



PROJECT DATA

SCOPE OF WORK: THIS PROJECT IS THE CONSTRUCTION OF A DRIVE-THRU COFFEE SHOP

PROJECT ADDRESS: XXXX MORMON COULEE RD, LA CROSSE WISCONSIN, 54601

GROSS FLOOR AREA: 510 SF

CONSTRUCTION TYPE: V-B

OCCUPANCY: GROUP B - BUSINESS

OCCUPANT LOAD: 510 SF / 100 = 6 PERSONS

APPLICABLE CODES: 2015 INTERNATIONAL BUILDING CODE W/ AMENDMENTS FROM STATE OF WISCONSIN
2015 INTERNATIONAL ENERGY CONSERVATION CODE W/ AMENDMENTS FROM STATE OF WISCONSIN
2015 INTERNATIONAL FUEL GAS CODE W/ AMENDMENTS FROM STATE OF WISCONSIN
2015 INTERNATIONAL MECHANICAL CODE W/ AMENDMENTS FROM STATE OF WISCONSIN
2015 INTERNATIONAL FIRE CODE
2018 WISCONSIN UNIFORM PLUMBING CODE
2017 NATIONAL ELECTRICAL CODE (NFPA 70)

VICINITY MAP



PROJECT DIRECTORY

OWNER
PLAZA STREET PARTNERS, LLC
2400 W 75THST, SUITE 220, PRAIRIE VILLAGE, KS 66207
913.299.5737

ARCHITECT
VERITAS ARCHITECTURE AND DESIGN
707 NORTH 6TH STREET, KANSAS CITY, KANSAS 66101
913.308.1460

MODULAR BUILDING FABRICATOR
NATIONAL MODULAR
8905 EAST INDUSTRIAL DRIVE, HAVEN, KS 67543
620.466.5000

MEP ENGINEER & OFF SITE INSPECTIONS
ENGINEITY CONSULTING ENGINEERS LLC
111 NORTH MOSLEY STREET, SUITE 200, WICHITA, KS 67202
316.239.7999

STRUCTURAL ENGINEER & OFF SITE INSPECTIONS
MKEC ENGINEERING INC.
411 NORTH WEBB ROAD, WICHITA, KANSAS 67206
316.684.9600

CIVIL ENGINEER
BFA, INC
103 ELM STREET, WASHINGTON, MISSOURI 63090
636.239.4751

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PREFABRICATED BUILDING:

APPROVED BY WISCONSIN BUILDING PRODUCT EVALUATION NUMBERS:
BP-022300001-BAS & PP-022300003-PTOPP

THIS BUILDING IS BEING FABRICATED IN A CONTROLLED ENVIRONMENT AND TRANSFERRED TO THE JOB SITE. THE UNIT WILL BE INSPECTED PRIOR TO SHIPPING, AND INSPECTIONS WILL INCLUDE STRUCTURAL, FRAMING, BUILDING, PLUMBING, AND ELECTRICAL. THE ENGINEER OF RECORD OR A CERTIFIED THIRD-PARTY INSPECTOR WILL CONDUCT AN INSPECTION OF ALL FABRICATION WITHIN THE FABRICATION WAREHOUSE AND THOSE INSPECTION REPORTS WILL BE PROVIDED TO THE MUNICIPALITY FOR REVIEW.

GENERAL CONSTRUCTION PROCEDURES

- ALL CONSTRUCTION SHALL BE EXECUTED IN STRICT COMPLIANCE WITH ALL LOCAL CODES AND ORDINANCES. GENERAL CONTRACTOR SHALL COMPLY WITH ALL CONSTRUCTION REGULATIONS AND PROCEDURES ESTABLISHED BY THE LANDLORD.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING APPLICATION FOR AND PROCURING ALL PERMITS AND CERTIFICATES AS MIGHT BE REQUIRED BY GOVERNING AGENCIES AND SHALL BEAR THE COST FOR SUCH PERMITS AND CERTIFICATES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS OF THE SITE.
- EVERY EFFORT HAS BEEN MADE TO ASSURE ACCURATE CONSTRUCTION DOCUMENTS, BUT IF A CONFLICT EXISTS THE GENERAL CONTRACTOR SHALL CONTACT THE ARCHITECT IMMEDIATELY FOR CLARIFICATION. THESE DOCUMENTS INDICATE THE DESIGN INTENT AND IF EXISTING CONDITIONS ARE IN CONFLICT THE GENERAL CONTRACTOR SHALL CONTACT THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- THE GENERAL CONTRACTOR SHALL MAINTAIN DIRECT SUPERVISION OVER ALL SUBCONTRACTORS AND SHARE RESPONSIBILITY FOR THEIR PERFORMANCE AND QUALITY OF WORK. A LIST OF ALL SUBCONTRACTORS SHALL BE PROVIDED TO THE OWNER AND THE ARCHITECT. A COPY OF THIS LIST SHALL BE POSTED ON THE JOB SITE.
- ALL SIGNAGE AND MOUNTING DEVICES SHALL BE PROVIDED, AND ALL SIGNAGE APPROVALS OBTAINED, BY OWNERS SIGN CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE ELECTRICAL POWER AS REQUIRED AND INSURE SUFFICIENT SPACE AND CLEARANCE IS PROVIDED FOR PROPER INSTALLATION. SIGNAGE CONTRACTOR SHALL APPLY FOR AND SECURE ALL APPROVALS REQUIRED BY ALL LOCAL GOVERNING AGENCIES AND SUPPLY ANY DRAWINGS OR GRAPHIC REPRESENTATIONS REQUIRED BY LANDLORD.
- ALL CONCEALED WOOD BLOCKING USED IN CONSTRUCTION SHALL BE FIRE-RETARDANT TREATED (IF APPLICABLE).
- GENERAL CONTRACTOR SHALL PERFORM AND/OR CAUSE TO BE PERFORMED ALL WORK IN A FIRST-CLASS WORKMANLIKE MANNER AND IN ACCORDANCE WITH EACH TRADE'S ESTABLISHED PROCEDURES AND MANUFACTURER'S RECOMMENDATIONS FOR PRODUCT USE AND INSTALLATION.
- ALL PRODUCTS USED ON THIS PROJECT SHALL BE FIRST QUALITY, NEW AND FREE OF ASBESTOS OR OTHER ENVIRONMENTALLY UNSAFE SUBSTANCES.
- MILLWORK, BASE, DESIGNATED TRIM, ETC. SHALL BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR WHERE INDICATED ON THE DRAWINGS AND/OR SCHEDULES.
- GENERAL CONTRACTOR SHALL PROVIDE ALUMINUM CORNER GUARDS AT ALL EXPOSED OUTSIDE CORNERS. ALUMINUM GUARDS TO BE 8'-0" LENGTHS AS MANUFACTURED BY INSTITUTIONAL PRODUCTS CORPORATION.
- GENERAL CONTRACTOR SHALL CONTACT ARCHITECT PRIOR TO CONSTRUCTION START DATE TO CONFIRM THAT HE/SHE HAS LATEST APPROVED CONSTRUCTION DOCUMENTS FOR THIS LOCATION.

ABBREVIATIONS

A/C	air conditioning	E	east	ID	inside diameter	PH	panic hardware	TS	tube steel
ABV	above	EA	each	INT	interior	PK	parking	TSL	top of slab
AFF	above finished floor	EL, ELEV	elevation	JT	joint	PLF	pounds per linear foot	TYP	typical
ALT	alternate	ELECT	electric(al)	KO	knock out	PNL	panel	UNF	unfinished
APPROX	approximately	ELEV	elevation	LAV	lavatory	PREFAB	prefabricate(d)	UNO	unless noted otherwise
ARCH	architect(ural)	EQ	equal	LBL	label	PRF	preformed	VAR	varies, variable
AUTO	automatic	EST	estimate	LH	left hand	PSC	prestressed concrete	VB	vapor barrier
BD	board	EW	each way	LL	live load	PSF	pounds per square foot	VIF	verify in field
BEL	below	EJ	existing	LPT	low point	PTI	pounds per square inch	W	west
BLDG	building	EX	expansion joint	LT	light	PT	point	W/	width, wide
BO	bottom of	EXT	exterior	LVR	lower	PTC	post-tensioned concrete	W/O	without
BSMT	basement	FA	fire alarm	LW	lightweight	RA	return air	WB	wood base
BVL	bevel	FBO	furnished by other	LWC	lightweight concrete	RB	rubber base	WC	water closet
CAB	cabinet	FD	floor drain	M	meter(s)	RD	roof drain	WD	wood
CCTV	closet circuit television	FE	fire extinguisher	MAX	maximum	REF	reference	WH	wall hung
CG	corner guard	FEC	fire extinguisher cabinet	MBR	member	REV	revision	WP	waterproofing
CJ	corner joint	FF	finished floor	MECH	mechanical	RH	right hand	WPT	working point
CL	centerline	FFE	finished floor elevation	MEP	mechanical, electrical, plumbing	RM	room	WR	water resistant
CLG	ceiling	FFL	finished floor line	MFR	manufacture(r)	RO	rough opening	WTTW	wall to wall
CLR	clear	FND	foundation	MHO	magnetic hold open	ROW	right of way		
CMU	concrete masonry unit	FOC	face of concrete	MIN	minimum	S	solid core		
CNR	corner	FOS	face of stud	MM	millimeter(s)	SC	solid core		
CO	cleanout	FTG	footing	MRD	metal roof deck	SEC	section		
COL	column	FUR	furr(ed)	MTL	metal	SF	square feet (foot)		
COMP	compress(ed)(ion)(ible)	GA	gauge, gage	N	north	SM	similar		
CONC	concrete	GALV	galvanized	NIC	not in contract	SP	soundproof		
CONST	construction	GB	grab bar	NOM	nominal	SPEC	specification(s)		
CONT	continue, continuous	GC	general contractor	NTS	not to scale	SQ	square		
D	depth	GYP BD	gypsum board	OA	overall	SS	stainless steel		
DBL	double	HB	hose bibb	OC	on center	STD	standard		
DEMO	demolish, demolition	HC	hollow core	OD	outside diameter	STG	sealing		
DIAG	diagonal	HD	heavy duty	OH	opposite hand	STRUCT	structure(al)		
DIAM	diameter	HDR	header	OH	overhead	SYM	symmetrical		
DIM	dimension	HT	height	OPP	opposite	SYS	system		
DIV	division	HM	hollow metal	ORD	overflow roof drain	T&G	tongue and groove		
DL	dead load	HTG	heating	PB	panic bar	THK	thickness		
DN	down	HVAC	heating/ventilating/air conditioning	PC	precast concrete	TO	top of		
DR	door	HW	hardware	PCF	per cubic foot	TOS	top of steel		
DS	downspout	HWD	hardware	PERF	perforate(d)	TOW	top of wall		
DTL	detail	ICF	insulated concrete form(ing)						
DWG	drawing								



707 n. 6th street
kansas city, ks 66101
www.veritas-ad.com
913.308.1460
consulting engineer.



7 BREW DRIVE THRU - LA CROSSE WI - MORMON COULEE
PLAZA STREET PARTNERS, LLC
XXXX MORMON COULEE RD, LA CROSSE WISCONSIN, 54601

REVISIONS

No.	Description	Date

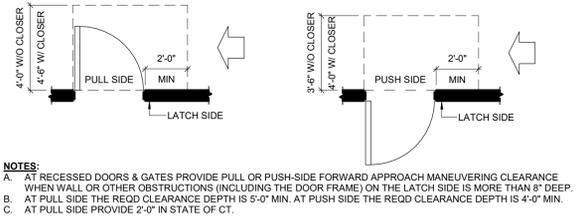
sheet issue date:
07/12/2024

project no.:
22.34.73

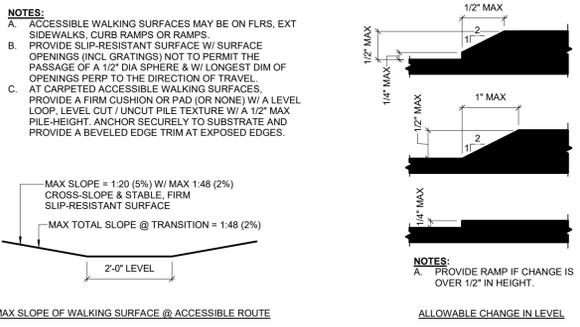
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COVER

sheet no.:

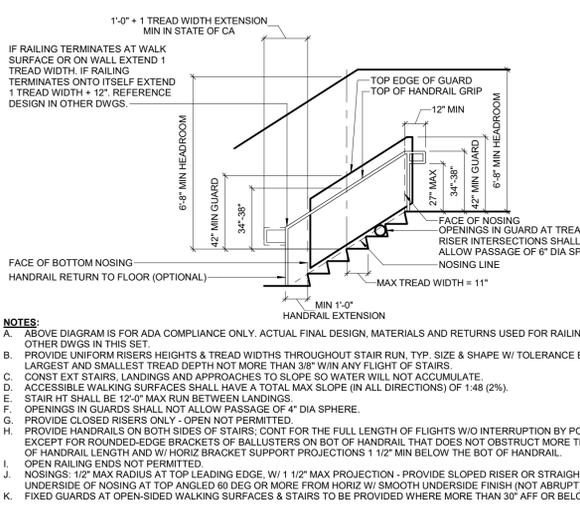
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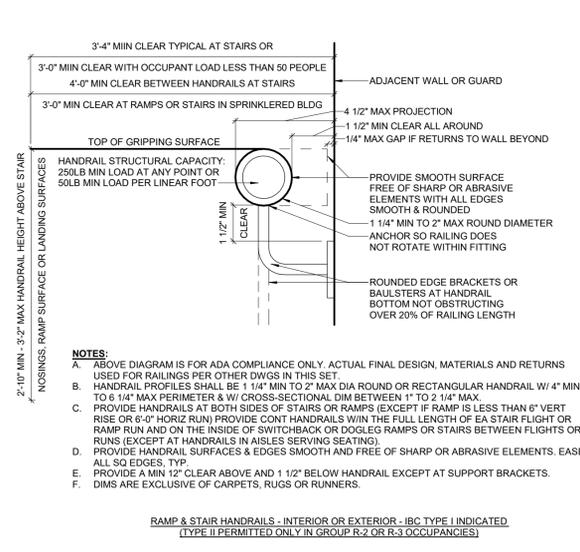
LATCH SIDE - SWING DOOR OR GATE



