

COLD SPRING DESIGN, LLC

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

OCTAGON HOUSE

DRAWING INDEX:

STRUCTURAL

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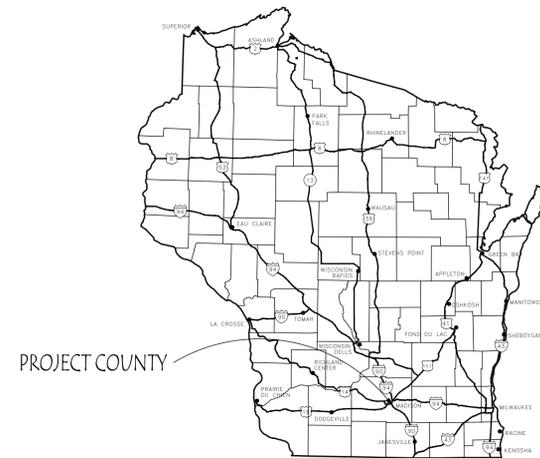
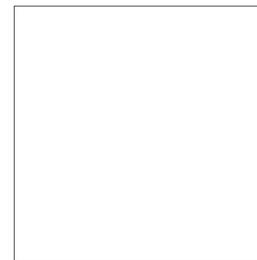
ARCHITECTURAL

- 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
 F (920)568-9531

ISSUE

#	DATE	DESCRIPTION

OCTAGON HOUSE
 919 CHARLES ST.
 WATERTOWN, WI 53094

CSD PROJECT #: .
 SCALE: AS NOTED
 DATE: 7/31/2024
 DRAWN BY: ATT
 CHECKED BY: CFN

TITLE SHEET

TSO.1

GENERAL NOTES

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

WOOD TRUSS NOTES

WOOD TRUSS SHOP DRAWINGS SHALL SHOW THE FOLLOWING INFORMATION

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

ROOF TRUSS BRACING NOTES

- ALL BRACING SHOWN OR DESCRIBED SHALL BE MINIMUM 2x4 WITH 2-180 IN EVERY TRUSS IT CROSSES.
- ALL TRUSS TOP CHORDS SHALL BE CONTINUOUSLY BRACED BY THE ROOF DECKING.
- ALL TRUSS WEB MEMBERS SHALL BE BRACED AT 4'-0" OC, UNLESS CALCULATIONS SHOW OTHERWISE.
- ALL HORIZONTAL BRACING SHALL BE STIFFENED AT 20'-0" OC WITH EITHER:
 - DIAGONAL BRACING EXTENDED TO A SHEAR WALL PARALLEL TO THE ORIGINAL BRACING. SEE BRACING DETAIL B33.1 FIGURES 1(a) THROUGH 1(d).
 - A 3/4" PLYWOOD SHEET EXTENDED TO ROOF DECK OR SHEAR WALL.
- ALL TRUSS BOTTOM CHORDS SHALL BE BRACED AT 4'-0" OC UNLESS CALCULATIONS SHOW OTHERWISE. CONTINUOUS SHEATHING APPLIED TO BOTTOM CHORD WILL SATISFY THIS BRACING REQUIREMENT.

TRUSS DESIGN LOADS

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

WOOD FRAMING NOTES

- ARCHITECT & CONTRACTOR SHALL DETAIL & CONSTRUCT BUILDING FINISHES TO ACCOMMODATE AN EXPECTED BUILDING SHRINKAGE OF APPROXIMATELY 1/4" TO 3/8" PER FLOOR OF WOOD CONSTRUCTION. PROPER CARE SHALL BE TAKEN TO PREVENT STORED & INSTALLED LUMBER FROM THE ELEMENTS. DO NOT ALLOW LUMBER TO REST IN STANDING WATER.
- FRAMING MEMBERS**

