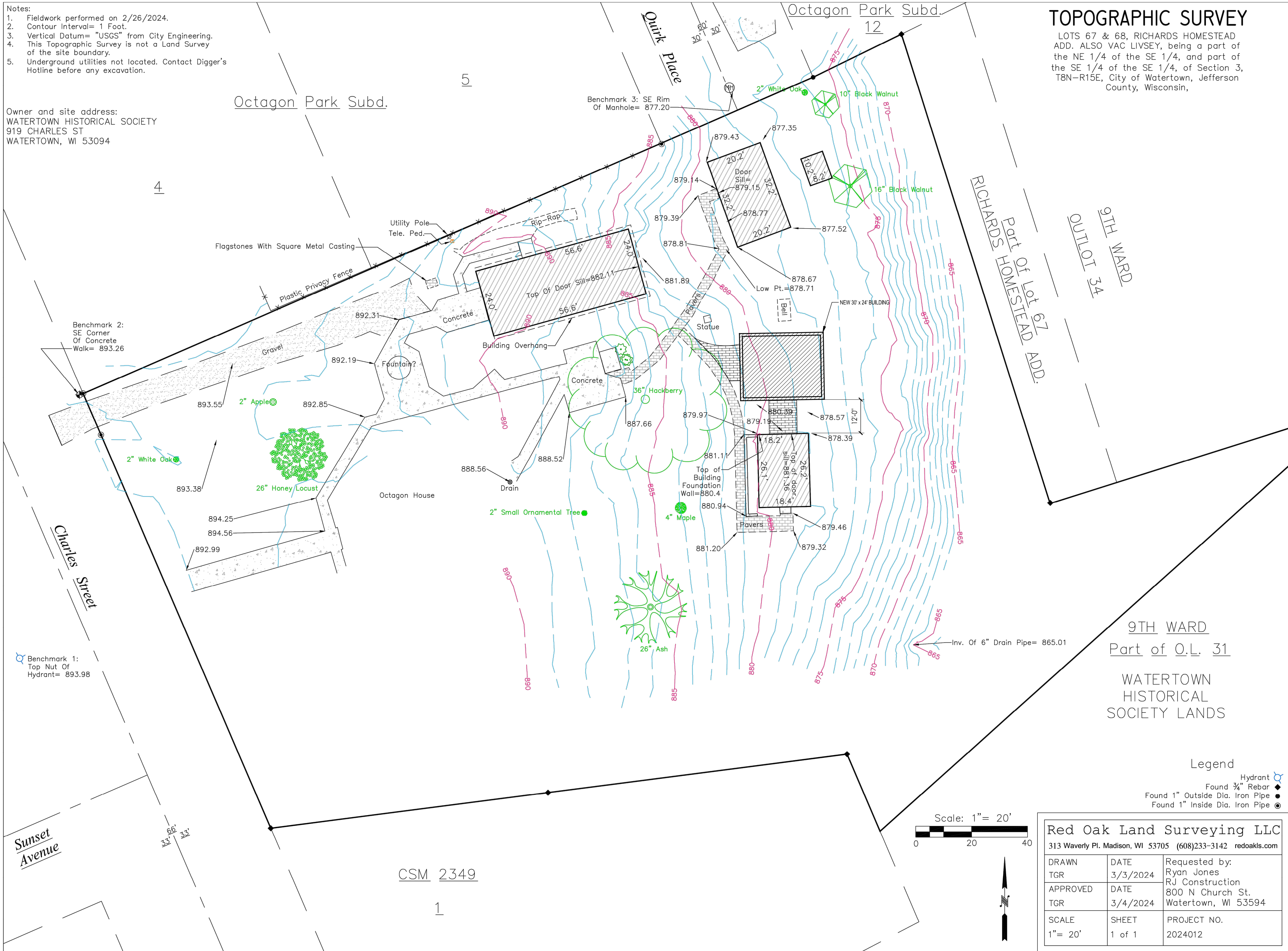
2 PROPOSED NORTH ELEVATION
A2.1 SCALE: 1/4" = 1' - 0"



3 PROPOSED EAST ELEVATION
A2.1 SCALE: 1/4" = 1' - 0"



4 PROPOSED SOUTH ELEVATION
A2.1 SCALE: 1/4" = 1' - 0"



Cold Spring Design

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SITE PLAN