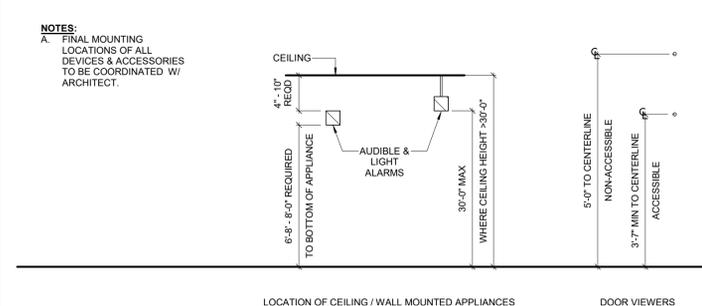
MAX ALLOWABLE FLR LVL CHANGES



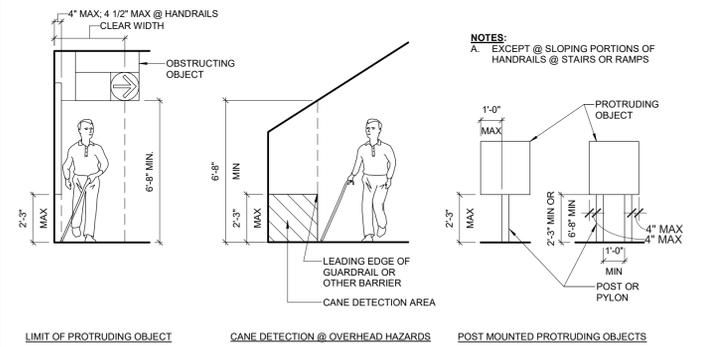
STAIR REQUIREMENTS



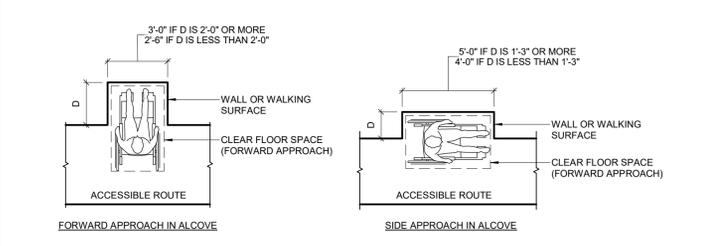
FRNT APPROACH - SWING DR OR GATE



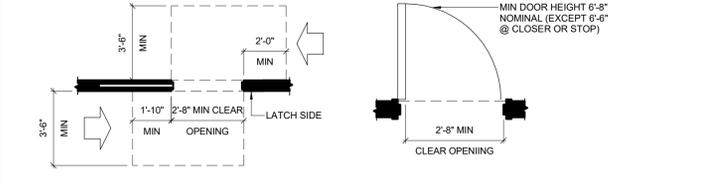
ACCESSORIES MOUNTING HEIGHTS



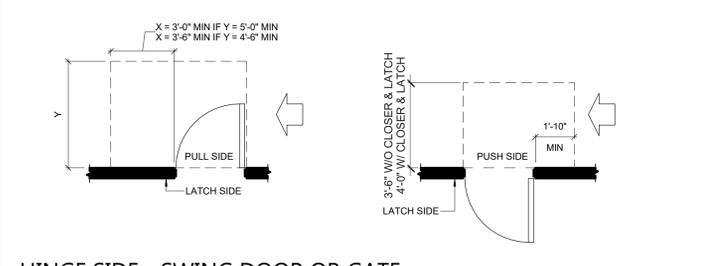
PROTRUDING OBJECT CLEARANCES



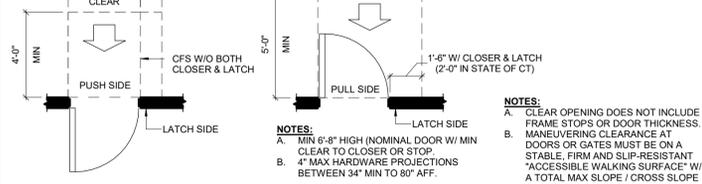
ACCESSIBLE ALCOVE APPROACHES



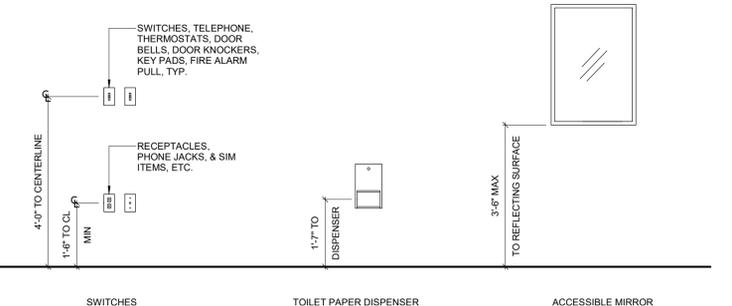
FLNG / SLNG DR & TYP SWING DOOR



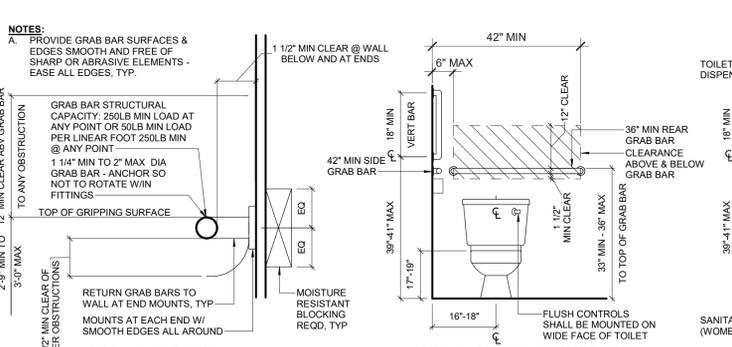
HINGE SIDE - SWING DOOR OR GATE



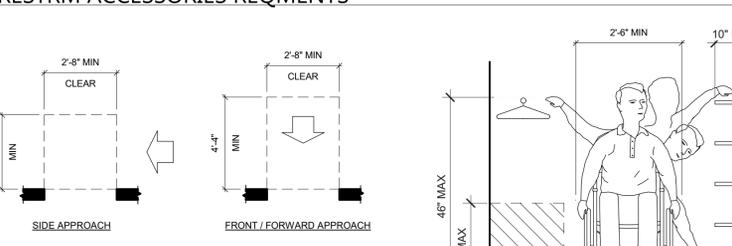
FRNT APPROACH - SWING DR OR GATE



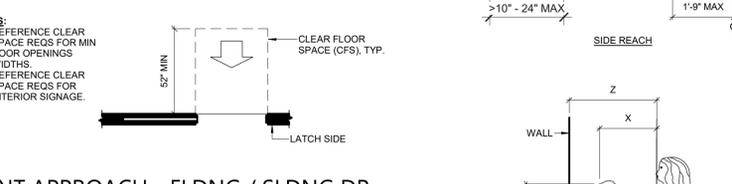
RESTRM ACCESSORIES RQMTS



FRNT & SIDE APPROACH - DOORWAYS



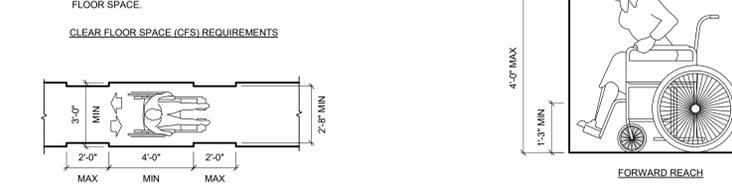
FRNT APPROACH - FLNG / SLNG DR



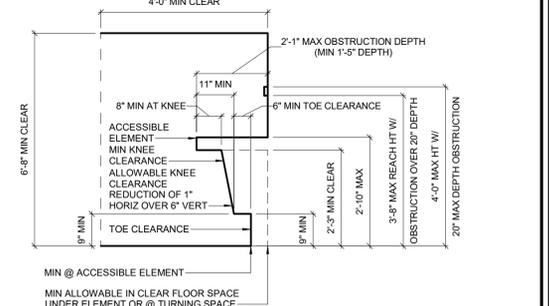
LATCH SIDE - FOLDING / SLIDING DOOR



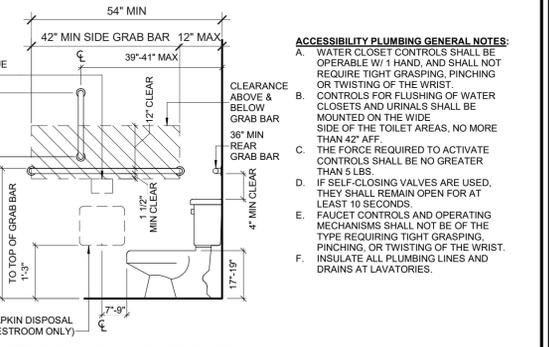
CLEAR FLOOR SPACE REQUIREMENTS



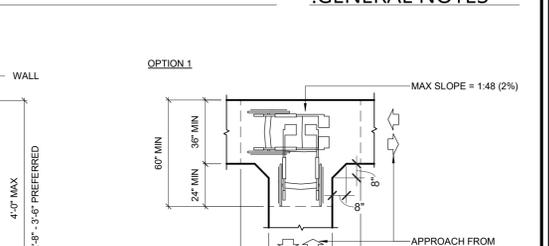
REACHABILITY REQUIREMENTS



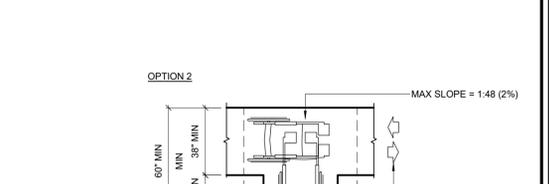
KNEE & TOE CLEARANCES



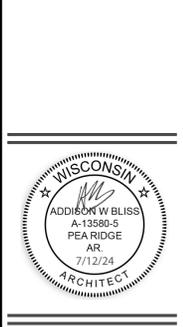
ACCESSIB./ PLUMB. GENERAL NOTES



CLEAR TURNING SPACE RQMTS



CLEAR TURNING SPACE RQMTS



REVISIONS		
No.	Description	Date

sheet issue date: 07/12/2024
 project no.: 22.34.73
 sheet contents: GENERAL ACCESSIBILITY REQUIREMENTS
 sheet no.: A0.2



7 BREW DRIVE THRU - LA CROSSE WI - MORMON COULE
PLAZA STREET PARTNERS, LLC
XXXX MORMON COULEE RD, LA CROSSE WISCONSIN, 54601

REVISIONS		
No.	Description	Date

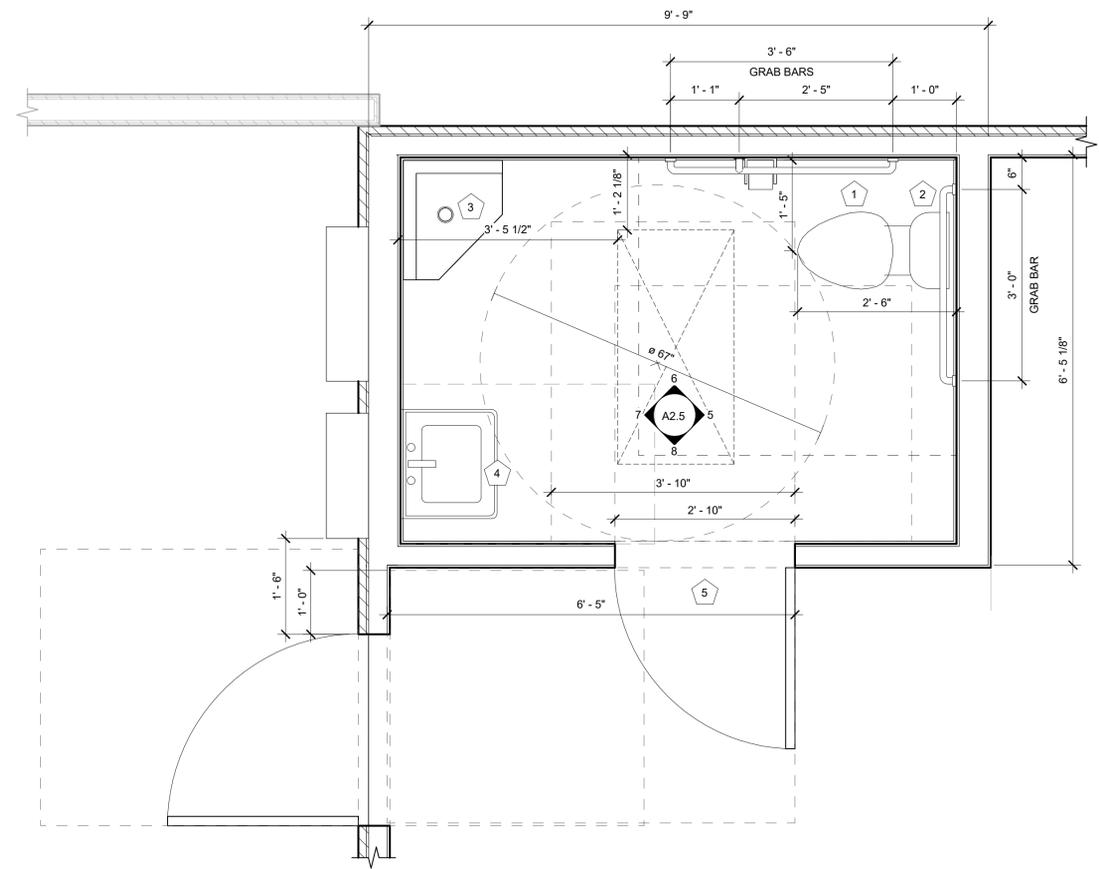
sheet issue date:
07/12/2024

project no.:
22.34.73

sheet contents:
LIFE SAFETY PLAN

sheet no.:

A0.5



2 ENLARGED RESTROOM
3/4" = 1'-0"

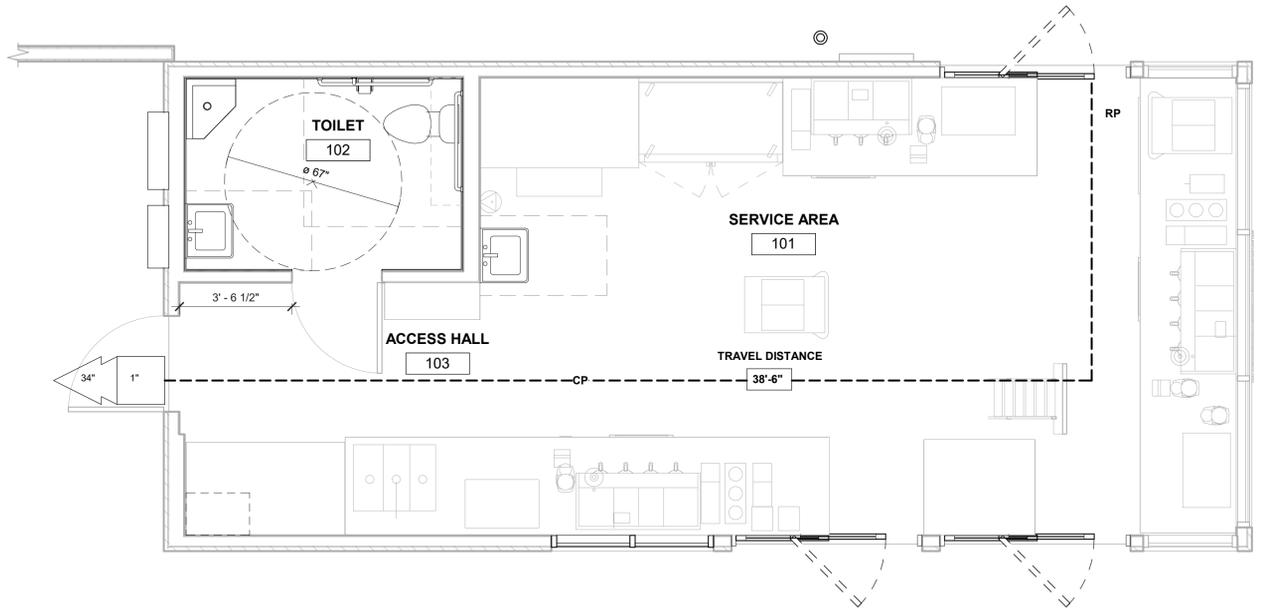
NOTE NO.	NOTE TEXT
1	FIXTURES AND GRAB BARS SHALL BE IN COMPLIANCE WITH ADA 604 AND 606 - CONTRACTOR SHALL PROVIDE ADDITIONAL BLOCKING AS REQUIRED
2	CONTRACTOR SHALL PROVIDE A ROLL-OUT TYPE WATER-PROOF MEMBRANE AT TOILET - RETURN MEMBRANE UP WALL MIN 6"
3	MOP SINK - RE: PLUMBING DRAWINGS
4	30" X 48" CLEAR SPACE AT LAVATORY
5	HM DOOR AND FRAME AT TOILET ROOM - RE: DOOR SCHEDULE

EGRESS SYMBOL LEGEND	
	INDICATES ACTUAL EGRESS WIDTH (IN INCHES)
	INDICATES MIN. REQUIRED EGRESS WIDTH (IN INCHES) - FOR BUILDING EGRESS CALCULATION ONLY
	EGRESS WIDTH EXIT SYMBOL
	REMOTE POINT
	COMMON POINT
	TRAVEL DISTANCE

PROJECT DATA

SCOPE OF WORK:
THIS PROJECT IS THE CONSTRUCTION OF A DRIVE-THRU COFFEE SHOP

BUILDING AREA: 510 SQ. FT.
CONSTRUCTION TYPE: VB
OCCUPANCY: GROUP B BUSINESS
OCCUPANT LOAD: 510 SF / 100 = 6 PERSONS
1 MEANS OF EGRESS REQUIRED



1 LIFE SAFETY
3/8" = 1'-0"

PROPOSED

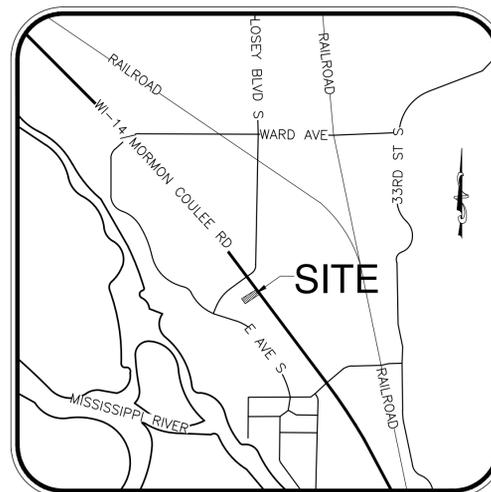
7 BREW COFFEE SHOP

3960 MORMON COULEE ROAD

LA CROSSE, LA CROSSE COUNTY, WISCONSIN 54601

PROJECT CONTACT INFORMATION	
GAS	XCEL ENERGY, INC CONTACT: PHONE: (800)-895-4999 EMAIL:
TELEPHONE	CHARTER COMMUNICATIONS CONTACT: PHONE: (262)-446-9821 EMAIL:
ELECTRIC	XCEL ENERGY, INC CONTACT: PHONE: (800)-895-4999 EMAIL:
SANITARY SEWER	CITY OF LA CROSSE SEWER DEPARTMENT 400 LA CROSSE ST, 5TH FLOOR LA CROSSE, WI 54601 CONTACT: PHONE: (608)-789-7384 EMAIL:
WATER	CITY OF LA CROSSE 400 LA CROSSE ST, 5TH FLOOR LA CROSSE, WI 54601 CONTACT: PHONE: (608)-789-7384 EMAIL:
STORM SEWER	CITY OF LA CROSSE SEWER DEPARTMENT 400 LA CROSSE ST, 5TH FLOOR LA CROSSE, WI 54601 CONTACT: PHONE: (608)-789-7384 EMAIL:

THE CONTRACTOR SHALL COORDINATE WORK WITH THE APPROPRIATE UTILITY OWNERS TO ENSURE NO CONFLICTS WITH EXISTING UTILITY INFRASTRUCTURE.



DEVELOPER	PLAZA STREET PARTNERS 3400 COLLEGE BLVD, SUITE 200 LEAWOOD, KS 66211 CONTACT: KARA CONDIE PHONE: (913) 299-5737 EMAIL: kcondie@plazastreetpartners.com
CIVIL/SITE ENGINEER	BFA, INC. 103 ELM STREET WASHINGTON, MISSOURI 63090 CONTACT: JOHN SCHEBAUM PHONE: (636) 231-4337 EMAIL: jschebaum@bfaeng.com
ARCHITECT	VERITAS ARCHITECTURE & DESIGN CONTACT: ADDISON BLISS PHONE: (479) 358-1310 EMAIL: addison@veritas-od.com

SHEET INDEX	
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ALTA*	ALTA 3 OF 3
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EROSION AND SEDIMENT CONTROL DETAIL SHEET I	ESC-3
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BMP DRAINAGE AREA MAP	DA-3
*PROVIDED UNDER SEPARATE SEAL	

CAUTION - NOTICE TO CONTRACTOR REGARDING EXISTING UTILITIES

THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE PERFORMING ANY CONSTRUCTION ACTIVITIES TO REQUEST FIELD LOCATIONS OF THEIR UTILITIES. THE CONTRACTOR MUST BE AWARE THAT SOME EXISTING UTILITIES MAY NOT BE ACCURATELY SHOWN, KNOWN TO EXIST, AND/OR LOCATED BY LOCAL OR STATE UTILITY COMPANIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE NECESSARY ACCOMMODATIONS TO ACCURATELY LOCATE ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF WORK.

ALL EXISTING UTILITIES ON THIS PROJECT SITE AND ON ADJACENT DEVELOPMENTS SHALL REMAIN IN PLACE AND OPERATIONAL AT ALL TIMES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE EXISTING UTILITIES, WHEN NECESSARY, TO FACILITATE THE REQUIRED IMPROVEMENTS SHOWN BY THESE PLANS. THE CONTRACTOR MUST COORDINATE ANY RELOCATIONS OR MODIFICATIONS TO THE EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANY, THE OWNER, AND BFA, INC.

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

bfaeng.com TELEPHONE: (636) 239-4751

BFA

Engineering-Surveying

103 ELM STREET WASHINGTON, MISSOURI 63090

LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

REVISIONS	
1	By: _____ App: _____
2	By: _____ App: _____
3	By: _____ App: _____
4	By: _____ App: _____

DRAWN
B.L.F.
CHECKED
J.B.S.
DATE
07/12/24
SCALE
NONE
JOB No.
8306
SHEET NAME
COVER SHEET

CS-1

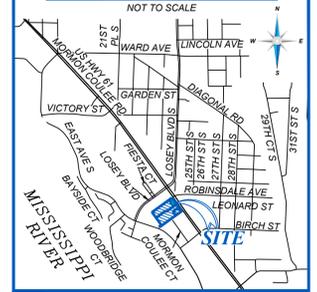
ALTA/NSPS LAND TITLE LIMITED TOPOGRAPHIC SURVEY

3960, 4000, 4049, 4020 MORMON COULEE ROAD
LOCATED IN: SECTION 16, TOWNSHIP 15 NORTH, RANGE 7 WEST
LA CROSSE, LA CROSSE COUNTY, WISCONSIN 54601

PARKING INFORMATION

WITHIN SUBJECT PROPERTY:
REGULAR= 228
HANDICAP= 8
TOTAL= 236
PARKING EASEMENT DOCUMENT NO. 1593561
DOCUMENT NO. 1620054, DOCUMENT NO. 1734366
REGULAR= 110
HANDICAP= 3
TOTAL= 349

VICINITY MAP



GENERAL NOTES

- SOME FEATURES SHOWN ON THIS PLAT MAY BE SHOWN OUT OF SCALE FOR CLARITY.
- DIMENSIONS ON THIS PLAT ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED. MONUMENTS WERE FOUND AT POINTS WHERE INDICATED.
- IN REGARD TO ALTA/NSPS TABLE ITEM 16, THERE WAS NO OBSERVABLE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR ADDITIONS EXCEPT AS SHOWN HEREON.
- IN REGARD TO ALTA/NSPS TABLE ITEM 17, THERE WERE NO KNOWN PROPOSED CHANGES IN RIGHT OF WAY LINES, RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS EXCEPT AS SHOWN HEREON.
- AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL.
- AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A CEMETERY, ISOLATED GRAVE SITE OR BURIAL GROUNDS.
- COMPLETED FIELD WORK WAS APRIL 30, 2024.
- THE DISTANCES SHOWN HEREON ARE UNITS OF GROUND MEASUREMENTS.
- THE NEAREST INTERSECTING STREET IS THE INTERSECTION OF U.S.H. 1461, A.K.A. MORMON COULEE ROAD AND LOSEY BOULEVARD, WHICH IS APPROXIMATELY 190' FROM THE NORTHEASTERN CORNER OF THE SUBJECT PROPERTY.
- THE SUBJECT PROPERTY HAS INDIRECT ACCESS TO LOSEY BOULEVARD VIA ACCESS / PARKING EASEMENT DESCRIBED IN DOCUMENT NO. 1593561, BEING A PUBLIC RIGHT-OF-WAY.
- EXCEPT AS SPECIFICALLY STATED OR SHOWN ON THIS PLAT, THIS SURVEY DOES NOT PURPORT TO REFLECT ANY OF THE FOLLOWING WHICH MAY BE APPLICABLE TO THE SUBJECT PROPERTY: EASEMENTS, OTHER THAN POSSIBLE EASEMENTS WHICH WERE VISIBLE AT THE TIME OF SURVEY; RESTRICTIVE COVENANTS; SUBDIVISION RESTRICTIONS OR OTHER LAND USE REGULATIONS; AND ANY OTHER FACTS WHICH AN ACCURATE TITLE SEARCH MAY DISCLOSE.
- NO SURVEYOR OR ANY OTHER PERSON OTHER THAN A LICENSED WISCONSIN ATTORNEY MAY PROVIDE LEGAL ADVICE CONCERNING THE STATUS OF TITLE TO THE PROPERTY DESCRIBED IN THIS SURVEY ("THE SUBJECT PROPERTY"), THE PURPOSE OF THIS SURVEY AND THE COMMENTS RELATED TO THE SCHEDULE B-II EXCEPTIONS, IS ONLY TO SHOW THE LOCATION OF BOUNDARIES AND PHYSICAL OBJECTIONS IN RELATION THERETO TO THE EXTENT THAT THE SURVEY INDICATES THAT THE LEGAL INSTRUMENT "AFFECTS" THE SUBJECT PROPERTY, SUCH STATEMENT IS ONLY INTENDED TO INDICATE THAT PROPERTY BOUNDARIES INCLUDED IN SUCH INSTRUMENT INCLUDE SOME OR ALL OF THE SUBJECT PROPERTY. THE SURVEYOR DOES NOT PURPORT TO DESCRIBE HOW SUCH INSTRUMENT AFFECTS THE SUBJECT PROPERTY OR THE ENFORCEABILITY OR LEGAL CONSEQUENCES OF SUCH INSTRUMENT.
- NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS WERE TAKEN FROM LA CROSSE COUNTY GIS.
- THE SUBJECT PROPERTY SHOWN HEREON FORMS A MATHEMATICALLY CLOSED FIGURE AND IS CONTIGUOUS WITH THE ADJOINING PUBLIC RIGHT-OF-WAY AND/OR ADJOINING PARCELS WITH NO GAPS OR OVERLAPS.
- IN REGARD TO ALTA/NSPS TABLE ITEM 10, VISIBLE DIVISION OR PARTY WALLS WITH RESPECT TO ADJOINING PROPERTIES WERE OBSERVED AT THE TIME THE FIELD WORK WAS PERFORMED, AS SHOWN HEREON.
- ELEVATIONS ESTABLISHED WITH GPS STATIC OBSERVATIONS WITH ORIGINATING BENCHMARK PID: DH8676, VERTICAL DATUM BASED UPON NORTH AMERICAN VERTICAL DATUM (NAVD83) IN US SURVEY FEET. CONTOURS SHOWN ARE 1' FOOT INTERVALS. BENCHMARK PID: DH8676 DESIGNATION: K 124 RESET PUBLISHED ELEVATION: 667.91' MONUMENT DESCRIPTION: VERTICAL CONTROL DISK STAMPING: K 124 RESET 1991
- THE TERM "CERTIFY" OR "CERTIFICATION" AND "CORRECT" AS NOTED HEREON AND AS IT PERTAINS TO LAND SURVEYING SERVICES AS SHOWN ON THIS DOCUMENT SHALL MEAN: "A STATEMENT SIGNED BY THE PROFESSIONAL LAND SURVEYOR BASED ON THE FACTS AND KNOWLEDGE KNOWN TO THE PROFESSIONAL LAND SURVEYOR AT THE TIME OF THE SURVEY AND IS NOT A GUARANTEE OR WARRANTY, EITHER IMPLIED OR EXPRESSED".
- A PRIVATE UTILITY LOCATE WAS CONDUCTED ON THE SUBJECT PROPERTY BY BLEW & ASSOCIATES ON 04/19/2024.