SEE BEARING WALL SCHEDULE, NO. MOISTURE CONTENT SHALL BE BETWEEN 15% AND 19%

VERTICAL MEMBERS

JOISTS: 2x NO 1 NO 2 SPF LINO SIZE & SPACING PER PLANS

JOISTS EXPOSED TO WEATHER: 2x NO 1 NO 2 TREATED SOUTHERN YELLOW PINE, LINO SIZE & SPACING PER PLANS

POSTS: NO 2 SPF (INTERIOR), LINO NO 2 TREATED SOUTHERN YELLOW PINE (EXTERIOR), LINO
- SEE WOOD BRG WALL SCHEDULE FOR BOTTOM PLATE & DOUBLE TOP PLATE INFORMATION.
- FLOOR SHEATHING SHALL BE 3/4" APA RATED, 1/8" SHEATHING, GLUED & NAILED TO FLOOR FRAMING w/ #6 COMMON OR BOX NAILS @ 8" OC ALONG EDGES AND 12" OC ALONG INTERMEDIATE MEMBERS. STAGGER PANEL EDGES.
- ROOF SHEATHING SHALL BE 3/4" APA RATED OSB SHEATHING ATTACHED TO THE ROOF FRAMING MEMBERS w/ #6 COMMON OR BOX NAILS @ 8" OC ALONG EDGES AND 12" OC ALONG INTERMEDIATE MEMBERS (1" MINIMUM EMBEDMENT INTO FRAMING MEMBER). STAGGER PANEL EDGES.
- EXTERIOR WALLS SHALL BE SHEATHED w/ 3/4" APA RATED SHEATHING. ATTACH DIRECTLY TO THE OUTSIDE FACE OF EXTERIOR STUD WALLS WITH #6 COMMON OR BOX NAILS @ 8" OC ALONG EDGES AND 12" OC ALONG INTERMEDIATE MEMBERS, UNO.
- ALL INTERIOR DEMISING WALLS, CORRIDOR WALLS & LOAD BEARING WALLS NOT SPECIFICALLY DESIGNATED AS A SHEAR WALL SHALL BE CONSTRUCTED WITH A MINIMUM OF 1 LAYER 3/2" GYPSUM BOARD ATTACHED w/ #6 COOLER NAILS @ 8" OC ALONG EDGES & 12" OC AT INTERMEDIATE MEMBERS, UNO.
- DESIGN UPLIFT ON ROOF TRUSSES AS INDICATED IN THE DESIGN CRITERIA. PROVIDE THE DOWN CLIP AT EACH TRUSS. AT EVERY POINT OF BEARING.
 - INTERIOR TRUSS SPACING + 2'-0" EXCEPT WHERE SPECIFICALLY NOTED.
- COORDINATE WALL STUD LOCATIONS TO ALIGN WITH TRUSS BEARING LOCATIONS @ ALL WALLS.
 - PROVIDE EQUIVALENT SIZE SOLID BLOCKING & VERTICAL MEMBERS THROUGH UNDERLYING FLOORS / WALLS BELOW MULTIPLE MEMBERS OR POSTS CARRYING CONCENTRATED LOADS.
 - COLUMN SIZES SHOWN ARE MIN. CONTRACTOR MAY USE LARGER SECTION IF REQ'D TO FULLY SUPPORT MEMBERS.
 - AS A MINIMUM, ALL CONNECTIONS SHALL CONFORM TO FASTENING SCHEDULE TABLE 2304.3.1 WECS 2008. DRAWING DETAILS SHALL GOVERN IF THEIR CONNECTION CAPACITY IS GREATER THAN THOSE SPECIFIED IN TABLE 2304.3.1
 - 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.
 - USE JOIST HANGERS DESIGNED FOR GIVEN MEMBER SIZE TO SUPPORT ALL JOIST HEADERS FRAMING INTO SIDES OF OTHER MEMBERS.
 - PROVIDE CROSS BRIDGING/BLOCKING BETWEEN FLOOR JOISTS PER NATIONAL DESIGN SPECIFICATION 4.4.1.
 - DO NOT CUT, NOTCH, OR DRILL HOLES IN MICROLAM LVL OR JOISTS WITHOUT ENGINEER APPROVAL.
 - ALL HEADERS NOT ABOVE DOORS OR WINDOWS TO BE FLUSH WITH CEILING, UNO.
 - COORDINATE WALL & FACE BRICK DIMENSIONS w/ ARCHITECTURAL DRAWINGS.
 - JOIST MANUFACTURER SHALL NOTIFY STRUCTURAL ENGINEER IF FRAMING PLANS TO BE DIFFERENT THAN SHOWN.
 - ALL CONNECTORS (I.E., SIMPSON HANGERS, ETC.) TO BE GALVANIZED WHEN USED FOR EXTERIOR PURPOSES.
 - GENERAL CONTRACTOR TO COORDINATE WOOD TRUSS, PLUMBING, AND HVAC LOCATIONS.