SURVEYORS' CERTIFICATE

TO: PLAZA STREET PARTNERS, LLC, A KANSAS LIMITED LIABILITY COMPANY; VSC CORPORATION; FIDELITY NATIONAL TITLE INSURANCE COMPANY;

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6A, 6B, 7A, 7B1, 7C, 8, 9, 10, 11A, 11B, 13, 14, 16, 17, AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 04/30/2024.

DATE OF PLAT OR MAP: 05/02/2024

JASON M. PAGE
LAND SURVEYOR NO. 3012
STATE OF WISCONSIN

PRELIMINARY

3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
EMAIL: SURVEY@BLEWINC.COM
OFFICE: 479.443.4506 FAX: 479.582.1883
WWW.BLEWINC.COM

SURVEYOR JOB NUMBER:
23-7330

SURVEYOR DRAWN BY:
K.J.D. - 05/03/2024

SURVEY REVIEWED BY:
J.M.C.

SHEET:
1 OF 3

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME PROPERTY AS DESCRIBED IN FIDELITY NATIONAL TITLE INSURANCE COMPANY, TITLE COMMITMENT ORDER NUMBER: W-4011116E, WITH A COMMITMENT DATE OF APRIL 17, 2024 AT 12:00 A.M.

SCHEDULE A DESCRIPTION

UNIT 2, MORMON COULEE PLAZA CONDOMINIUM, BEING A CONDOMINIUM UNDER THE CONDOMINIUM OWNERSHIP ACT OF THE STATE OF WISCONSIN BY A CONDOMINIUM DECLARATION DATED MARCH 21, 2012, AND RECORDED MARCH 27, 2012, IN THE OFFICE OF THE REGISTER OF DEEDS FOR LA CROSSE COUNTY, WISCONSIN, AS DOCUMENT NO. 1593560, AND BY A CONDOMINIUM PLAT THEREFORE.

TOGETHER WITH ALL APPURTENANT RIGHTS, TITLE AND INTERESTS, INCLUDING (WITHOUT LIMITATION):
(A) THE UNDIVIDED PERCENTAGE INTEREST IN ALL COMMON ELEMENTS AS SPECIFIED FOR SUCH UNIT IN THE AFOREMENTIONED DECLARATION;
(B) THE RIGHT TO USE THE AREAS AND/OR FACILITIES, IF ANY, SPECIFIED IN THE AFOREMENTIONED DECLARATION AS LIMITED COMMON ELEMENTS FOR SUCH UNIT; AND
(C) MEMBERSHIP IN THE MORMON COULEE PLAZA CONDOMINIUM ASSOCIATION, INC. (HEREAFTER THE "OWNERS ASSOCIATION"), AS PROVIDED FOR IN THE AFOREMENTIONED DECLARATION AND IN ANY ARTICLES OF INCORPORATION AND/OR BYLAWS FOR SUCH OWNER'S ASSOCIATION, IN THE CITY OF LA CROSSE, LA CROSSE COUNTY, WISCONSIN.

TAX KEY NO. 17-40381-120

ADDRESS: 3960 MORMON COULEE ROAD LA CROSSE, WI 54601

NOTES CORRESPONDING TO SCHEDULE B

- EASEMENT TO THE CITY OF LA CROSSE RECORDED AUGUST 12, 1976, IN VOLUME 578, PAGE 506, AS DOCUMENT NO. 860334 (DOES NOT AFFECT, APPEARS TO FALL SOUTH OF THE SUBJECT PROPERTY)
- EASEMENT DEED TO THE CITY OF LA CROSSE RECORDED OCTOBER 17, 1978, IN VOLUME 618, PAGE 656, AS DOCUMENT NO. 889231 (DOES NOT AFFECT, APPEARS TO FALL EAST OF THE SUBJECT PROPERTY)
- ALL MATTERS AS MAY AFFECT THE CAPTIONED PREMISES AS SHOWN ON THE RECORDED PLAT OF SEMINARY PARK PLAT RECORDED OCTOBER 6, 1978, AS DOCUMENT NO. 889885 (AFFECTS, PLOTTED AS SHOWN)
- AGREEMENT FOR UTILITY AND DRIVEWAY EASEMENTS RECORDED SEPTEMBER 7, 1979, IN VOLUME 633, PAGE 960, AS DOCUMENT NO. 900253 (DOES NOT AFFECT, PLOTTED AS SHOWN)
- TERMS, CONDITIONS AND PROVISIONS OF EASEMENTS CONTAINED IN WARRANTY DEED RECORDED SEPTEMBER 7, 1979, IN VOLUME 633, PAGE 970, AS DOCUMENT NO. 900255 (AFFECTS, PLOTTED AS SHOWN)
- EASEMENT CONTAINED IN AWARD OF DAMAGES RECORDED JULY 18, 1991, IN VOLUME 899, PAGE 361, AS DOCUMENT NO. 1054063 (AFFECTS, PLOTTED AS SHOWN)
- TERMS, CONDITIONS, PROVISIONS AND MAINTENANCE FEES, IF ANY, CONTAINED IN SPECIAL WARRANTY DEED RECORDED MAY 26, 1994, IN VOLUME 1049, PAGE 528, AS DOCUMENT NO. 1116985 (AFFECTS, CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- RESERVATIONS, CONDITIONS, EASEMENTS, COVENANTS, USES, OPTIONS, AGREEMENTS, LIMITATIONS ON TITLE AND ALL OTHER PROVISIONS CONTAINED IN OR INCORPORATED BY REFERENCE TO THAT CERTAIN DECLARATION OF CONDOMINIUM OF MORMON COULEE PLAZA CONDOMINIUM AND EXHIBITS THERETO, DATED MARCH 21, 2012 AND RECORDED MARCH 27, 2012 IN THE OFFICE OF THE REGISTER OF DEEDS FOR LA CROSSE COUNTY, WISCONSIN AS DOCUMENT NUMBER 1593560, AND BY LAWS OF THE CONDOMINIUM HOMEOWNERS ASSOCIATION, PROVISIONS AND LIMITATIONS OF THE UNIT OWNERSHIP ACT OF THE STATE OF WISCONSIN, (AFFECTS, PLOTTED AS SHOWN)
- DECLARATION OF RECIPROCAL EASEMENT AGREEMENT RECORDED MARCH 27, 2012 AS DOCUMENT NO. 1593561; MODIFIED BY AMENDED DECLARATION OF RECIPROCAL EASEMENT AGREEMENT RECORDED APRIL 23, 2013, AS DOCUMENT NO. 1620054; MODIFIED BY FIRST AMENDMENT TO AMENDED DECLARATION OF RECIPROCAL EASEMENT AGREEMENT RECORDED OCTOBER 15, 2019 AS DOCUMENT NO. 1734366 (AFFECTS, BLANKET IN NATURE, AS SHOWN HEREON)
- ALL MATTERS AS MAY AFFECT THE CAPTIONED PREMISES AS SHOWN ON THE RECORDED PLAT OF MORMON COULEE PLAZA CONDOMINIUM RECORDED MARCH 27, 2012, AS DOCUMENT NO. 1593562 (AFFECTS, PLOTTED AS SHOWN)

REFERENCE DOCUMENTS

- CSM RECORDED AS VOL. 7, PAGE 6.
- CSM RECORDED AS VOL. 15, PAGE 130.

SIGNIFICANT OBSERVATIONS

NONE OBSERVED AT THE TIME OF THE ALTA/NSPS SURVEY.

UTILITY INFORMATION

THE UTILITIES SHOWN ON THIS DRAWING HEREON HAVE BEEN LOCATED BY FIELD MEASUREMENTS, UTILITY MAP DRAWINGS, PRIVATE UTILITY LOCATE (PUL) BY BLEW & ASSOCIATES AND ONE-CALL UTILITY LOCATE REQUEST. BLEW & ASSOCIATES MAKES NO WARRANTY TO THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION. CALL WISCONSIN ONE-CALL AT 800-242-8511 OR 811 FOR FIELD LOCATIONS (REQUEST FOR GROUND MARKINGS) OF UNDERGROUND UTILITY LINES BEFORE DIGGING.
DIG TICKET NUMBER: 20234403725; 20234403767; 20234403831

COMPANY: BRIGHTSPEED
CITY OF LA CROSSE
CITY OF LA CROSSE - ELECTRIC & FIBER
DAIRYLAND POWER COOPERATIVE
CHARTER COMMUNICATIONS
XCEL ENERGY, INC.

CONTACT: (833) 363-2360
(608) 789-7384
(608) 386-5104
(715) 845-5004
(262) 446-9821
(800) 895-4999

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME PROPERTY AS DESCRIBED IN FIDELITY NATIONAL TITLE INSURANCE COMPANY, TITLE COMMITMENT ORDER NUMBER: W-4011116E, WITH A PRINT DATE OF JUNE 11, 2024 AT 1:40 P.M.

SCHEDULE A DESCRIPTION

PARCEL 1:
LOT 1 OF CELTAX-LA CROSSE ADDITION, CITY OF LA CROSSE, LA CROSSE COUNTY, WISCONSIN, EXCEPT LOT 1 CERTIFIED SURVEY MAP RECORDED ON MAY 1, 2013, IN VOLUME 15 OF CERTIFIED SURVEY MAPS, PAGE 130, AS DOCUMENT NO. 1620535.

PARCEL 2:
LOT 1 CERTIFIED SURVEY MAP RECORDED ON MAY 1, 2013, IN VOLUME 15 OF CERTIFIED SURVEY MAPS, PAGE 130, AS DOCUMENT NO. 1620535, CITY OF LA CROSSE, LA CROSSE COUNTY, WISCONSIN.

NOTES CORRESPONDING TO SCHEDULE B

- EASEMENT TO THE CITY OF LA CROSSE RECORDED AUGUST 12, 1976, IN VOLUME 578, PAGE 506, AS DOCUMENT NO. 860334 (DOES NOT AFFECT, APPEARS TO FALL SOUTH OF THE SUBJECT PROPERTY)
- EASEMENT DEED TO THE CITY OF LA CROSSE RECORDED OCTOBER 17, 1978, IN VOLUME 618, PAGE 656, AS DOCUMENT NO. 889231 (DOES NOT AFFECT, APPEARS TO FALL EAST OF THE SUBJECT PROPERTY)
- COVENANTS, CONDITIONS AND RESTRICTIONS CONTAINED ON THE RECORDED PLAT OF SEMINARY PARK PLAT RECORDED OCTOBER 6, 1978, AS DOCUMENT NO. 889885 STATING: NO OWNER OR POSSESSOR, USER OR LICENSEE, OR OTHER PERSON SHALL HAVE ANY RIGHT OF DIRECT VEHICULAR INGRESS OR EGRESS WITH HIGHWAYS 14-61 AND 35 AS SHOWN ON THE PLAT. ALL ENTRANCES AND EXITS ON BOTH LOSEY BOULEVARD AND BIRCH STREET WILL BE LOCATED AT LEAST 300 FEET FROM THE CENTERLINE OF HIGHWAYS 14-61 AND 35. (AFFECTS, PLOTTED AS SHOWN)
- RESERVATION FOR EASEMENT AS DESIGNATED ON THE RECORDED PLAT OF SEMINARY PARK PLAT RECORDED OCTOBER 6, 1978, AS DOCUMENT NO. 889885, RESERVING THE SOUTHEASTERLY 10 FEET, SOUTHWESTERLY 10 FEET, NORTHWESTERLY 10 FEET AND THE NORTHEASTERLY 12 FEET OF THE PREMISES. (AFFECTS, PLOTTED AS SHOWN)
- AGREEMENT FOR UTILITY AND DRIVEWAY EASEMENTS RECORDED SEPTEMBER 7, 1979, IN VOLUME 633, PAGE 960, AS DOCUMENT NO. 900253 (AFFECTS, PLOTTED AS SHOWN)
- TERMS, CONDITIONS AND PROVISIONS OF EASEMENTS CONTAINED IN WARRANTY DEED RECORDED SEPTEMBER 7, 1979, IN VOLUME 633, PAGE 970, AS DOCUMENT NO. 900255 (AFFECTS, PLOTTED AS SHOWN)
- RESERVATION FOR UTILITY, DRIVEWAY AND STORM SEWER EASEMENTS AND BUILDING SETBACKS AS DESIGNATED ON THE RECORDED PLAT OF CELTAX-LA CROSSE ADDITION RECORDED OCTOBER 10, 1980, AS DOCUMENT NO. 911706 (AFFECTS, PLOTTED AS SHOWN)
- EASEMENT CONTAINED IN AWARD OF DAMAGES RECORDED JULY 18, 1991, IN VOLUME 899, PAGE 361, AS DOCUMENT NO. 1054063 (DOES NOT AFFECT, APPEARS TO LIE NORTHERLY OF THE SUBJECT PROPERTY)
- TERMS, CONDITIONS, PROVISIONS, AND MAINTENANCE FEES, IF ANY, CONTAINED IN SPECIAL WARRANTY DEED RECORDED MAY 26, 1994, IN VOLUME 1049, PAGE 528, AS DOCUMENT NO. 1116985 (AFFECTS, CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- EASEMENT GRANTED TO CITY OF LA CROSSE RECORDED DECEMBER 6, 1999, IN VOLUME 1355, PAGE 565, AS DOCUMENT NO. 1242187 (AFFECTS, PLOTTED AS SHOWN)
- DECLARATION OF RECIPROCAL EASEMENT AGREEMENT RECORDED MARCH 27, 2012, AS DOCUMENT NO. 1593561; MODIFIED BY AMENDED DECLARATION OF RECIPROCAL EASEMENT AGREEMENT RECORDED APRIL 23, 2013, AS DOCUMENT NO. 1620054; MODIFIED BY FIRST AMENDMENT TO AMENDED DECLARATION OF RECIPROCAL EASEMENT AGREEMENT RECORDED OCTOBER 15, 2019, AS DOCUMENT NO. 1734366 (AFFECTS, BLANKET IN NATURE, AS SHOWN HEREON)
- RESTRICTIVE ACCESS, 20 FOOT PLATTED STORM SEWER EASEMENT, 12 FOOT PLATTED UTILITY EASEMENT AND BUILDING SETBACK LINE PER CELTAX-LA CROSSE ADDITION AND NOTE AS SET FORTH ON CERTIFIED SURVEY MAP NO. 130 RECORDED MAY 1, 2013, IN VOLUME 15 OF CERTIFIED SURVEY MAPS AT PAGE 130, AS DOCUMENT NO. 1620535 (AFFECTS, PLOTTED AS SHOWN)

FLOOD ZONE INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 55063C0263D, WHICH BEARS AN EFFECTIVE DATE OF 01/6/2012 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

ZONE "X" - AREA OF MINIMAL FLOOD HAZARD, USUALLY DEPICTED ON FIRMS AS ABOVE THE 500-YEAR FLOOD LEVEL. ZONE "X" IS THE AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD AND PROTECTED BY LEVEE FROM 100-YEAR FLOOD.

BASIS OF BEARING

THE BASIS OF BEARING OF THIS SURVEY IS GRID NORTH BASED ON THE SOUTHEASTERN RIGHT-OF-WAY LINE OF LOSEY BOULEVARD. THE BEARING IS DENOTED AS N54°15'12"E PER GPS COORDINATE OBSERVATIONS WISCONSIN STATE PLANE, SOUTH ZONE NAD83.
LATITUDE = 43°46'29.340"
LONGITUDE = 91°13'12.5557"
CONVERGENCE ANGLE = -00°50'18.14"

SITE INFORMATION

M/F: VSC CORPORATION
3960 MORMON COULEE ROAD
LA CROSSE, LA CROSSE COUNTY, WISCONSIN 54601
PROPOSED PARCEL: 13,277 SQ.FEET, OR 0.305 ACRES ±

ORDER NUMBER: W-401111:
UNIT 2, MORMON COULEE PLAZA CONDOMINIUM WITHOUT PROPOSED PARCEL:
74,507 SQ.FEET, OR 1.710 ACRES ±

ORDER NUMBER: W-401111AE:
PARCEL 1:
94,181 SQ.FEET, OR 2.162 ACRES ±

ORDER NUMBER: W-401111AE:
PARCEL 2:
15,465 SQ.FEET, OR 0.355 ACRES ±

TOTAL AREA: 197,430 SQ.FEET, OR 4.532 ACRES ±
APR: 17-40381-120, 17-50410-010 & 17-50410-025

ZONING INFORMATION (PROPOSED PARCEL)

PROPERTY IS CURRENTLY ZONED: AWAITING ZONING REPORT		
ITEM	REQUIRED	OBSERVED
PERMITTED USE		RETAIL
MIN. SETBACKS FRONT		N/A
MIN. SETBACKS SIDE		N/A
MIN. SETBACKS REAR		N/A
MAX. BUILDING HEIGHT		N/A
MIN. LOT AREA		N/A
MIN. LOT WIDTH		N/A
MAX. BLDG COVERAGE		N/A
PARKING REGULAR		N/A
PARKING HANDICAP		N/A
PARKING TOTAL		N/A
PARKING INFORMATION:		

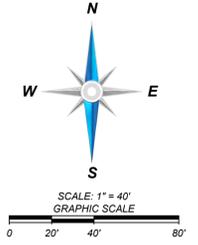
DATE	REVISION HISTORY	BY
07/01/2024	ADDITIONAL TITLE COMMITMENT	DMS

ALTA/NSPS LAND TITLE LIMITED TOPOGRAPHIC SURVEY

3960, 4000, 4049, 4020 MORMON COULEE ROAD
LOCATED IN: SECTION 16, TOWNSHIP 15 NORTH, RANGE 7 WEST
LA CROSSE, LA CROSSE COUNTY, WISCONSIN 54601

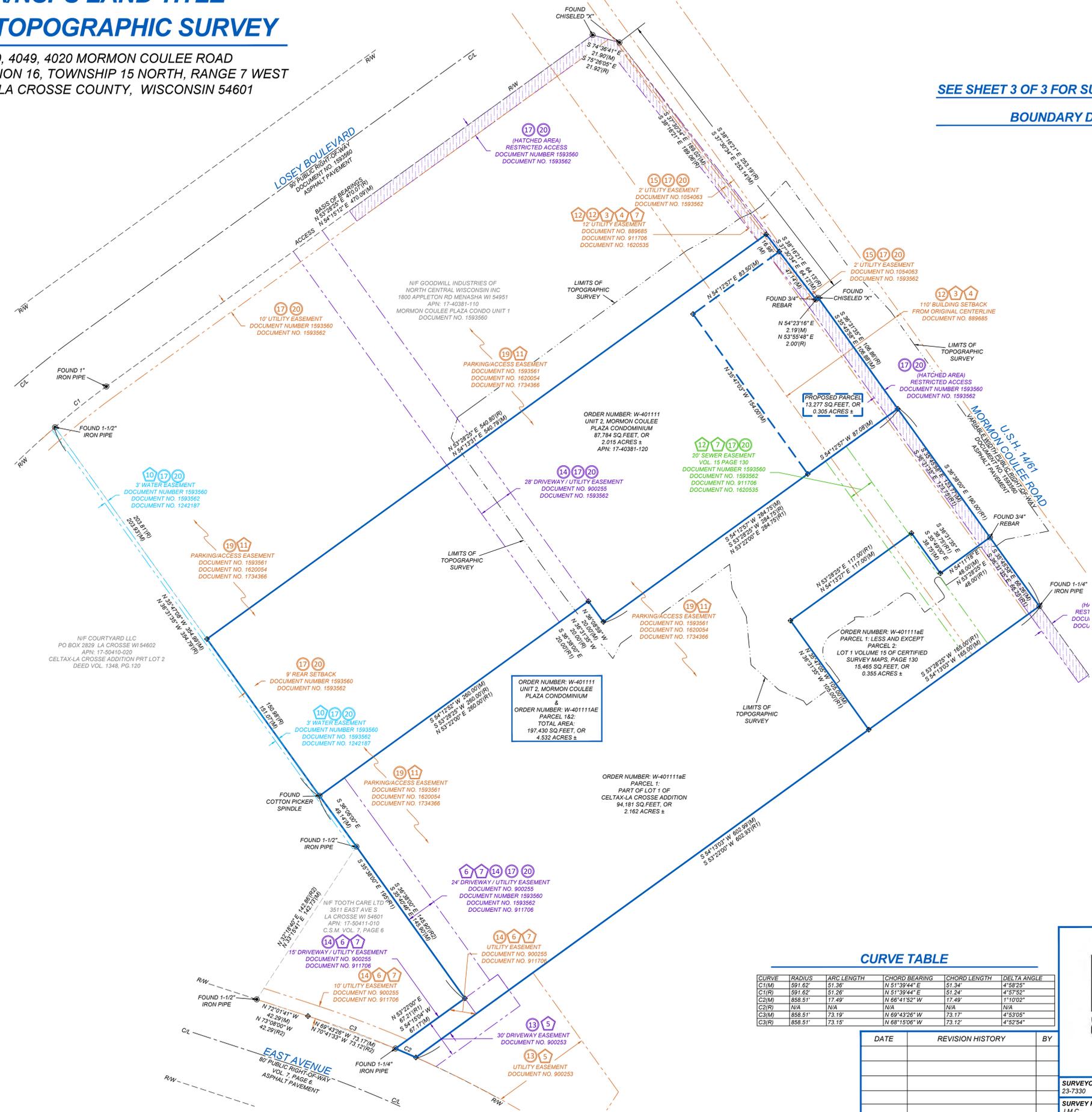
SEE SHEET 3 OF 3 FOR SURVEY DEPICTION

BOUNDARY DETAIL



LEGEND
SYMBOLS & ABBREVIATIONS

⊙	FOUND MONUMENT AS-NOTED
⊕	COMPUTED POINT
⊕	TEMPORARY BENCHMARK (TBM)
⊕	HANDICAP PARKING SPACE
⊕	UNKNOWN MANHOLE (UH)
⊕	SANITARY SEWER MANHOLE (SMH)
⊕	CURB INLET (CI)
⊕	GRAATED INLET ROUND (GI)
⊕	ELECTRICAL VAULT
⊕	UTILITY VAULT
⊕	ELECTRICAL METER
⊕	ELECTRICAL CABINET
⊕	GUY ANCHOR
⊕	LIGHT POLE
⊕	FIRE HYDRANT
⊕	WATER VALVE
⊕	GAS VALVE
⊕	SIGN
⊕	BOLLARD
(M)	MEASURED/CALCULATED DIMENSION
(R)	RECORD DIMENSION PER ORDER NUMBER: W-401111
(R1)	RECORD DIMENSION PER ORDER NUMBER: W-401111AE
(R2)	RECORD DIMENSION PER C.S.M. VOL. 7, PAGE 6
PS	PARKING SPACE(S)
R/W	RIGHT-OF-WAY
N/F	NOW OR FORMERLY
B.H.L.	BUILDING HEIGHT LOCATION
F.F.E.	FINISHED FLOOR ELEVATION
SQ.FT.	SQUARE FEET
BOC	BACK OF CURB
FL	FLOW LINE
TA	TOP OF ASPHALT
TC	TOP OF CONCRETE
EC	EDGE OF CONCRETE
NG	NATURAL GROUND
CR	CROWN OF ROAD
RCP	REINFORCED CONCRETE PIPE
---	PROPERTY LINE
---	PROPOSED PARCEL
---	RIGHT-OF-WAY
---	OVERHEAD POWER LINE
---	UNDERGROUND ELECTRICAL LINE
---	UNDERGROUND TELEPHONE LINE
---	UNDERGROUND STORM SEWER LINE
---	UNDERGROUND SANITARY SEWER LINE
---	UNDERGROUND GAS LINE
---	UNDERGROUND WATER LINE
---	LIMITS OF TOPOGRAPHIC AREA
---	MAJOR CONTOUR
---	MINOR CONTOUR



CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH	DELTA ANGLE
C1(M)	591.62'	51.36'	N 51°39'44" E	51.34'	4°58'25"
C1(R)	591.62'	51.26'	N 51°39'44" E	51.24'	4°57'52"
C2(M)	858.51'	17.49'	N 69°43'26" W	17.49'	1°17'02"
C2(R)	N/A	N/A	N/A	N/A	N/A
C3(M)	858.51'	73.15'	N 69°43'26" W	73.17'	4°53'05"
C3(R)	858.51'	73.15'	N 68°15'06" W	73.12'	4°52'54"

DATE	REVISION HISTORY	BY

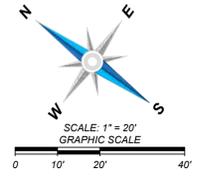
BLEW & ASSOCIATES, P.A.

3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
 EMAIL: SURVEY@BLEWINC.COM
 OFFICE: 479.443.4506 FAX: 479.582.1883
 WWW.BLEWINC.COM

SURVEYOR JOB NUMBER: 23-7330	SURVEY DRAWN BY: K.J.D. - 05/03/2024
SURVEY REVIEWED BY: J.M.C.	SHEET: 2 OF 3

ALTA/NSPS LAND TITLE LIMITED TOPOGRAPHIC SURVEY

3960, 4000, 4049, 4020 MORMON COULEE ROAD
LOCATED IN: SECTION 16, TOWNSHIP 15 NORTH, RANGE 7 WEST
LA CROSSE, LA CROSSE COUNTY, WISCONSIN 54601



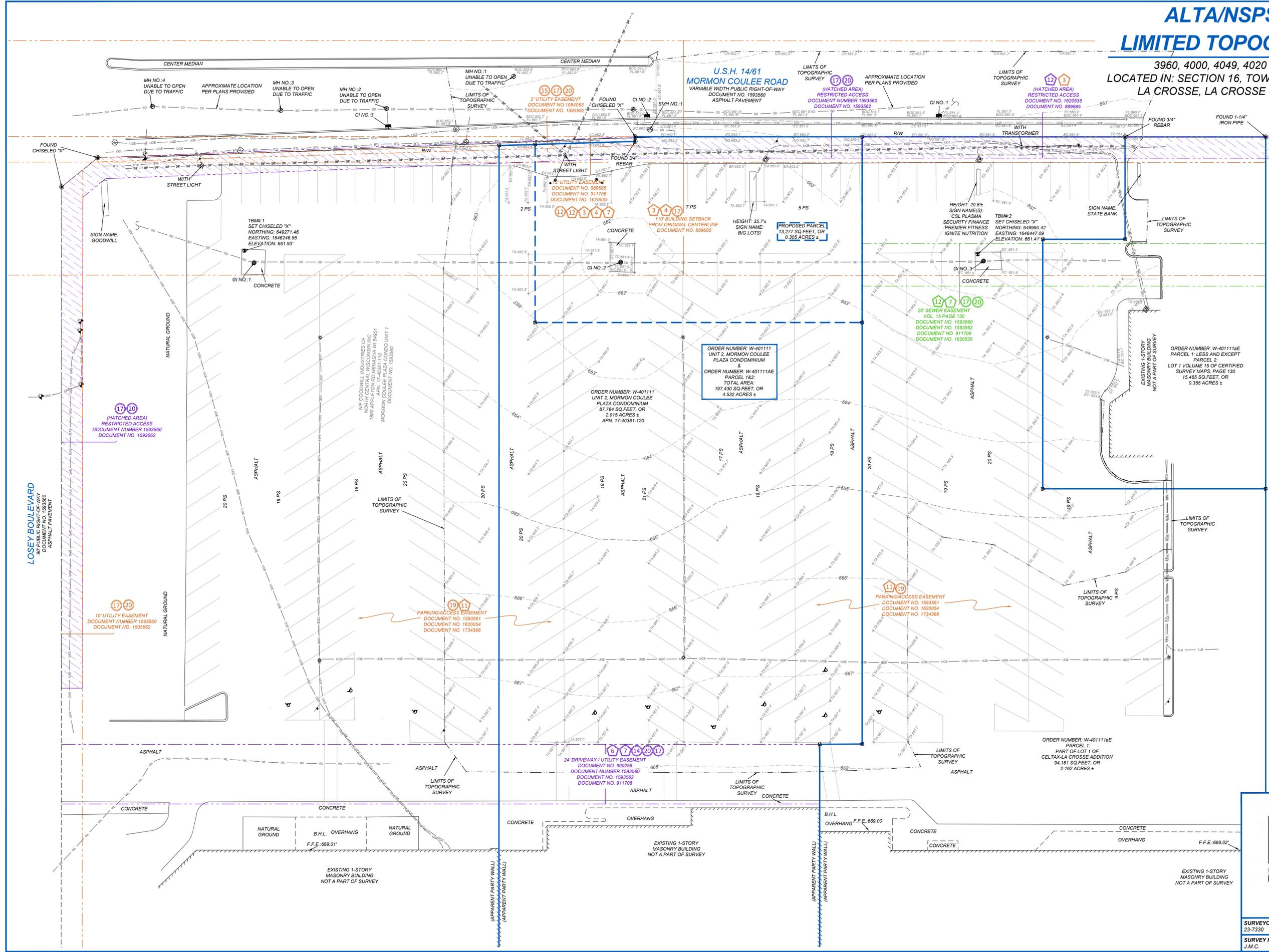
LEGEND

SYMBOLS & ABBREVIATIONS

- FOUND MONUMENT AS-NOTED
- COMPUTED POINT
- ⊕ TEMPORARY BENCHMARK (TBM)
- ⊕ HANDICAP PARKING SPACE
- ⊕ UNKNOWN MANHOLE (MH)
- ⊕ SANITARY SEWER MANHOLE (SMH)
- ⊕ CURB INLET (CI)
- ⊕ GRATED INLET ROUND (GI)
- ⊕ ELECTRICAL VAULT
- ⊕ UTILITY VAULT
- ⊕ ELECTRICAL METER
- ⊕ ELECTRICAL CABINET
- ⊕ GUY ANCHOR
- ⊕ LIGHT POLE
- ⊕ FIRE HYDRANT
- ⊕ WATER VALVE
- ⊕ GAS VALVE
- ⊕ SIGN
- ⊕ BOLLARD
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION PER ORDER NUMBER: W-401111
- (R1) RECORD DIMENSION PER ORDER NUMBER: W-401111A/E
- (R2) RECORD DIMENSION PER C.S.M. VOL. 7, PAGE 6
- PS PARKING SPACE(S)
- RW RIGHT-OF-WAY
- N/F NOW OR FORMERLY
- B.H.L. BUILDING HEIGHT LOCATION
- F.F.E. FINISHED FLOOR ELEVATION
- SQ.FT. SQUARE FEET
- BOC. BACK OF CURB
- FL. FLOW LINE
- TA. TOP OF ASPHALT
- TC. TOP OF CONCRETE
- EC. EDGE OF CONCRETE
- NG. NATURAL GROUND
- CR. CROWN OF ROAD
- RCP. REINFORCED CONCRETE PIPE
- — — — — PROPERTY LINE
- — — — — PROPOSED PARCEL
- — — — — RIGHT-OF-WAY
- — — — — OVERHEAD POWER LINE
- — — — — UNDERGROUND ELECTRICAL LINE
- — — — — UNDERGROUND TELEPHONE LINE
- — — — — UNDERGROUND STORM SEWER LINE
- — — — — UNDERGROUND SANITARY SEWER LINE
- — — — — UNDERGROUND GAS LINE
- — — — — UNDERGROUND WATER LINE
- — — — — LIMITS OF TOPOGRAPHIC AREA
- — — — — MAJOR CONTOUR
- — — — — MINOR CONTOUR

INVERT INFORMATION

- | | |
|--|--|
| CI NO. 1
RIM ELEVATION: 661.10'
INVERT SE (12" RCP): 657.9' | GI NO. 1
RIM ELEVATION: 661.56'
INVERT SE (18" RCP): 655.9'
INVERT NW (18" RCP): 655.8' |
| CI NO. 2
RIM ELEVATION: 661.37'
INVERT N (12" RCP): 658.1' | GI NO. 2
RIM ELEVATION: 661.47'
INVERT SE (18" RCP): 656.3'
INVERT NW (18" RCP): 656.1' |
| CI NO. 3
RIM ELEVATION: 661.74'
INVERT NE (12" RCP): 658.6' | GI NO. 3
RIM ELEVATION: 661.30'
INVERT SE (18" RCP): 656.6'
INVERT NW (18" RCP): 656.5' |
| SMH NO. 1
RIM ELEVATION: 662.11'
INVERT SE (10" RCP): 655.9' | |



LOSEY BOULEVARD
90' PUBLIC RIGHT-OF-WAY
DOCUMENT NO. 1593560
ASPHALT PAVEMENT

BLEW & ASSOCIATES, P.A.
Surveying
Engineering
Mapping

3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
EMAIL: SURVEY@BLEWINC.COM
OFFICE: 479.443.4506 FAX: 479.582.1883
WWW.BLEWINC.COM

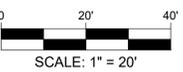
SURVEYOR JOB NUMBER: 23-7330	SURVEY DRAWN BY: K.J.D. - 05/03/2024
SURVEY REVIEWED BY: J.M.C.	SHEET: 3 OF 3

TOPOGRAPHIC SURVEY

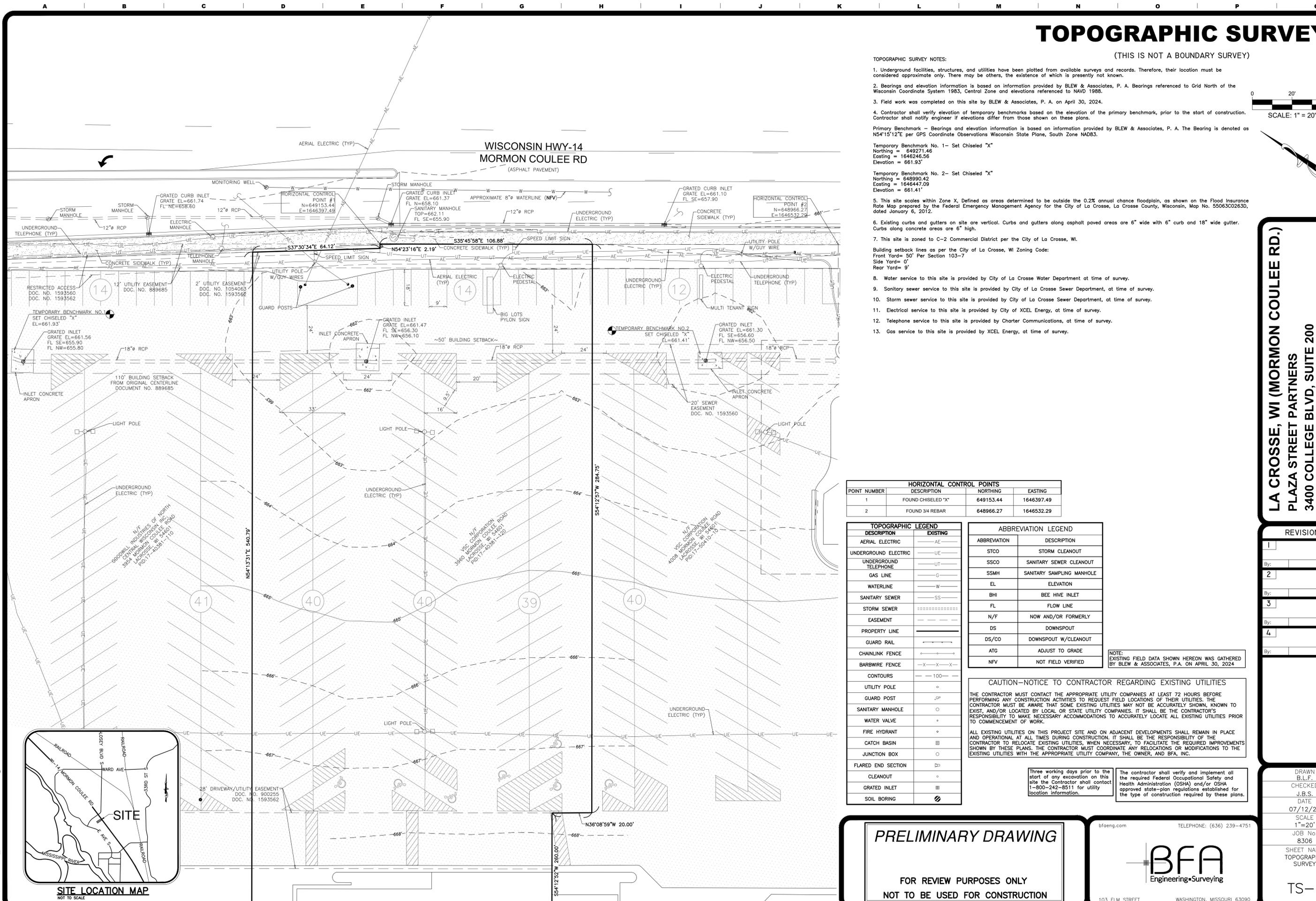
(THIS IS NOT A BOUNDARY SURVEY)

TOPOGRAPHIC SURVEY NOTES:

- Underground facilities, structures, and utilities have been plotted from available surveys and records. Therefore, their location must be considered approximate only. There may be others, the existence of which is presently not known.
 - Bearings and elevation information is based on information provided by BLEW & Associates, P. A. Bearings referenced to Grid North of the Wisconsin Coordinate System 1983, Central Zone and elevations referenced to NAVD 1988.
 - Field work was completed on this site by BLEW & Associates, P. A. on April 30, 2024.
 - Contractor shall verify elevation of temporary benchmarks based on the elevation of the primary benchmark, prior to the start of construction. Contractor shall notify engineer if elevations differ from those shown on these plans.
- Primary Benchmark - Bearings and elevation information is based on information provided by BLEW & Associates, P. A. The Bearing is denoted as N54°15'12"E per GPS Coordinate Observations Wisconsin State Plane, South Zone NAD83.
- Temporary Benchmark No. 1 - Set Chiseled "X"
 Northing = 649271.46
 Easting = 1646246.56
 Elevation = 661.93'
- Temporary Benchmark No. 2 - Set Chiseled "X"
 Northing = 648990.42
 Easting = 1646447.09
 Elevation = 661.41'
- This site scales within Zone X, Defined as areas determined to be outside the 0.2% annual chance floodplain, as shown on the Flood Insurance Rate Map prepared by the Federal Emergency Management Agency for the City of La Crosse, La Crosse County, Wisconsin, Map No. 55063C0263D, dated January 6, 2012.
 - Existing curbs and gutters on site are vertical. Curbs and gutters along asphalt paved areas are 6" wide with 6" curb and 18" wide gutter. Curbs along concrete areas are 6" high.
 - This site is zoned to C-2 Commercial District per the City of La Crosse, WI.
- Building setback lines as per the City of La Crosse, WI Zoning Code:
 Front Yard= 50' Per Section 103-7
 Side Yard= 0'
 Rear Yard= 9'
- Water service to this site is provided by City of La Crosse Water Department at time of survey.
 - Sanitary sewer service to this site is provided by City of La Crosse Sewer Department, at time of survey.
 - Storm sewer service to this site is provided by City of La Crosse Sewer Department, at time of survey.
 - Electrical service to this site is provided by City of XCEL Energy, at time of survey.
 - Telephone service to this site is provided by Charter Communications, at time of survey.
 - Gas service to this site is provided by XCEL Energy, at time of survey.