FOUNDATION PLAN NOTES

- CONTRACTOR SHALL PROVIDE FROST AND MOISTURE PROTECTION FOR FOOTINGS EXPOSED DURING CONSTRUCTION.
- REFER TO ARCHITECTURAL DRAWINGS OR PLUMBING DRAWINGS FOR SPECIFIC FLOOR DRAIN LOCATIONS AND ELEVATIONS.
- REFER TO FOUNDATION DETAILS SHEET FOR MISCELLANEOUS DETAILS NOT CUT ON PLAN.
- 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 PRESSURE NOTED IN THE DESIGN CRITERIA. CONTACT THE ARCHITECT OR ENGINEER IF UNABLE TO ATTAIN THIS SOIL BEARING PRESSURE.
- NO PROVISION HAS BEEN MADE FOR FUTURE EXPANSION.
- VERIFY SIZES OF ALL STOODS WITH ARCHITECT PRIOR TO CONSTRUCTION.

STRUCTURAL ABBREVIATIONS

AB - 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
	J - JOINT
BLDG - BUILDING	L - STEEL ANGLE DESIGNATION
BLK - BLOCK (CMU)	LL - LENGTH/LONG
BM - BEAM	LH - LONG LEG HORIZONTAL
BOT - BOTTOM	LV - LONG LEG VERTICAL
BRG - BEARING	LP - LOW POINT
	LVL - LAMINATED VENEER LUMBER
C - CHANNEL DESIGNATION	MAX - MAXIMUM
CB - CATCH BASIN	MIN - MINIMUM
CI - CAST IRON	MW - MASONRY BEARING WALL
CIP - CAST-IN-PLACE	MSW - MASONRY SHEAR WALL
CI - CONSTRUCTION CONTROL	MTL - METAL
CL - CENTER LINE	NIC - 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	OC - ON CENTER
CONT - CONTINUOUS	OD - OUTSIDE DIAMETER
CONTR - CONTRACTOR	OF - OUTSIDE FACE
	OH - OVER HEAD
D - DEPTH	OP - OPPOSITE
DBA - DECK BEARING ANGLE	PERIM - PERIMETER
DI - DIMENSION	PC - PRECAST/PRESTRESSED
DN - DOWN	PL - STEEL PLATE DESIGNATION
DP - DRILLED PIER	P - POINT
DTL - DETAIL	PT - POST TENSIONED
DWG - DRAWING	R - RADIUS
DWL - DOWEL	RD - ROOF DRAIN
EA - EACH	REIN - REINFORCING / REINFORCEMENT
EC - ELECTRICAL CONTRACTOR	REQD - REQUIRED
EJ - EXPANSION JOINT	SCHED - SCHEDULE
EL - ELEVATION	SH - SIMILAR
ELEV - ELEVATOR	SMT - SHEET
ENG - ENGINEER	SPA - SPACE / SPACES
EQ - EQUAL	SPCC - SPECIFICATION
EW - EACH WAY	SQ - SQUARE
E/W - EAST-WEST DIRECTION	STR - STAINLESS STEEL
EXT - EXISTING	STL - STEEL
EXP - EXPANSION	STS - STRUCTURAL
EXT - EXTERIOR	TW - THICK
FD - FLOOR DRAIN	TL - TOP OF EDGE ELEVATION
FDN - FOUNDATION	TP - TOP OF PER ELEVATION
FE - FIRE EXTINGUISHER	TS - SEE HSS DESIGNATION
FF - FINISH FLOOR	TYP - TYPICAL
FT - FLOOR TRUSS	UW - TOP OF WALL ELEVATION
FTG - FOOTING	URJL - URINAL SLAB DEPRESSION
FUT - FUTURE	UNO - UNLESS NOTED OTHERWISE
FV - FIELD VERIFY	VERT - VERTICAL
GA - GAUGE	VIF - VERIFY FIELD
GALV - GALVANIZED	W - WIDTH
GC - GENERAL CONTRACTOR	WI - WITH
GL - GRID LINE/COLUMN LINE	WO - WITHOUT
HC - HVAC CONTRACTOR	WD - WOOD
HK - HOOK	WF - WOOD FLANGE DESIGNATION
HM - HOLLOW METAL	WP - WORKING POINT
HORIZ - HORIZONTAL	WSBW - WOOD STUD BEARING WALL
HP - HIGH POINT	WWF - WELODED WIRE FABRIC
HSS - HOLLOW STRUCTURAL SECTION (REPLACES 'TS' DESIGNATION)	
HT - HEIGHT	
HVAC - HEATING, VENTILATING, & AIR CONDITIONING	