WISCONSIN HWY-14
MORMON COULEE RD
 (ASPHALT PAVEMENT)



HORIZONTAL CONTROL POINTS			
POINT NUMBER	DESCRIPTION	NORTHING	EASTING
1	FOUND CHISELED "X"	649153.44	1646397.49
2	FOUND 3/4 REBAR	648966.27	1646532.29

TOPOGRAPHIC LEGEND	
DESCRIPTION	EXISTING
AERIAL ELECTRIC	— AE —
UNDERGROUND ELECTRIC	— UE —
UNDERGROUND TELEPHONE	— UT —
GAS LINE	— G —
WATERLINE	— W —
SANITARY SEWER	— SS —
STORM SEWER	=====
EASEMENT	-----
PROPERTY LINE	=====
GUARD RAIL	—+—+—+—
CHAINLINK FENCE	—+—+—+—
BARB WIRE FENCE	—X—X—X—
CONTOURS	--- 100 ---
UTILITY POLE	o
GUARD POST	oP
SANITARY MANHOLE	o
WATER VALVE	o
FIRE HYDRANT	o
CATCH BASIN	o
JUNCTION BOX	o
FLARED END SECTION	o
CLEANOUT	o
GRATED INLET	o
SOIL BORING	o

ABBREVIATION LEGEND	
ABBREVIATION	DESCRIPTION
STCO	STORM CLEANOUT
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SAMPLING MANHOLE
EL	ELEVATION
BHI	BEE HIVE INLET
FL	FLOW LINE
N/F	NOW AND/OR FORMERLY
DS	DOWNSPOUT
DS/CO	DOWNSPOUT W/CLEANOUT
ATG	ADJUST TO GRADE
NFV	NOT FIELD VERIFIED

NOTE: EXISTING FIELD DATA SHOWN HEREON WAS GATHERED BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024

CAUTION—NOTICE TO CONTRACTOR REGARDING EXISTING UTILITIES

THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE PERFORMING ANY CONSTRUCTION ACTIVITIES TO REQUEST FIELD LOCATIONS OF THEIR UTILITIES. THE CONTRACTOR MUST BE AWARE THAT SOME EXISTING UTILITIES MAY NOT BE ACCURATELY SHOWN, KNOWN TO EXIST, AND/OR LOCATED BY LOCAL OR STATE UTILITY COMPANIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE NECESSARY ACCOMMODATIONS TO ACCURATELY LOCATE ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF WORK.

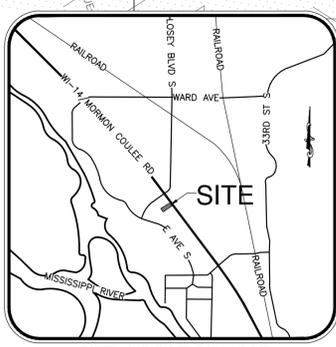
ALL EXISTING UTILITIES ON THIS PROJECT SITE AND ON ADJACENT DEVELOPMENTS SHALL REMAIN IN PLACE AND OPERATIONAL AT ALL TIMES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE EXISTING UTILITIES, WHEN NECESSARY, TO FACILITATE THE REQUIRED IMPROVEMENTS SHOWN BY THESE PLANS. THE CONTRACTOR MUST COORDINATE ANY RELOCATIONS OR MODIFICATIONS TO THE EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANY, THE OWNER, AND BFA, INC.

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

REVISIONS	
1	By: _____ App: _____
2	By: _____ App: _____
3	By: _____ App: _____
4	By: _____ App: _____



PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY
 NOT TO BE USED FOR CONSTRUCTION

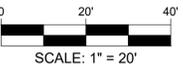
bfaeng.com TELEPHONE: (636) 239-4751

103 ELM STREET WASHINGTON, MISSOURI 63090

DRAWN
 B.L.F.
 CHECKED
 J.B.S.
 DATE
 07/12/24
 SCALE
 1"=20'
 JOB No.
 8306
 SHEET NAME
 TOPOGRAPHIC
 SURVEY
 TS-1

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DEMOLITION PLAN



DEMOLITION PLAN NOTES:

- The Contractor shall conform to all applicable State and local codes for demolition of structures, safety of adjacent structures, dust control, and sediment and erosion control during construction.
- The Contractor shall verify that all required permits and licenses from appropriate authorities have been obtained prior to construction.
- The Contractor shall notify and coordinate scheduling with affected utility companies before starting work and comply with their requirements.
- The Contractor shall not close or obstruct public or private roadways, sidewalks, or fire hydrants without appropriate permits or written authorization.
- The Contractor shall accurately record actual locations of capped utilities and subsurface obstructions that will remain after demolition.
- The Contractor shall provide, erect, and maintain sediment and erosion control devices, temporary barriers, and security devices during construction.
- The Contractor shall protect existing landscaping materials, appurtenances, and structures, which are not to be demolished. Any damage caused by demolition operations shall be repaired by the Contractor at no cost to Owner.
- The Contractor shall protect and maintain in a safe and operable condition utilities that are to remain. The Contractor shall prevent interruption of existing utility service to occupied or used facilities, except when authorized in writing by authorities having jurisdiction. The Contractor shall provide temporary services during interruptions to existing utilities as acceptable to governing authorities and Owner.
- The Contractor shall notify adjacent owners of work that may affect their property, potential noise, utility outages or disruptions.
- Completely fill below grade areas and voids resulting from demolition or removal of structures, footings, foundations, underground fuel storage tanks, wells, cisterns, etc., using approved select fill materials consisting of stone, gravel, and sand. Fill materials shall be free from debris, trash, frozen materials, roots, and other organic matter.
- No burning of any material, debris, or trash on-site or off-site will be allowed, except when allowed by appropriate governing authority and Owner. Any permits required for doing so shall be obtained by the Contractor.
- All items noted "To Remain, and/or To Be Adjusted" shall be raised or lowered to match the new grade indicated or flush with the surrounding pavement. (i.e. manhole rims, valve covers, grates, etc.)
- Unless noted otherwise, utilities designated to be removed shall be removed in their entirety. Trenches shall then be backfilled and compacted. (See Soil Preparation and Compaction note on these plans.)
- Should hazardous materials be found during demolition operations, the Contractor shall notify the owner and all governing agencies, if necessary, and conform to all applicable regulatory procedures.
- The Contractor shall provide, install, and maintain traffic control at all times during construction. This includes signs, barriers, construction fencing, striping, etc. necessary to safely control site and construction traffic.
- The Contractor shall keep the premises clean and free of debris during construction.
- The fire protection for the site shall remain in service at all times during construction.
- Existing paint striping within the parking lot shall be removed as necessary for the proposed striping as shown on these plans. Striping shall be removed by sand blasting, milling, or grinding.
- All survey monuments disturbed during construction shall be replaced by a licensed land surveyor, licensed in the state where this project is located.
- The edges of all pavement and curb sections to be removed shall be saw cut. Remaining pavement and curb sections shall have smooth, clean edges. This means additional sawcuts may be necessary depending on contractor's means and methods.
- Remove all stumps, bushes, trees, weeds and other surface obstructions from the site that are within the proposed construction area and that are not otherwise noted to remain. Contractor to strip all topsoil from entire area to be graded. This may be done in phases. (Refer to Erosion and Sediment Control Plans.) Extent of topsoil use on site as per the on site geotechnical representative.
- The sitework for this project shall meet or exceed applicable AHJ Specifications, permit requirements, and manufacturer specifications.
- The contractor shall maintain the site in a well-drained manner in order to assure the shortest possible drying time after each rainfall. This will mean that pumping of standing water in the low areas on the site may be required during construction.
- The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
- Contractor shall be responsible for repair and replacement of any existing site features that are to remain that are disturbed during construction, including trench backfill, granular base, and pavements. Contractor's bid shall include any and all removal of and replacement of existing features due to utility removals and new connections.
- Contractor shall coordinate prior with Gas Company and Owner to construction commencement. The area surrounding the existing gas valve, including supports for elevated gas line will be disturbed by demolition of the existing retaining wall and construction of the new wall/proposed grades. The Contractor shall be responsible for maintaining/adjusting/removing and replacing the gas line and valve as necessary. Unless approved otherwise, gas service to the building shall not be disturbed. Any potential shutdowns shall be coordinated with the Owner.
- (TBR) = To Be Removed
(TBR&R) = To Be Removed and Replaced
(TR) = To Remain
(TBA) = To Remain and adjusted to proposed finish grade

PAVEMENT LEGEND

	MILL ASPHALT/ PREPARE FOR OVERLAY
	FULL DEPTH ASPHALT PAVEMENT

NOTE:
EXISTING FIELD DATA SHOWN HEREON WAS GATHERED
BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

bfaeng.com TELEPHONE: (636) 239-4751

BFA
Engineering-Surveying

103 ELM STREET WASHINGTON, MISSOURI 63090

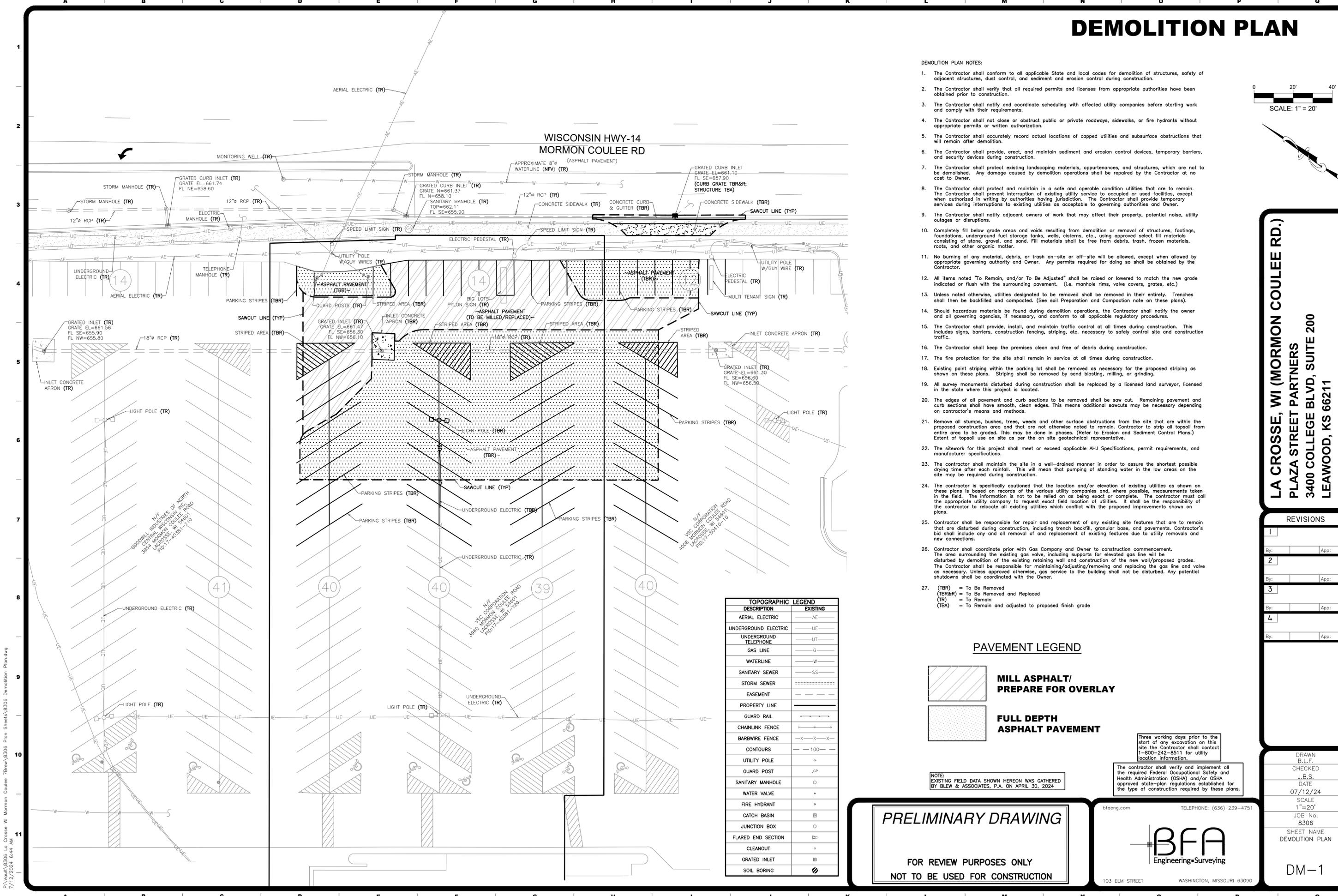
LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

REVISIONS

NO.	DATE	BY	APP.
1			
2			
3			
4			

DRAWN
B.L.F.
CHECKED
J.B.S.
DATE
07/12/24
SCALE
1"=20'
JOB No.
8306
SHEET NAME
DEMOLITION PLAN

DM-1



TOPOGRAPHIC LEGEND	
DESCRIPTION	EXISTING
AERIAL ELECTRIC	—AE—
UNDERGROUND ELECTRIC	—UE—
UNDERGROUND TELEPHONE	—UT—
GAS LINE	—G—
WATERLINE	—W—
SANITARY SEWER	—SS—
STORM SEWER	-----
EASEMENT	----
PROPERTY LINE	=====
GUARD RAIL	—X—X—X—
CHAINLINK FENCE	—X—X—X—
BARB WIRE FENCE	—X—X—X—
CONTOURS	—100—
UTILITY POLE	o
GUARD POST	o
SANITARY MANHOLE	o
WATER VALVE	o
FIRE HYDRANT	o
CATCH BASIN	o
JUNCTION BOX	o
FLARED END SECTION	o
CLEANOUT	o
GRATED INLET	o
SOIL BORING	o

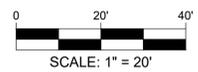
P:\Vault\8306 La Crosse WI Mormon Coulee 7Brew 8306 Plan Sheets\8306 Demolition Plan.dwg 7/12/2024 6:44 AM

PHASE I EROSION AND SEDIMENTATION CONTROL PLAN / SITE MAP

LEGEND

SITE FEATURES

- PROPERTY LINE
- RIGHT OF WAY LINE
- PROPOSED LIMITS OF DISTURBANCE
- EXISTING CONTOUR ELEVATIONS
- STORM DRAIN
- DIRECTION OF OVERLAND FLOW
- SOIL BOUNDARY



EROSION DETAILS

- CEP CONSTRUCTION EXIT ON PAVEMENT
- CW CONCRETE WASHOUT
- EE EROSION EELS
- SF TEMPORARY SILT FENCE
- IP10 FILTER SACK
- SS SWPP INFORMATION SIGN
- WW WHEEL WASHOUT
- MSLA MATERIAL LAYDOWN AND STORAGE AREA
- UA UNDISTURBED AREA

EROSION NOTES

2020 SOIL TYPE: URBAN LAND, VALLEY TRAINS

BENCHMARK INFORMATION

TEMPORARY BENCHMARK NO. 1 - SET CHISELED "X"
ELEVATION=661.93'
TEMPORARY BENCHMARK NO. 2 - SET CHISELED "X"
ELEVATION=661.41'

NOTE:

IN THE EVENT THAT AN INSPECTOR OF THE U.S. E.P.A. OR A STATE OR LOCAL AGENCY SHOULD APPEAR AT THE PROJECT TO CONDUCT AN INSPECTION, THE CONTRACTOR SHALL IMMEDIATELY CONTACT BFA, INC. AT 636-239-4751 AND ADVISE THEM OF THE INSPECTION.

DEVELOPER/OWNER:

PLAZA STREET PARTNERS, LLC
3400 COLLEGE BOULEVARD, SUITE 200
LEAWOOD, KS 66211

SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

MINIMIZATION OF DISTURBED AREAS:

1. CONTRACTOR SHALL MANAGE CONSTRUCTION ACTIVITIES TO REDUCE EROSION AND RETAIN SEDIMENT AND OTHER POLLUTANTS IN THE SOIL AT THE CONSTRUCTION SITE.
2. CONTRACTOR SHALL MINIMIZE THE TIME BARE SOIL IS EXPOSED.
3. CONTRACTOR SHALL MINIMIZE SITE DISTURBANCE BY MINIMIZING THE EXTENT OF GRADING AND CLEARING TO EFFECTIVELY REDUCE SEDIMENT YIELD.

NOTE TO GC: OWNER HAS AUTHORITY AT ANY TIME TO LIMIT SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY CLEARING AND GRUBBING, EXCAVATION, BORROW AND EMBANKMENT OPERATIONS AND TO DIRECT THE GC TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURES.

ACREAGE SUMMARY (IN ACRES)

1	7 BREW PROPERTY AREA	0.39
2	AREA WITHIN 7 BREW PROPERTY	0.39
3	AREA OUTSIDE OF TAKE 5 PROPERTY	0.24
4	TOTAL PROJECT AREA	0.63
5	IMPERVIOUS AREA BEFORE PROJECT	0.56
6	IMPERVIOUS AREA AT COMPLETION	0.49
7	PERVIOUS AREA AT COMPLETION	0.14

SEQUENCE OF CONSTRUCTION

PHASE I

1. INSTALL STABILIZED CONSTRUCTION EXITS(S).
2. PREPARE TEMPORARY PARKING AND STORAGE AREA. UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA POTTY, WHEEL WASH, CONCRETE WASHOUT, MASONS AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC. DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN THE LOCATIONS AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.
3. INSTALL INLET PROTECTIONS AND SILT FENCE(S) ON THE SITE.
4. OVER-EXCAVATE FOR BUILDING PAD.
5. BEGIN GRADING THE SITE.

PHASE II

1. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.
2. TEMPORARILY SEED/STABILIZE DENUDED AREAS.
3. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
4. INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES.
5. PREPARE SITE FOR PAVING.
6. PAVE SITE.
7. INSTALL INLET PROTECTION DEVICES.
8. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTINGS.
9. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED).

CROSS ACCESS NOTE:

CONTRACTOR SHALL MAINTAIN CROSS ACCESS AND TRAFFIC CONTROL AT ALL TIMES THROUGHOUT CONSTRUCTION. ACCESS THROUGH ADJACENT PROPERTIES SHALL NOT BE LIMITED BY THE CONSTRUCTION WITHOUT APPROVAL OF ADJACENT OWNER.

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

ESC PLAN LEGEND	
DESCRIPTION	EXISTING
AERIAL ELECTRIC	AE
UNDERGROUND ELECTRIC	UE
UNDERGROUND TELEPHONE	UT
GAS LINE	G
FIBER OPTIC LINE	FO
WATERLINE	W
SANITARY SEWER	SS
STORM SEWER	SS
EASEMENT	---
PROPERTY LINE	---
CONTOURS	--- 100 ---
UTILITY POLE	o
GUARD POST	oP
SANITARY MANHOLE	o
WATER VALVE	o
FIRE HYDRANT	o
CLEANOUT	o

NOTE: EXISTING FIELD DATA SHOWN HEREON WAS GATHERED BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024

PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

bfaeng.com TELEPHONE: (636) 239-4751

BFA
Engineering-Surveying

103 ELM STREET WASHINGTON, MISSOURI 63090

LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

REVISIONS

NO.	DATE	BY	APP.
1			
2			
3			
4			

DRAWN
B.L.F.
CHECKED
J.B.S.
DATE
07/12/24
SCALE
1"=20'
JOB No.
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SHEET NAME
ESC PHASE I

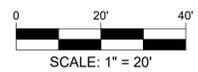
ESC-1

PHASE II EROSION AND SEDIMENTATION CONTROL PLAN / SITE MAP

LEGEND

SITE FEATURES

- PROPERTY LINE
- RIGHT OF WAY LINE
- PROPOSED LIMITS OF DISTURBANCE
- EXISTING CONTOUR ELEVATIONS
- STORM DRAIN
- DIRECTION OF OVERLAND FLOW
- SOIL BOUNDARY



EROSION DETAILS

- CEP CONSTRUCTION EXIT ON PAVEMENT
- CW CONCRETE WASHOUT
- EE EROSION EELS
- SF TEMPORARY SILT FENCE
- IP10 FILTER SACK
- SS SWPP INFORMATION SIGN
- WW WHEEL WASHOUT
- MSLA MATERIAL LAYDOWN AND STORAGE AREA
- UA UNDISTURBED AREA

EROSION NOTES

- PS PERMANENT SOD

BENCHMARK INFORMATION

TEMPORARY BENCHMARK NO. 1 - SET CHISELED "X"
ELEVATION=661.93'
TEMPORARY BENCHMARK NO. 2 - SET CHISELED "X"
ELEVATION=661.41'

NOTE:

IN THE EVENT THAT AN INSPECTOR OF THE U.S. E.P.A. OR A STATE OR LOCAL AGENCY SHOULD APPEAR AT THE PROJECT TO CONDUCT AN INSPECTION, THE CONTRACTOR SHALL IMMEDIATELY CONTACT BFA, INC. AT 636-239-4751 AND ADVISE THEM OF THE INSPECTION.

DEVELOPER/OWNER:

PLAZA STREET PARTNERS, LLC
3400 COLLEGE BOULEVARD, SUITE 200
LEAWOOD, KS 66211

SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

MINIMIZATION OF DISTURBED AREAS:

1. CONTRACTOR SHALL MANAGE CONSTRUCTION ACTIVITIES TO REDUCE EROSION AND RETAIN SEDIMENT AND OTHER POLLUTANTS IN THE SOIL AT THE CONSTRUCTION SITE.
2. CONTRACTOR SHALL MINIMIZE THE TIME BARE SOIL IS EXPOSED.
3. CONTRACTOR SHALL MINIMIZE SITE DISTURBANCE BY MINIMIZING THE EXTENT OF GRADING AND CLEARING TO EFFECTIVELY REDUCE SEDIMENT YIELD.

NOTE TO GC: OWNER HAS AUTHORITY AT ANY TIME TO LIMIT SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY CLEARING AND GRUBBING, EXCAVATION, BORROW AND EMBANKMENT OPERATIONS AND TO DIRECT THE GC TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURES.

ACREAGE SUMMARY (IN ACRES)		
1	7 BREW PROPERTY AREA	0.39
2	AREA WITHIN 7 BREW PROPERTY	0.39
3	AREA OUTSIDE OF TAKE 5 PROPERTY	0.24
4	TOTAL PROJECT AREA	0.63
5	IMPERVIOUS AREA BEFORE PROJECT	0.56
6	IMPERVIOUS AREA AT COMPLETION	0.49
7	PERVIOUS AREA AT COMPLETION	0.14

SEQUENCE OF CONSTRUCTION

PHASE I

1. INSTALL STABILIZED CONSTRUCTION EXITS(S).
2. PREPARE TEMPORARY PARKING AND STORAGE AREA. UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA POTTY, WHEEL WASH, CONCRETE WASHOUT, MASONS AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN THE LOCATIONS AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.
3. INSTALL INLET PROTECTIONS AND SILT FENCE(S) ON THE SITE.
4. OVER-EXCAVATE FOR BUILDING PAD.
5. BEGIN GRADING THE SITE.

PHASE II

1. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.
2. TEMPORARILY SEED/STABILIZE DENUDEED AREAS.
3. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
4. INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES.
5. PREPARE SITE FOR PAVING.
6. PAVE SITE.
7. INSTALL INLET PROTECTION DEVICES.
8. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTINGS.
9. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED).

CROSS ACCESS NOTE:
CONTRACTOR SHALL MAINTAIN CROSS ACCESS AND TRAFFIC CONTROL AT ALL TIMES THROUGHOUT CONSTRUCTION. ACCESS THROUGH ADJACENT PROPERTIES SHALL NOT BE LIMITED BY THE CONSTRUCTION WITHOUT APPROVAL OF ADJACENT OWNER.

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

ESC PLAN LEGEND	
DESCRIPTION	EXISTING
AERIAL ELECTRIC	AE
UNDERGROUND ELECTRIC	UE
UNDERGROUND TELEPHONE	UT
GAS LINE	G
FIBER OPTIC LINE	FO
WATERLINE	W
SANITARY SEWER	SS
STORM SEWER	-----
EASEMENT	-----
PROPERTY LINE	=====
CONTOURS	---100---
UTILITY POLE	o
GUARD POST	SP
SANITARY MANHOLE	o
WATER VALVE	o
FIRE HYDRANT	o
CLEANOUT	o

NOTE:
EXISTING FIELD DATA SHOWN HEREON WAS GATHERED BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024

PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

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Engineering • Surveying

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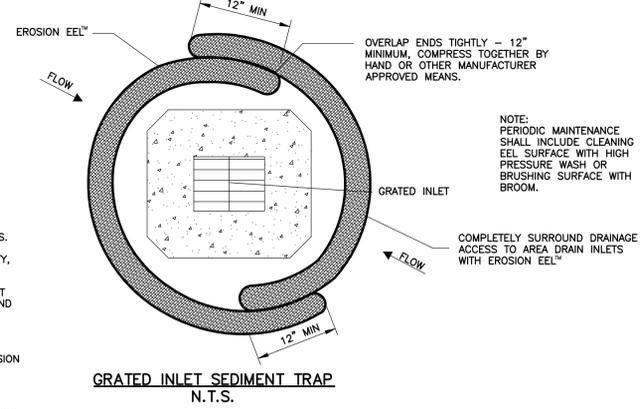
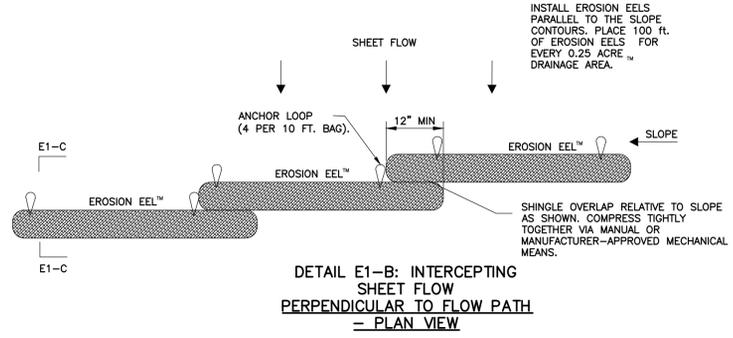
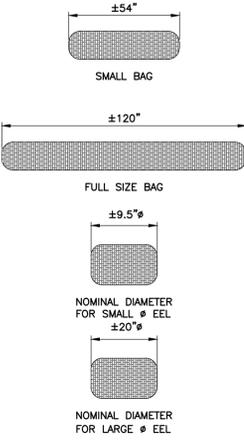
LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

REVISIONS

NO.	DESCRIPTION	DATE	BY	APP.
1				
2				
3				
4				

DRAWN
B.L.F.
CHECKED
J.B.S.
DATE
07/12/24
SCALE
1"=20'
JOB No.
8306
SHEET NAME
ESC PHASE II

ESC-2



SPACING RECOMMENDATIONS FOR THE EROSION EEL™ FOR PERIMETER CONTROLS AND INTERCEPTING SHEET FLOW ON SLOPES

SLOPE(%)	SINGLE EEL SPACING(ft)	* STACKED DUAL EEL SPACING(ft)
0.5	300	N/A
1	200	N/A
2	150	N/A
3	80	N/A
4	50	N/A
5	40	N/A
6	35	N/A
8	30	N/A
10	25	N/A
15	+17	N/A
20	+12	+25
25	N/A	+15
33	N/A	+10
50	N/A	+6

CONTACT INFORMATION

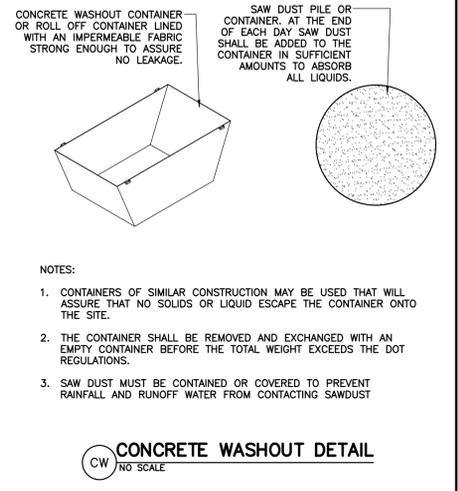
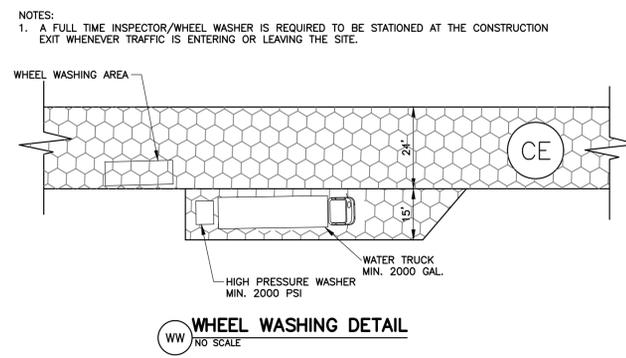
FRIENDLY ENVIRONMENT
100 PRINCE STREET
SHELBYVILLE, TN 37160
1-866-H2O-EELS
INFO@FRIENDLYENVIRONMENTUS.COM
http://FRIENDLYENVIRONMENTUS.COM/INDEX.HTML

* DUAL STACK REFERS TO TWO EELS STACKED ATOP ONE ANOTHER AND STABILIZED WITH T-POSTS.

+ PLACE STAKES BEHIND EELS @ 24" C/C SPACING.

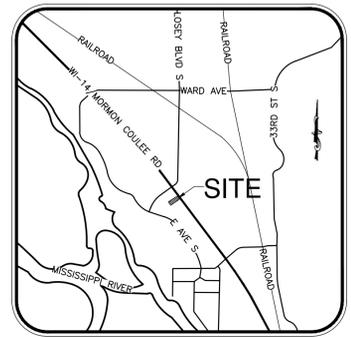
- GENERAL NOTES:**
- MIXTURE SPECIFICATION A FILTER MIXTURE COMPRISED OF 100% SHREDDED RUBBER. THE SHREDDED RUBBER SHALL BE WASHED AND PROCESSED TO REMOVE MOST, IF NOT ALL, METAL COMPONENTS. THE RUBBER SHALL BE DERIVED FROM RECYCLED TIRES AND SHALL BE SHREDDED TO PRODUCE A MAXIMUM PARTICLE SIZE OF +/- 2 INCH.
 - EROSION EELS SHALL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE GEOTEXTILE COVERING THE INTERIOR FILTER MATERIALS OF SHREDDED RUBBER.
 - LENGTHS OF EROSION EELS SHALL BE EITHER A NOMINAL +/-10 FT. OR +/- 4.5 FT. NOMINAL DIAMETER SHALL BE +/-9.5 INCHES.
 - EROSION EELS CAN BE PLACED AT THE TOP, ON THE FACE, OR AT THE TOE OF SLOPES TO INTERCEPT RUNOFF, REDUCE FLOW VELOCITY, RELEASE THE RUNOFF AS SHEET FLOW AND PROVIDE REMOVAL OF SEDIMENT FROM THE RUNOFF.
 - EROSION EELS SHALL BE INSTALLED ALONG THE GROUND CONTOUR, AT THE TOE OF SLOPES, AT AN ANGLE TO THE CONTOUR TO DIRECT FLOW AS A DIVERSION BERM, AROUND INLET STRUCTURES, IN A DITCH AS A CHECK DAM TO HELP REDUCE SUSPENDED SOLIDS LOADING AND RETAIN SEDIMENT, OR AS A GENERAL FILTER FOR ANY DISTURBED SOIL AREA.
 - NO TRENCHING IS REQUIRED FOR INSTALLATION OF EROSION EELS.
 - PREPARE BED FOR EEL INSTALLATION BY REMOVING ANY LARGE DEBRIS INCLUDING ROCKS, SOIL CLOUDS, AND WOODY VEGETATION. EROSION EELS CAN ALSO BE PLACED OVER PAVED SURFACES INCLUDING CONCRETE AND ASPHALT WITH NO SURFACE PREPARATION REQUIRED.
 - RAKE BED AREA WITH A HAND RAKE OR BY DRAG HARROW.
 - DO NOT PLACE EEL DIRECTLY OVER RILL AND GULLIES UNTIL AREA HAS BEEN HAND-EXCAVATED AND RAKED TO PROVIDE A LEVEL BEDDING SURFACE. ALL SURFACES SHALL BE UNIFORMLY COMPACTED FOR MAXIMUM SEATING OF EELS IN PLACE.
 - FOR LOCATIONS WHERE EELS WILL BE PLACED IN CONCENTRATED FLOWS (SUCH AS CHECK DAMS, INLET PROTECTION) AND FOR PERIMETER CONTROLS AT PRIMARY DISCHARGE LOCATIONS, BED THE EELS IN A FLOORMAT CRADLE.
 - FOR DITCH APPLICATIONS, THE MAXIMUM DRAINAGE AREA SHALL BE 10 ACRES.
 - IF MORE THAN ONE EROSION EEL IS PLACED IN A ROW, THE EELS SHALL BE OVERLAPPED A MINIMUM OF 12 INCHES TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT. COMPRESS THE TWO EELS OF THE OVERLAP TIGHTLY TOGETHER EITHER BY HAND OR MANUFACTURER-APPROVED MECHANIZED MEANS.
 - REMOVE SEDIMENT AND DEBRIS WHEN ACCUMULATION REACHES 50% OF THE STORAGE HEIGHT BEHIND THE SINGLE OF STACKED EEL ARRANGEMENT. DISPOSE OF SEDIMENT AND DEBRIS AT AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.
 - WHEN USED IN DITCHES AS A CHECK DAM, EROSION EELS SHALL BE INSTALLED PER MANUFACTURER'S DETAILS.
 - FOR CHECK DAM APPLICATIONS, EROSION EELS SHALL BE PLACED PERPENDICULAR TO THE FLOW OF THE WATER. EROSION EELS SHALL CONTINUE UP THE SIDES SLOPES A MINIMUM OF 3 FEET ABOVE THE DESIGN FLOW DEPTH.
 - EROSION EELS SHALL REMAIN IN PLACE UNTIL FULLY ESTABLISHED VEGETATION HAS COMPLETELY DEVELOPED OR UNTIL THE STORAGE CAPACITY/FUNCTIONAL LIFE OF THE EEL HAS BEEN EXHAUSTED (REQUIRING REPLACEMENT WITH NEW EELS).
 - ANCHORING POSTS FOR CHECK DAM APPLICATIONS SHALL HAVE A MINIMUM WEIGHT OF 1.25 LBS/FT STEEL T-POSTS (5 TO 7 FT. LENGTHS) ROLLED FROM HIGH CARBON STEEL. POSTS SHOULD BE HOT-DIP GALVANIZED OR COATED WITH A WEATHER-RESISTANT PAINT FOR STEEL APPLICATION. POSTS SHOULD BE EQUIPPED WITH A METAL ANCHOR PLATE. INSTALL PER DETAILS ON THIS SHEET.
 - PLACE T-POSTS THROUGH HANDLE OF BAGS. DO NOT DRIVE POSTS THROUGH EROSION EELS. T-POSTS ARE TO BE EMBEDDED A MINIMUM OF 2 FT INTO GROUND.

LAST REVISED: **BFA STANDARD DETAIL**
JULY 2014



GENERAL EROSION AND SEDIMENT CONTROL NOTES:

- CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THIS STORM WATER POLLUTION PREVENTION PLAN. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN ACCORDANCE WITH EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN, OR REQUIRED BY THE APPLICABLE GENERAL PERMIT.
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- DUST ON THE SITE SHALL BE MINIMIZED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- ALL DENUDE/BARE AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE, MUST BE STABILIZED IMMEDIATELY UPON COMPLETION OF MOST RECENT GRADING ACTIVITY WITH THE USE OF FAST-GERMINATION ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING OR BLANKETS.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS. THESE AREAS SHALL BE SEEDED, SODDED, AND/OR VEGETATED IMMEDIATELY, AND NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE PAVED CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO PREVENT TRACKING OF DIRT, DUST OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATION AS PROVIDED. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- ON-SITE AND OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES TO PREVENT EROSION AND POLLUTANT DISCHARGE.
- GENERAL CONTRACTOR IS TO DESIGNATE/IDENTIFY AREAS ON THE SITE MAPS, INSIDE OF THE LIMITS OF DISTURBANCE, FOR WASTE DISPOSAL AND DELIVERY AND MATERIAL STORAGE.