REINFORCING NOTES

- REINFORCING SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 (CURRENT EDITION).
- ALL LAPS SHALL BE CLASS 'B' PER ACI 318 UNLESS OTHERWISE NOTED ON THE DESIGN DRAWINGS. OR UNLESS THE DETAILER TAKES SPECIAL CARE TO PROVIDE STAGGERED LAPS. USE TOP BAR LAP LENGTHS FOR ALL HORIZONTAL WALL BARS 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 LAPS SHALL BE PROVIDED AT ALL WALL CORNERS AND INTERSECTIONS PER DETAIL 152.1.
- HORIZONTAL BARS EXCEPT FOR CONTINUOUS STRINGS FROM ONE CORNER OF OPENING 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.
- WELODED WIRE FABRIC SHALL BE LAPPED AND/OR ANCHORED TO DEVELOP F_y PER ACI 315.
- PROVIDE MINIMUM COVER PER ACI 318, 7.7.1.
- 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 DETAIL 6 & 752.1.

MILD REINFORCING STEEL MINIMUM CLEAR COVER

CONCRETE CAST AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH	3" MIN
FOOTINGS	
CONCRETE EXPOSED TO EARTH OR WEATHER	
WALLS, COLUMNS, & BEAMS	
BARS UP TO #5	1 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 1/2" MIN
ELEVATED SLABS	
TOP BARS	3/4" MIN
BOTTOM BARS	1" MIN
BEAMS	
ALL BARS	1 1/2" MIN
COLUMNS	
ALL BARS	1 1/2" MIN

DESIGN CRITERIA

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		
STAR	100 psf		
STORAGE	125 psf		
SNOW LOAD INFORMATION			
GROUND SNOW LOAD - P _g	30.0 psf		
SNOW EXPOSURE FACTOR - C _e	1.00		
SNOW LOAD IMPORTANCE FACTOR - I _s	1.00		
THERMAL FACTOR - C _t	1.10		
FLAT ROOF SNOW LOAD - P _f	25.0 psf		
DRIFT LOAD	SEE SNOW DRIFT DIAGRAM ON UPPER ROOF PLAN		
SOIL LOAD INFORMATION			
ALLOWABLE NET SOIL BEARING PRESSURE - Q _a	2,000 psf (ASSUMED)		
WIND LOAD INFORMATION			
BASIC WIND SPEED	115 mph		
BUILDING CODE OCCUPANCY CATEGORY	R		
WIND LOAD IMPORTANCE FACTOR - I _w	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	10.9 SF		
ROOF STEEL PLATE DESIGNATION	10.0 SF		
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
SEISMIC LOAD INFORMATION			
SEISMIC USE GROUP - OCCUPANCY CATEGORY	II		
SEISMIC LOAD IMPORTANCE FACTOR - I _e	1.00		
SEISMIC SITE CLASS	D		
MAPPED SPECTRAL RESPONSE ACCELERATION - S _s	0.1170		
MAPPED SPECTRAL RESPONSE ACCELERATION - S ₁	0.0470		
SPECTRAL RESPONSE COEFFICIENT - S _{rs}	0.125		
SPECTRAL RESPONSE COEFFICIENT - S _{o1}	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	0.026W		
ANALYSIS PROCEDURE	EQUVALENT LATERAL FORCE		