LA CROSSE, WI (MORMON COULEE RD.)
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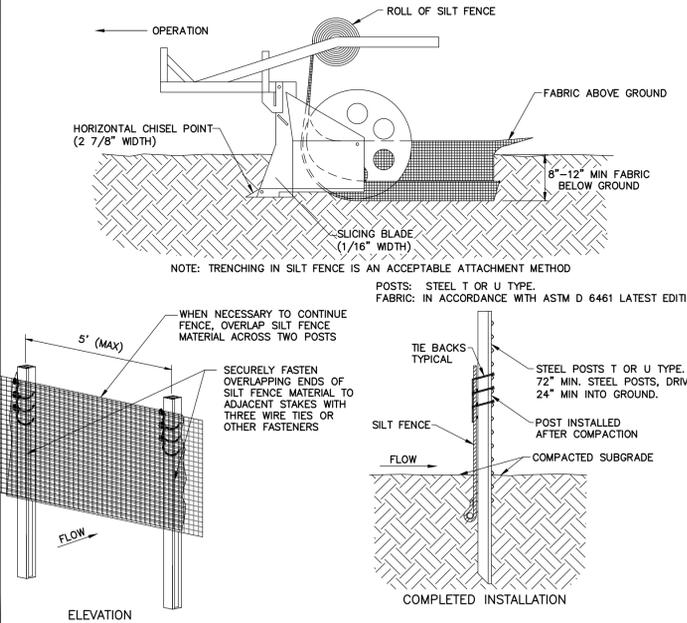
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SPECIFICATIONS FOR STATIC SLICING METHOD FOR SILT FENCE INSTALLATION

- STATIC SLICING SHALL BE USED TO ANCHOR SILT FENCE FABRIC IN ORDER TO NOT USE THE WIRE BACKING.
- SILT FENCE SHALL BE INSTALLED PER ASTM D-6462-03 LATEST EDITION.
 - INSTALL POSTS AT A MAXIMUM OF 5'-0" APART.
 - INSTALL POSTS AT A MINIMUM DEPTH OF 24" ON THE DOWNSTREAM SIDE OF THE SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC, ENABLING POSTS TO SUPPORT UPSTREAM WATER PRESSURE ON THE FABRIC.
 - INSTALL POSTS WITH THE NIPPLES FACING AWAY FROM THE SILT FENCE FABRIC.
 - ATTACH THE FABRIC TO EACH POST WITH THREE TIES, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. ALSO, EACH TIE SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
 - WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
 - WHEN NECESSARY TO CONTINUE FENCE, OVERLAP SILT FENCE MATERIAL ACROSS TWO POSTS.
 - NO MORE THAN 24" OF A 36" FABRIC IS ALLOWED ABOVE GROUND LEVEL.
 - DRIVE POST A MINIMUM OF 24" INTO THE GROUND.
 - THE INSTALLATION SHOULD BE CHECKED AND CORRECTED FOR ANY DEVIATIONS BEFORE COMPACTION. USE A FLAT-BLADED SHOVEL TO TUCK FABRIC DEEPER INTO THE SLIT IF NECESSARY.
 - COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
 - MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-HALF THE HEIGHT OF THE FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-HALF THE HEIGHT OF THE FENCE FABRIC ABOVE GRADE.
 - WHEN TWO SECTIONS OF SILT FENCE MATERIAL ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
 - ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

NON-WIRE BACKED SLICING METHOD FOR SILT FENCE INSTALLATION



PRELIMINARY DRAWING

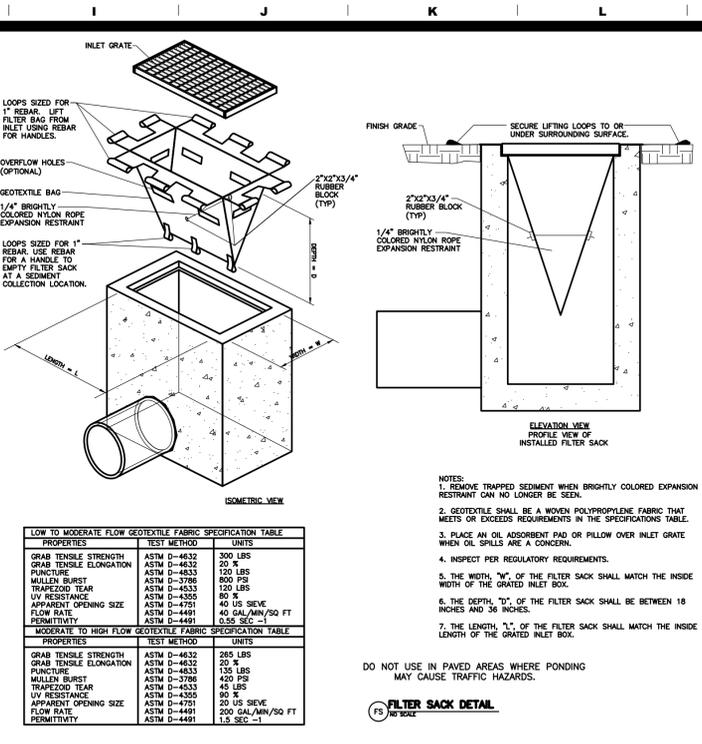
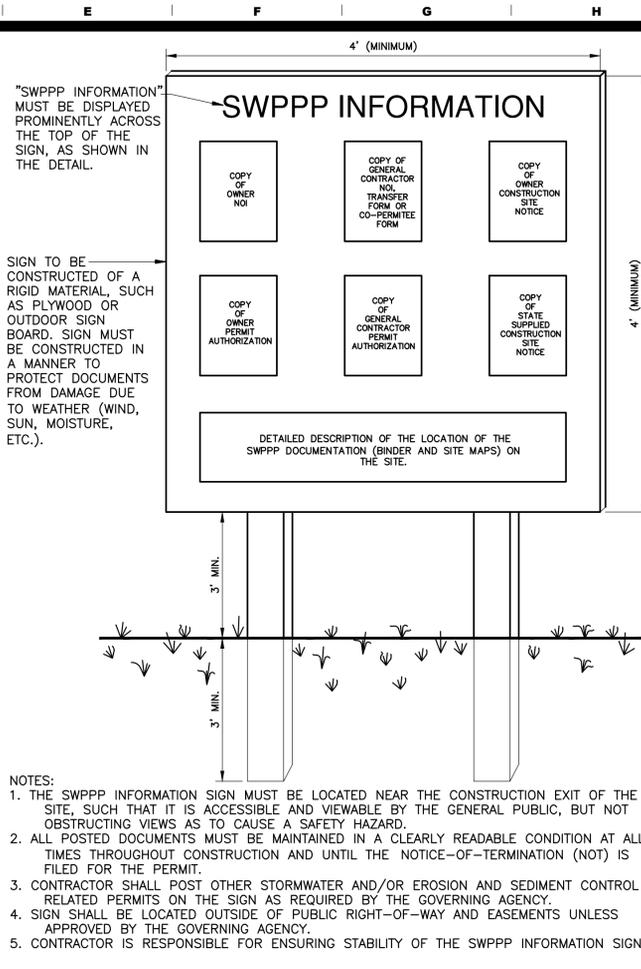
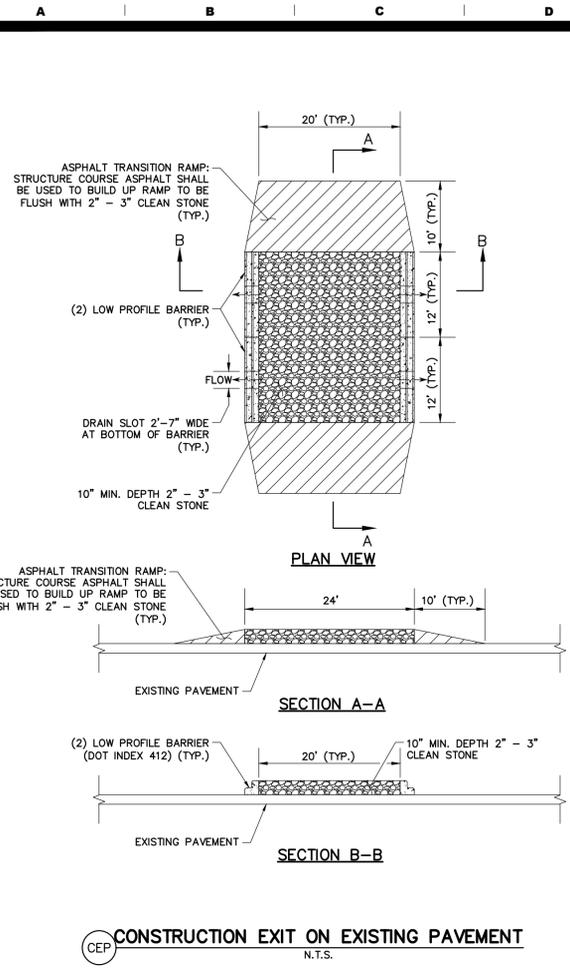
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BFA
Engineering-Surveying

103 ELM STREET WASHINGTON, MISSOURI 63090

DRAWN B.L.F.
CHECKED J.B.S.
DATE 07/12/24
SCALE NONE
JOB No. 8306
SHEET NAME ESC DETAIL SHEET 1
ESC-3



NOTES:

- PERMANENT STABILIZATION SHALL BE ACCOMPLISHED IN ALL DISTURBED AREAS BY COVERING THE SOIL WITH PAVEMENT, BUILDING STRUCTURES, VEGETATION, OR OTHER FORMS OF SOIL STABILIZATION.
- THE GC IS REQUIRED TO INITIATE PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY UPON REACHING FINAL GRADE. FOR THOSE AREAS NOT AT FINAL GRADE THAT WILL NOT BE DISTURBED FOR GREATER THAN 14 DAYS, THE CONTRACTOR SHOULD INITIATE TEMPORARY STABILIZATION PER THE TEMPORARY SEEDING OR STABILIZATION DETAIL.
- THE GC HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETE SOIL PREPARATION, SEEDING, MULCHING, AND ANY OTHER REQUIRED ACTIVITIES RELATED TO THE PLANTING AND ESTABLISHMENT OF VEGETATION. THE GC ALSO HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETELY INSTALL NON-VEGETATED MEASURES, IF UTILIZED.
- SOILS MUST BE PREPARED BEFORE INSTALLATION OF SOD OR SEED.
- AT THE COMPLETION OF GROUND-DISTURBING ACTIVITIES, THE ENTIRE SITE MUST HAVE PERMANENT VEGETATIVE COVER MEETING VEGETATIVE DENSITY REQUIREMENTS IN THE GENERAL PERMIT, OR MULCH PER LANDSCAPE PLAN, IN ALL AREAS NOT COVERED BY HARDSCAPE (STONE, PAVEMENT, BUILDINGS, ETC.).
- SEEDING AREAS SHALL BE PROTECTED WITH STRAW MULCH, HYDRAULIC MULCH OR A ROLLED EROSION CONTROL PRODUCT. STRAW MULCH MUST BE TACKIFIED OR CRIMPED BY DISC OR OTHER MACHINERY, AND ROLLED EROSION CONTROL PRODUCTS MUST BE INSTALLED PER MANUFACTURER RECOMMENDATIONS. ONLY ROLLED EROSION CONTROL PRODUCTS ARE PERMITTED TO BE USED IN FLOW CONVEYANCES.
- ALL AREAS TO BE SEEDING MUST MEET TOPSOIL DEPTH, PH AND ORGANIC CONTENT REQUIREMENTS.
- FINAL SITE STABILIZATION IS ACHIEVED WHEN PERENNIAL VEGETATIVE COVER PROVIDES PERMANENT STABILIZATION WITH A UNIFORM DENSITY GREATER THAN 70 PERCENT OVER THE ENTIRE AREA TO BE STABILIZED BY VEGETATIVE COVER. THIS AREA IS EXCLUSIVE OF AREAS THAT ARE COVERED WITH ROCK (CRUSHED GRANITE, GRAVEL, ETC.) OR LANDSCAPE MULCH, PAVED OR HAVE A BUILDING OR OTHER PERMANENT STRUCTURE ON THEM.

PERMANENT SEEDING, SOD OR MULCHING
SD PS

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4	By:	App:

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

PRELIMINARY DRAWING

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DRAWN
B.L.F.
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J.B.S.
 DATE
07/12/24
 SCALE
NONE
 JOB No.
8306
 SHEET NAME
ESC DETAIL SHEET 2

ESC-4

GRADING PLAN



GRADING NOTES:

- Contractor shall verify elevation of temporary benchmarks based on the elevation of the primary benchmark, prior to the start of construction. Contractor shall notify engineer if elevations differ from those shown on these plans.
 Primary Benchmark - Bearings and elevation information is based on information provided by BLEW & Associates, P. A. The Bearing is denoted as N54°15'12"E per GPS Coordinate Observations Wisconsin State Plane, South Zone NAD83.
 Temporary Benchmark No. 1 - Set Chiseled "X"
 Northing = 649271.46
 Easting = 1646246.56
 Elevation = 661.93'
 Temporary Benchmark No. 2 - Set Chiseled "X"
 Northing = 648990.42
 Easting = 1646447.09
 Elevation = 661.41'
- This site is within Zone X, Defined as areas determined to be outside the 0.2% annual chance floodplain, as shown on the Flood Insurance Rate Map prepared by the Federal Emergency Management Agency for the City of La Crosse, La Crosse County, Wisconsin, Map No. 55063C0263D, dated January 6, 2012.
- The Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
- All trenches under paved areas shall be backfilled with granular material and compacted to meet compaction requirements for the parking lot. Granular material shall be placed and compacted to a level equal to the trench depth at the time of the utility installations.
- All unpaved areas are to receive four inches of topsoil. Contractor to seed, mulch, fertilize, water, and maintain all areas outside of paved areas that were disturbed during construction until an acceptable stand of grass is established. Contractor shall be responsible to take whatever means necessary to establish permanent soil stabilization.
- The earthwork for all building foundations and slabs shall be in accordance with Building Plans & Specifications, unless otherwise noted.
- The Contractor is responsible for keeping storm water run-off and sediment under control during construction. All contractors shall refer to the Erosion and Sediment Control Plan throughout construction.
- The Contractor shall maintain the site in a well-drained manner in order to assure the shortest possible drying time after each rainfall. This will mean that pumping of standing water in low areas on the site will most likely be required during construction. Also pumping of ground water in utility trenches and deep excavations will be required during construction.
- The sitework for this project shall meet or exceed applicable AHJ Specifications, permit requirements, and/or manufacturer specifications.
- Contractor shall refer to architectural plans for exact locations and dimensions of entrances, exit doors, downspouts, roof drains, precise building dimensions, and exact building utility entrance locations.
- Layers of pavement shall be placed perpendicular to each other with the final layer perpendicular to the finished contours on parking lot.
- All survey monuments disturbed during construction shall be replaced by a surveyor licensed in the state, in which this project is located, at the Contractor's expense.
- The Contractor shall verify and/or perform all necessary inspections and/or certifications required by codes and/or utility companies prior to the announced building possession date and the final connections of utility services. All fees shall be paid by the contractor.
- Prior to placement of the base rock within the parking lot, the entire area shall be proof rolled with a loaded tandem axle dump truck, having no more than 3 axles and weighing a minimum of 40,000 pounds.
- Due to seasonal variations in rainfall and the groundwater level, the Contractor may be required to use light earth moving equipment to minimize pumping.
- The Contractor shall grade all areas to drain in order to prevent ponding water. The minimum allowable slope on all paved surfaces shall be 1 percent.
- The minimum depth of cover for waterlines on this site is 72 inches. Actual depths of waterlines may vary.
- Unless indicated otherwise, all waterline and sanitary sewer crossings shall have a minimum 18 inch vertical separation and 10 feet horizontal separation. The Contractor shall note that the depths of existing utilities have been plotted from information provided by various utility companies and is to be considered approximate. If the minimum separations cannot be constructed as shown the Contractor shall notify the BFA and appropriate modifications will be issued.
- All landscaping, paving, curbing, utilities, etc. adjacent to public right-of-way disturbed by construction activities (grading, utilities, sidewalk, etc.) shall be improved to new condition.
- All ramps and sidewalks shall meet Jurisdiction and ADA Rules/Regulations. Handrails shall be required on all ramps (sidewalk routes exceeding 1'x20" shall be constructed as ramps) that have a vertical change greater than 6 inches. Cross slopes on all sidewalks shall not exceed 2 percent.
- All landscape/planter areas adjacent to the building shall allow for proper stormwater/irrigation drainage. Where storm structures or storm pipes are readily available, the contractor shall install 4" diameter drain tile and connect to the storm sewer. 2" diameter PVC weep holes shall also be provided in adjacent curb @ 48" O.C. to release at pavement grade.

SOIL PREPARATION AND COMPACTION

Within all construction areas and five feet beyond, existing utilities, structures, foundations, pavements, and related below-grade components to be abandoned shall be properly demolished and the debris removed from the site, unless specifically noted otherwise. Existing utilities, cisterns and septic fields, as well as their associated backfill, shall be removed from the site, unless specifically noted to remain. Excavations resulting from the removal of existing site improvements shall be backfilled with properly compacted fill material meeting site specific specifications. Excavations shall be protected from extreme temperatures, precipitation, and construction disturbances. Areas to be cut or to receive fill shall be striped of any surface vegetation and/or organic topsoil. The strippings shall be removed from the site and/or stockpiled for later placement in landscaped or common ground areas. Masonry rubble, rocks, and pavement broken to less than 3 inches in maximum dimension may be used as fill, if properly blended with acceptable soil and placed as approved by the site testing firm. Prior to compaction, the entire site shall be proof-rolled by systematically passing over the subgrade to achieve complete coverage with proper compaction or loaded construction equipment, and observing the subgrade for pockets of excessively soft, wet, or otherwise unacceptable materials. Remove, replace, and/or repair unsuitable areas with suitable material meeting site specific geotechnical recommendations prior to placement of additional fill, then proof-roll again. Proof-roll passes shall be limited, particularly on silty substrates, to reduce the potential for pumping of moisture from within the soil. Fill material shall be free of organics, debris, other deleterious material, shall contain no chemicals that may result in the material being classified as "contaminated", shall not contain rocks greater than 1 1/2" (3) inches in size, and shall be placed in loose lifts not to exceed eight (8) inches in thickness. Within building and pavement areas, fill materials shall be mechanically compacted to at least 98 percent of its Standard Proctor maximum dry density (ASTM D 698) within a moisture content range of 2% of the soil's optimum moisture content for lean clays and 0% to 4% above optimum moisture content for lean to fat clays. Moisture content for granular soils shall be at a workable level to allow for compaction and prevent undue pumping. Fill material shall be low-plasticity with a maximum liquid limit of 50 and a maximum plasticity index of 30. Soils that become unstable due to moisture or disturbance shall be identified, dried, and recompacted; or underlaid to a suitable bearing subgrade and replaced with compacted fill material. Refer to the Building Plans for any additional earthwork criteria associated with the building pad preparation and to the geotechnical report for additional requirements, recommendations, and remediation associated with the site soils. All earthwork activities and soil remediation performed shall be included in the contractor's base bid.

ABBREVIATION LEGEND

ABBREVIATION	DESCRIPTION
BH	BEE HIVE INLET
EL	ELEVATION
FL	FLOW LINE
N/F	NOW AND/OR FORMERLY
DS	DOWNSPOUT
SSCO	SANITARY SEWER CLEANOUT
STCO	STORM SEWER CLEANOUT
L	ADA LANDING
R	ADA ACCESSIBLE RAMP

SPOT GRADE LEGEND

TOP OF CURB	0.000.00TC
PAVEMENT ELEVATION @ CURB/SIDEWALK	0.000.00TP
INTERIOR PAVEMENT/GROUND ELEVATIONS	0.000.00
GUTTER ELEVATION @ FACE OF CURB	0.000.00G
ELEVATION TO MATCH EXISTING	0.000.00*
TOP OF SIDEWALK	0.000.00TS

NOTE: EXISTING FIELD DATA SHOWN HEREON WAS GATHERED BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

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103 ELM STREET WASHINGTON, MISSOURI 63090

DESCRIPTION	PROPOSED	EXISTING
AERIAL ELECTRIC	—AE—	—AE—
UTILITY POLE	+	+
GUARD POST	GP	GP
SANITARY MANHOLE	●	○
CATCH BASIN	■	■
JUNCTION BOX	●	○
FLARED END SECTION	▢	▢
CLEANOUT	•	•
GRATED INLET	⊠	⊠
GUARD RAIL	—	—
CHAINLINK/WOODEN FENCE	—	—
WATER VALVE	•	•
FIRE HYDRANT	+	+
EASEMENT	---	---
PROPERTY LINE	---	---

PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

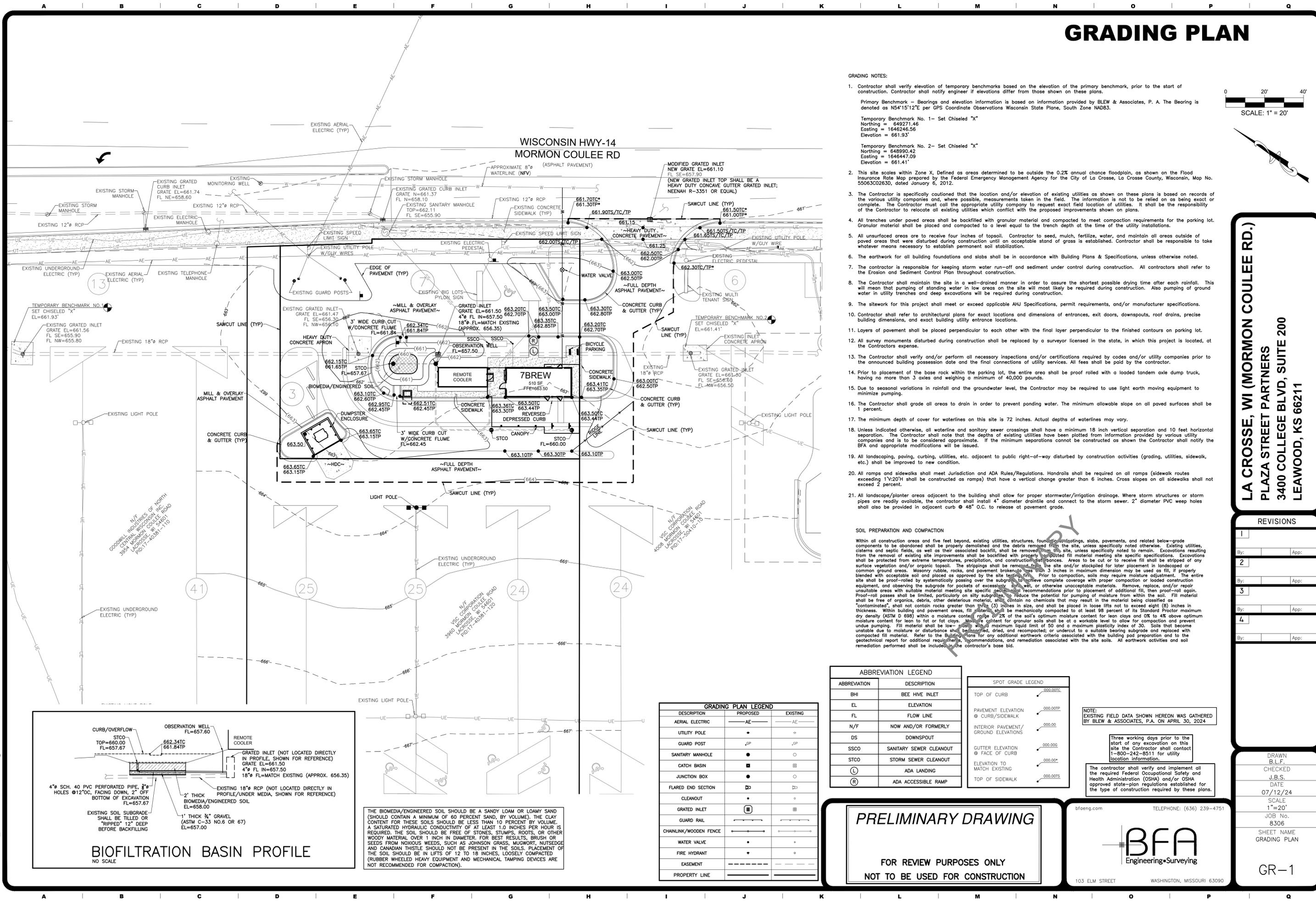
LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