DESIGN PROPERTIES

REINFORCING STEEL STRENGTHS						
BARS - ASTM A615, GRADE 60	F _y = 60,000 psi					
WWF - ASTM A195	F _y = 65,000 psi					
BOLT STRENGTHS						
ANCHOR BOLTS - ASTM A307 OR A36						
HIGH STRENGTH BOLTS - ASTM A325N						
EXPANSION BOLTS - WEDGE TYPE						
CAST-IN-PLACE CONCRETE STRENGTHS						
FOOTINGS	f _c = 3,000 psi					
WALLS	f _c = 4,000 psi					
SLABS ON GRADE	f _c = 4,000 psi					
PRECAST CONCRETE TOPPING	f _c = 4,000 psi					
SITE PAVEMENT - CURBS	f _c = 3,000 psi					
STRUCTURAL STEEL STRENGTHS						
WF SHAPES - ASTM A992	F _y = 50,000 psi					
C SHAPES, L SHAPES, PLATES, & BARS - ASTM A36	F _y = 36,000 psi					
TS OR HSS SHAPES - ASTM A500, GRADE B	F _y = 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 C82, GRADE SW	f _m = 3,000 psi					
MORTAR - ASTM C270						
TYPE M - BELOW GRADE	f _a = 2,500 psi					
TYPE S - ABOVE GRADE	f _a = 1,800 psi					
GROUT - ASTM C97						
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 STRESS IN BENDING	TENSION PARALLEL TO GRAIN	HORIZ SHEAR	COMP L TO GRAIN	COMP MODULUS OF GRAIN ELASTICITY
SPRUCE	SEL STR	F _b	F _t	F _v	E _c	E
PINE FIR	NO 1 NO 2	720	675	70	425	1400
	NO 3	675	425	70	425	1100
	STUD	500	250	70	425	625
		675	325	70	425	675
DOUGLAS FIR LARCH	SEL STR	1300	800	95	625	1900
	NO 1 NO 2	825	500	95	625	1350
	NO 3	475	300	95	625	775
	STUD	650	375	95	625	650
HEM FIR	SEL STR	1300	775	75	370	1650
	NO 1 NO 2	1000	550	75	370	1450
	NO 3	575	325	75	370	850
	STUD	775	425	75	370	925
NORTHERN SPECIES	SEL STR	950	450	65	350	1100
	NO 1 NO 2	575	275	65	350	825
	NO 3	300	150	65	350	475
	STUD	450	200	65	350	525

SHEAR WALL SHEATHING ATTACHMENT SCHEDULE

MARK	REQUIRED ATTACHMENT
SW1	1/2" 16 GAGE STAPLES @ 6" OC EDGE AND 12" OC FIELD
SW2	1/2" 16 GAGE STAPLES @ 4" OC EDGE AND 12" OC FIELD

HEADER SCHEDULE

MARK	TYPE	SHOULDER STUDS, UNO		REMARKS
		BASEMENT	1st	
H1	SPF NO 1 NO 2 2x4	2	1	
H2	2-9/2" LVL	3	2	
H3	2-11/2" LVL	3	2	
H4	3-11/2" LVL	3	2	

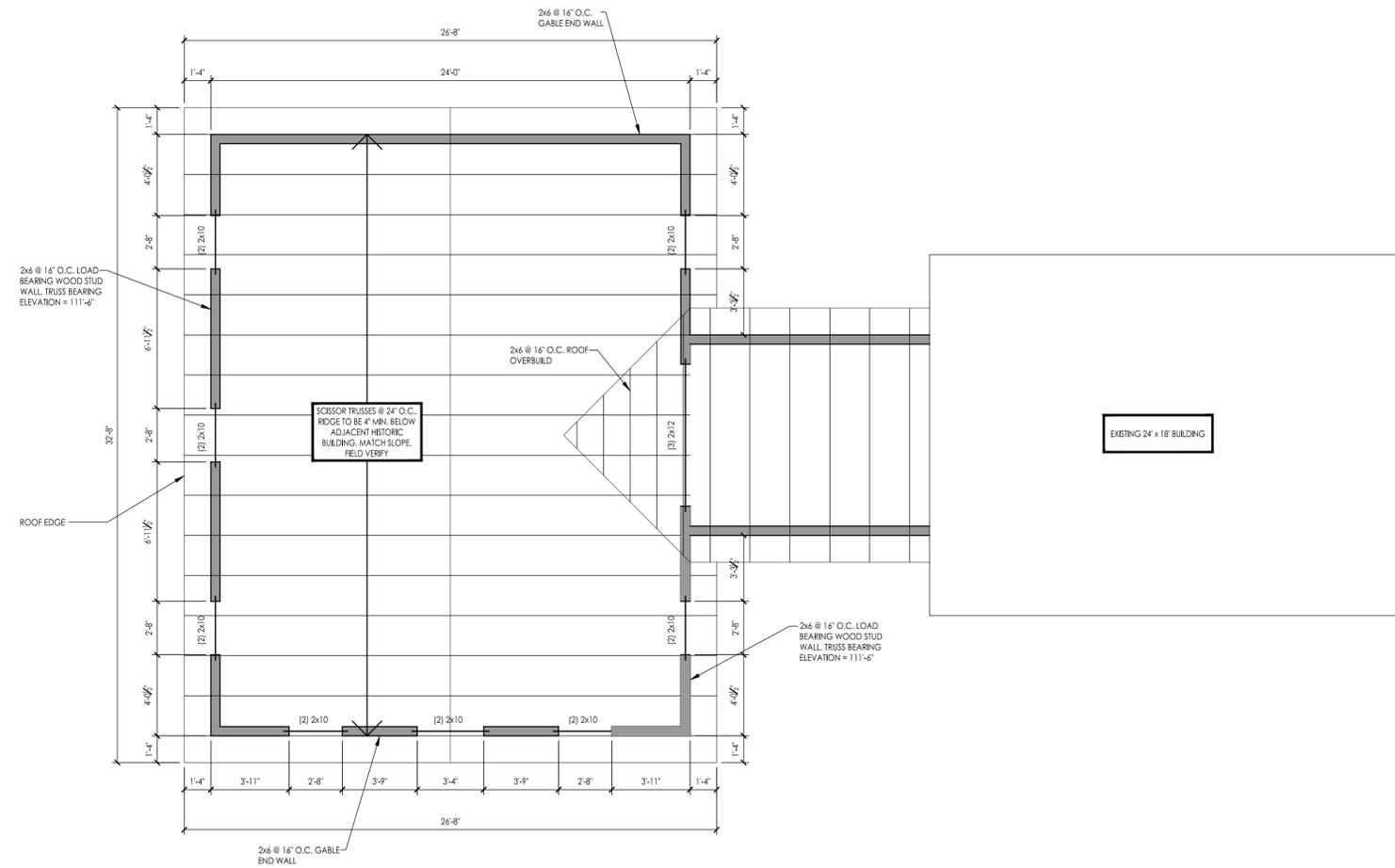
HEADER SCHEDULE NOTES

- WHERE HEADERS ARE LESS THAN THE CORRESPONDING WALL WIDTH, THE HEADER SHALL BE MODIFIED ACCORDING TO 153.0.
- SEE DETAIL 203.0 FOR MULTIPLY CONNECTION ASSEMBLIES.
- SEE DETAIL 353.0 FOR TYPICAL HEADERS FRAMING ELEVATION.
- SEE SHEET S0.1 FOR WOOD DESIGN PROPERTIES & MINIMUM STRESS REQUIREMENTS.
- HEADERS DENOTED AS "W/R" TO BE RECESSED (I.E., TOP OF HEADER @ UNDERSIDE OF SHEATHING).
- MINIMUM REQUIRED LVL BEARING STRESS TO BE 240 psi.
- SHOULDER STUDS TO BE OF SAME SPECIES AND GRADE AS BEARING WALLS, UNO.
- WALL OPENINGS SHOWN WITHOUT HEADERS ARE CONSIDERED NON-BEARING WALLS. MINIMUM 2x4 HEADER REQUIRED w/ 1" SHOULDER STUD EA SIDE.
- PROVIDE FULL HEIGHT SPF JOIST STUDS ADJACENT TO EACH HEADER LOCATION ACCORDING TO THE FOLLOWING:

OPENINGS ≤ 6'-0"	1 KING STUD
6'-0" < OPENINGS ≤ 10'-0"	2 KING STUDS
10'-0" < OPENINGS ≤ 16'-0"	3 KING STUDS
- REFER TO ARCHITECTURAL DOOR SCHEDULE SHEET FOR DO

ISSUE

#	DATE	DESCRIPTION



1
S1.2 PROPOSED ROOF FRAMING PLAN
 SCALE: 1/4" = 1'-0"

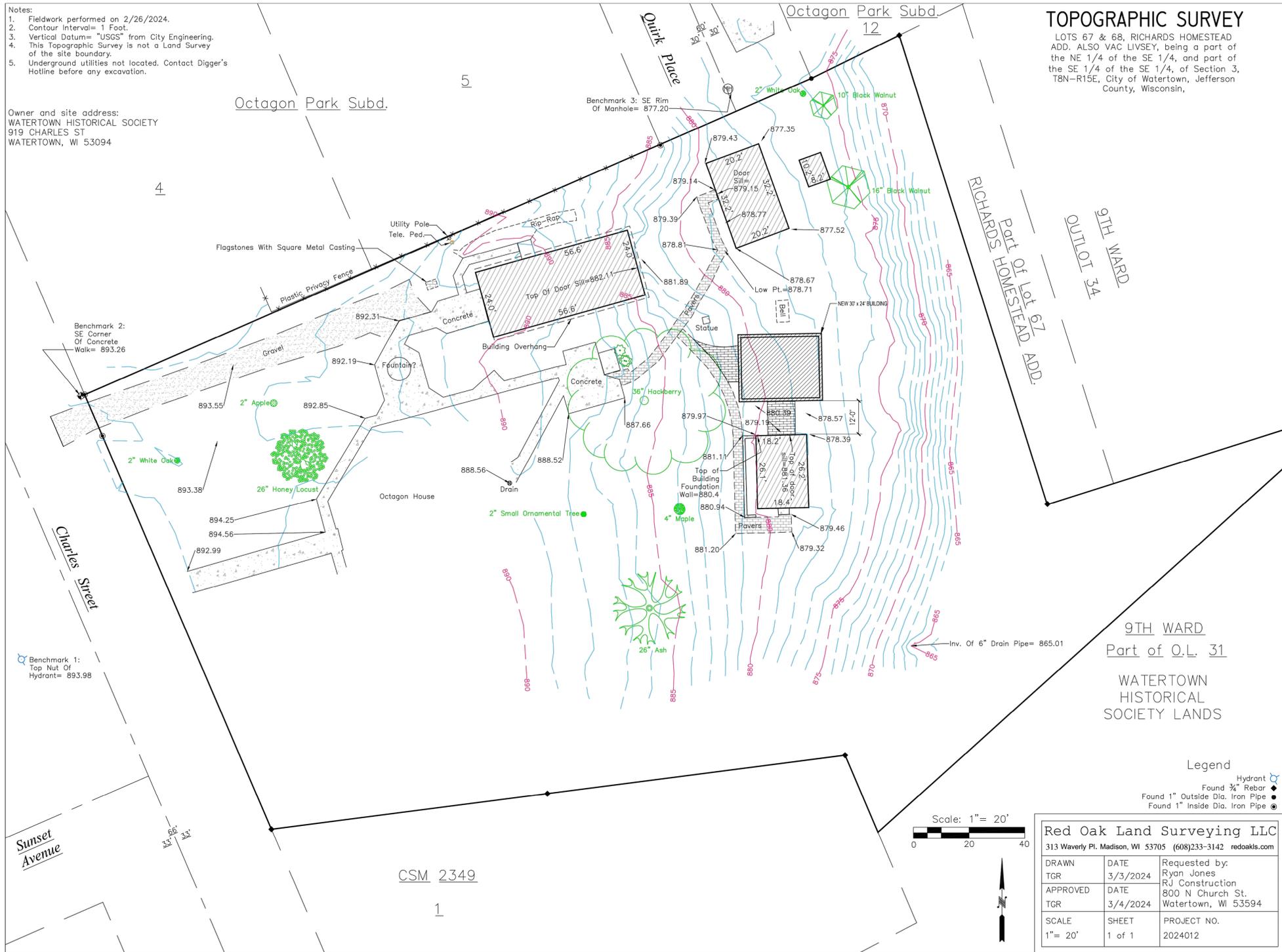
NOTES:
 1. ALL DIMENSIONS ARE FROM FACE OF CONCRETE OR STUD TO FACE OF CONCRETE OR STUD, UNLESS NOTED OTHERWISE.

OCTAGON HOUSE
 919 CHARLES ST.
 WATERTOWN, WI 53094

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

ROOF FRAMING PLAN

S1.2



- Notes:
1. Fieldwork performed on 2/26/2024.
 2. Contour Interval= 1 Foot.
 3. Vertical Datum= "USGS" from City Engineering.
 4. This Topographic Survey is not a Land Survey of the site boundary.
 5. Underground utilities not located. Contact Digger's Hotline before any excavation.

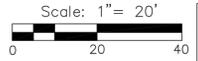
Owner and site address:
 WATERTOWN HISTORICAL SOCIETY
 919 CHARLES ST
 WATERTOWN, WI 53094

TOPOGRAPHIC SURVEY

LOTS 67 & 68, RICHARDS HOMESTEAD ADD. ALSO VAC LIVSEY, being a part of the NE 1/4 of the SE 1/4, and part of the SE 1/4 of the SE 1/4, of Section 3, T8N-R15E, City of Watertown, Jefferson County, Wisconsin.

9TH WARD
 Part of O.L. 31
 WATERTOWN HISTORICAL SOCIETY LANDS

- Legend
- Hydrant
 - Found 3/4" Rebar
 - Found 1" Outside Dia. Iron Pipe
 - Found 1" Inside Dia. Iron Pipe



Red Oak Land Surveying LLC		
313 Waverly Pl. Madison, WI 53705 (608)233-3142 redoaks.com		
DRAWN	DATE	Requested by: Ryan Jones RJ Construction 800 N Church St. Watertown, WI 53594
TGR	3/3/2024	
APPROVED	DATE	PROJECT NO. 2024012
TGR	3/4/2024	
SCALE	SHEET	
1" = 20'	1 of 1	



222 South Main Street
 Fort Atkinson, WI 53538
 P (920)568-9550
 F (920)568-9551

ISSUE		
#	DATE	DESCRIPTION

OCTAGON HOUSE
 919 CHARLES ST.
 WATERTOWN, WI 53094

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SITE PLAN