REVISIONS

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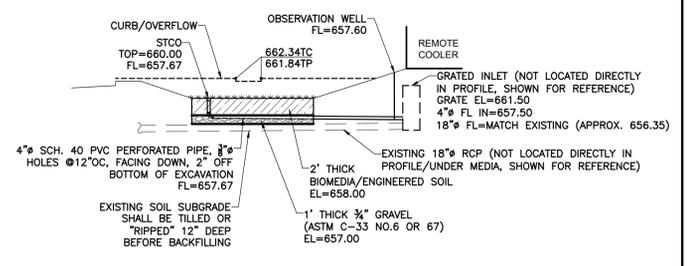
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07/12/24
SCALE
1"=20'
JOB No.
8306
SHEET NAME
GRADING PLAN

GR-1



BIOFILTRATION BASIN PROFILE

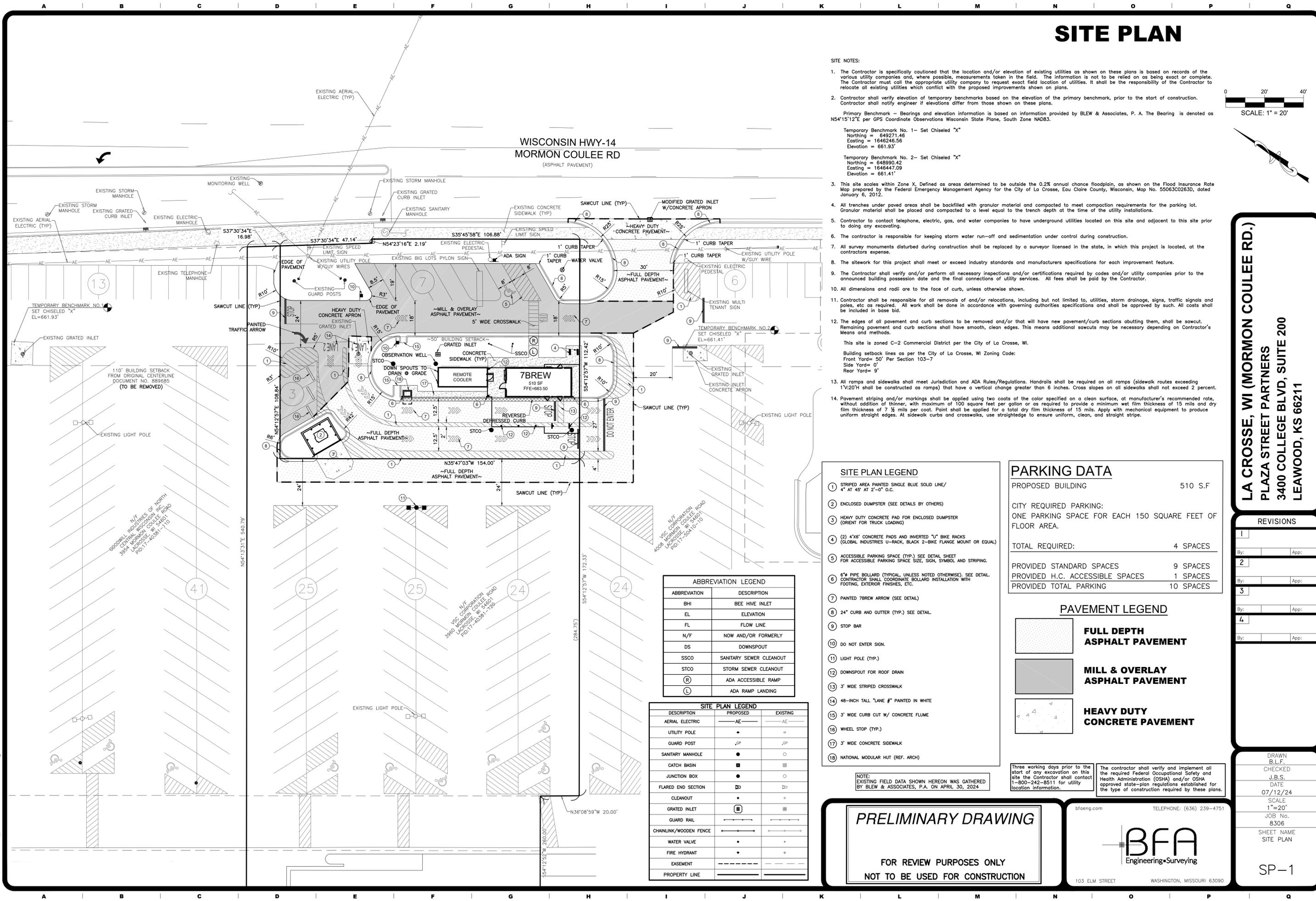
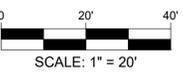
NO SCALE



THE BIOMEDIA/ENGINEERED SOIL SHOULD BE A SANDY LOAM OR LOAMY SAND (SHOULD CONTAIN A MINIMUM OF 60 PERCENT SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 10 PERCENT BY VOLUME. A SATURATED HYDRAULIC CONDUCTIVITY OF AT LEAST 1.0 INCHES PER HOUR IS REQUIRED. THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1 INCH IN DIAMETER. FOR BEST RESULTS, BRUSH OR SEEDS FROM NOXIOUS WEEDS, SUCH AS JOHNSON GRASS, MUGWORT, NUTSEDGE AND CANADIAN THISTLE SHOULD NOT BE PRESENT IN THE SOILS. PLACEMENT OF THE SOIL SHOULD BE IN LIFTS OF 12 TO 18 INCHES, LOOSELY COMPACTED (RUBBER WHEELED HEAVY EQUIPMENT AND MECHANICAL TAMPING DEVICES ARE NOT RECOMMENDED FOR COMPACTION).

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SITE PLAN



- SITE NOTES:**
- The Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
 - Contractor shall verify elevation of temporary benchmarks based on the elevation of the primary benchmark, prior to the start of construction. Contractor shall notify engineer if elevations differ from those shown on these plans.
 - Primary Benchmark - Bearings and elevation information is based on information provided by BLEW & Associates, P.A. The Bearing is denoted as N54°15'12"E per GPS Coordinate Observations Wisconsin State Plane, South Zone NAD83.
 - Temporary Benchmark No. 1 - Set Chiseled "X"
 - Northing = 649271.46
 - Easting = 1646246.56
 - Elevation = 661.93'
 - Temporary Benchmark No. 2 - Set Chiseled "X"
 - Northing = 648990.42
 - Easting = 1646447.09
 - Elevation = 661.41'
 - This site scales within Zone X, Defined as areas determined to be outside the 0.2% annual chance floodplain, as shown on the Flood Insurance Rate Map prepared by the Federal Emergency Management Agency for the City of La Crosse, Eau Claire County, Wisconsin, Map No. 5506300263D, dated January 6, 2012.
 - All trenches under paved areas shall be backfilled with granular material and compacted to meet compaction requirements for the parking lot. Granular material shall be placed and compacted to a level equal to the trench depth at the time of the utility installations.
 - Contractor to contact telephone, electric, gas, and water companies to have underground utilities located on this site and adjacent to this site prior to doing any excavating.
 - The contractor is responsible for keeping storm water run-off and sedimentation under control during construction.
 - All survey monuments disturbed during construction shall be replaced by a surveyor licensed in the state, in which this project is located, at the contractors expense.
 - The sitework for this project shall meet or exceed industry standards and manufacturers specifications for each improvement feature.
 - The Contractor shall verify and/or perform all necessary inspections and/or certifications required by codes and/or utility companies prior to the announced building possession date and the final connections of utility services. All fees shall be paid by the Contractor.
 - All dimensions and radii are to the face of curb, unless otherwise shown.
 - Contractor shall be responsible for all removals of and/or relocations, including but not limited to, utilities, storm drainage, signs, traffic signals and poles, etc as required. All work shall be done in accordance with governing authorities specifications and shall be approved by such. All costs shall be included in base bid.
 - The edges of all pavement and curb sections to be removed and/or that will have new pavement/curb sections abutting them, shall be sawcut. Remaining pavement and curb sections shall have smooth, clean edges. This means additional sawcuts may be necessary depending on Contractor's Means and methods.
 - This site is zoned C-2 Commercial District per the City of La Crosse, WI.
 - Building setback lines as per the City of La Crosse, WI Zoning Code:
 - Front Yard= 50' Per Section 103-7
 - Side Yard= 0'
 - Rear Yard= 9'
 - All ramps and sidewalks shall meet Jurisdiction and ADA Rules/Regulations. Handrails shall be required on all ramps (sidewalk routes exceeding 1'x20'H shall be constructed as ramps) that have a vertical change greater than 6 inches. Cross slopes on all sidewalks shall not exceed 2 percent.
 - Pavement striping and/or markings shall be applied using two coats of the color specified on a clean surface, at manufacturer's recommended rate, without addition of thinner, with maximum of 100 square feet per gallon or as required to provide a minimum wet film thickness of 15 mils and dry film thickness of 7 1/2 mils per coat. Paint shall be applied for a total dry film thickness of 15 mils. Apply with mechanical equipment to produce uniform straight edges. At sidewalk curbs and crosswalks, use straightedge to ensure uniform, clean, and straight stripe.

SITE PLAN LEGEND

- STRIPED AREA PAINTED SINGLE BLUE SOLID LINE/ 4" AT 45° AT 2'-0" O.C.
- ENCLOSED DUMPSTER (SEE DETAILS BY OTHERS)
- HEAVY DUTY CONCRETE PAD FOR ENCLOSED DUMPSTER (ORIENT FOR TRUCK LOADING)
- (2) 4"x8" CONCRETE PADS AND INVERTED "U" BIKE RACKS (GLOBAL INDUSTRIES U-RACK, BLACK 2-BIKE FLANGE MOUNT OR EQUAL)
- ACCESSIBLE PARKING SPACE (TYP.) SEE DETAIL SHEET FOR ACCESSIBLE PARKING SPACE SIZE, SIGN, SYMBOL AND STRIPING.
- 6" PIPE BOLLARD (TYPICAL UNLESS NOTED OTHERWISE, SEE DETAIL. CONTRACTOR SHALL COORDINATE BOLLARD INSTALLATION WITH FOOTING, EXTERIOR FINISHES, ETC.
- PAINTED 7BREW ARROW (SEE DETAIL)
- 24" CURB AND GUTTER (TYP.) SEE DETAIL.
- STOP BAR
- DO NOT ENTER SIGN.
- LIGHT POLE (TYP.)
- DOWNSPOUT FOR ROOF DRAIN
- 3' WIDE STRIPED CROSSWALK
- 48-INCH TALL "LANE #1" PAINTED IN WHITE
- 3' WIDE CURB CUT W/ CONCRETE FLUME
- WHEEL STOP (TYP.)
- 3' WIDE CONCRETE SIDEWALK
- NATIONAL MODULAR HUT (REF. ARCH)

ABBREVIATION	DESCRIPTION
BHI	BEE HIVE INLET
EL	ELEVATION
FL	FLOW LINE
N/F	NOW AND/OR FORMERLY
DS	DOWNSPOUT
SSCO	SANITARY SEWER CLEANOUT
STCO	STORM SEWER CLEANOUT
(R)	ADA ACCESSIBLE RAMP
(L)	ADA RAMP LANDING

DESCRIPTION	PROPOSED	EXISTING
AERIAL ELECTRIC	—AE—	—AE—
UTILITY POLE	•	•
GUARD POST	•GP	•GP
SANITARY MANHOLE	•	•
CATCH BASIN	■	■
JUNCTION BOX	•	•
FLARED END SECTION	▤	▤
CLEANOUT	•	•
GRATED INLET	■	■
GUARD RAIL	—	—
CHAINLINK/WOODEN FENCE	—	—
WATER VALVE	•	•
FIRE HYDRANT	•	•
EASEMENT	---	---
PROPERTY LINE	---	---

NOTE: EXISTING FIELD DATA SHOWN HEREON WAS GATHERED BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024.

PRELIMINARY DRAWING
FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

PARKING DATA

PROPOSED BUILDING	510 S.F.
CITY REQUIRED PARKING: ONE PARKING SPACE FOR EACH 150 SQUARE FEET OF FLOOR AREA.	
TOTAL REQUIRED:	4 SPACES
PROVIDED STANDARD SPACES	9 SPACES
PROVIDED H.C. ACCESSIBLE SPACES	1 SPACES
PROVIDED TOTAL PARKING	10 SPACES

PAVEMENT LEGEND

- FULL DEPTH ASPHALT PAVEMENT**
- MILL & OVERLAY ASPHALT PAVEMENT**
- HEAVY DUTY CONCRETE PAVEMENT**

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

REVISIONS	
1	By: App:
2	By: App:
3	By: App:
4	By: App:

DRAWN B.L.F.
CHECKED J.B.S.
DATE 07/12/24
SCALE 1"=20'
JOB No. 8306
SHEET NAME SITE PLAN

SP-1

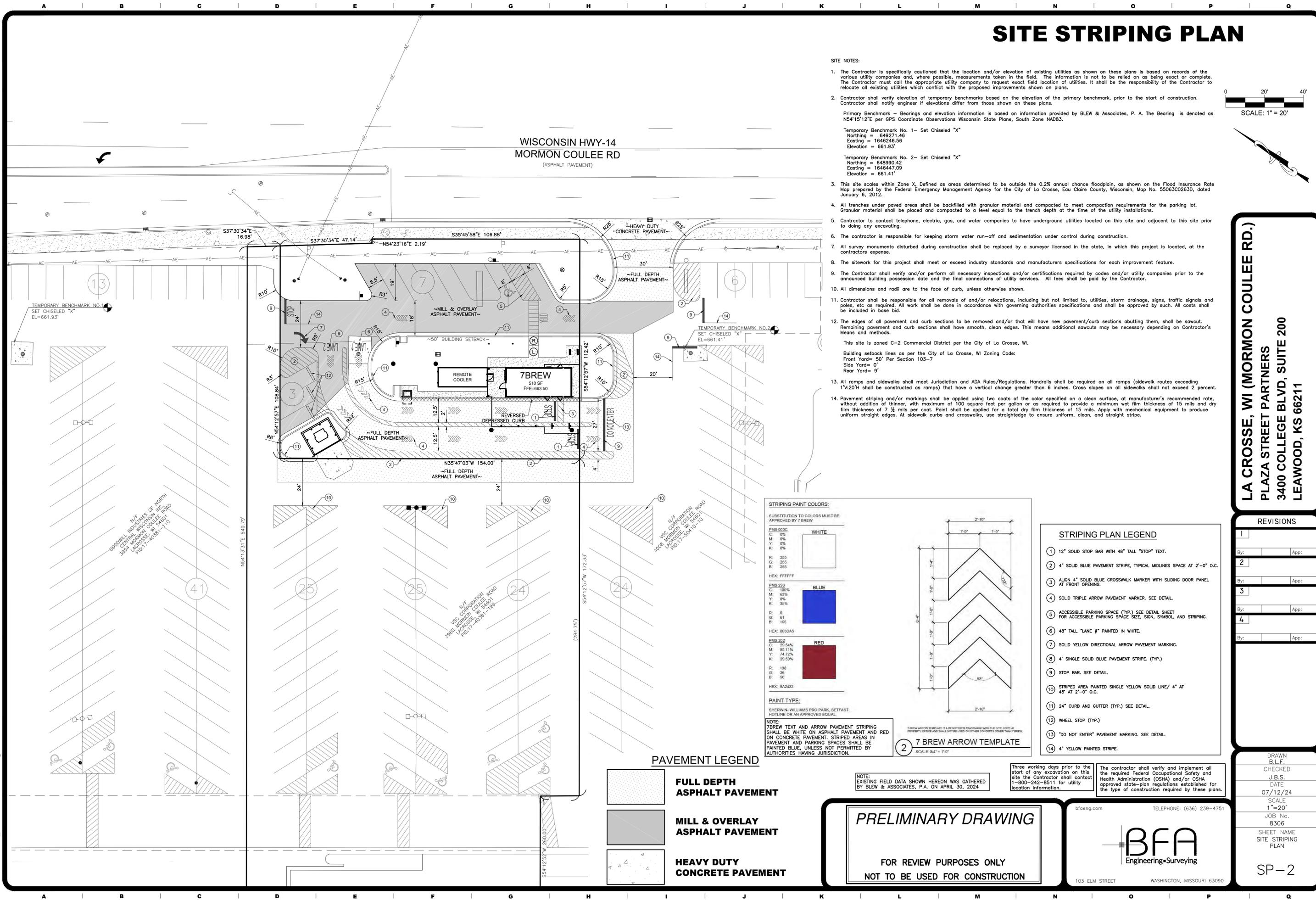
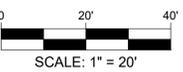
bfaeng.com TELEPHONE: (636) 239-4751

103 ELM STREET WASHINGTON, MISSOURI 63090

SITE STRIPING PLAN

SITE NOTES:

- The Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
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 Elevation = 661.93'
 Temporary Benchmark No. 2 - Set Chiseled "X"
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 Easting = 1646447.09
 Elevation = 661.41'
- This site scales within Zone X, Defined as areas determined to be outside the 0.2% annual chance floodplain, as shown on the Flood Insurance Rate Map prepared by the Federal Emergency Management Agency for the City of La Crosse, Eau Claire County, Wisconsin, Map No. 5506300263D, dated January 6, 2012.
- All trenches under paved areas shall be backfilled with granular material and compacted to meet compaction requirements for the parking lot. Granular material shall be placed and compacted to a level equal to the trench depth at the time of the utility installations.
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- The sitework for this project shall meet or exceed industry standards and manufacturers specifications for each improvement feature.
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- All dimensions and radii are to the face of curb, unless otherwise shown.
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 This site is zoned C-2 Commercial District per the City of La Crosse, WI.
 Building setback lines as per the City of La Crosse, WI Zoning Code:
 Front Yard = 50' Per Section 103-7
 Side Yard = 0'
 Rear Yard = 9'
- All ramps and sidewalks shall meet jurisdiction and ADA Rules/Regulations. Handrails shall be required on all ramps (sidewalk routes exceeding 1'x20'H shall be constructed as ramps) that have a vertical change greater than 6 inches. Cross slopes on all sidewalks shall not exceed 2 percent.
- Pavement striping and/or markings shall be applied using two coats of the color specified on a clean surface, at manufacturer's recommended rate, without addition of thinner, with maximum of 100 square feet per gallon or as required to provide a minimum wet film thickness of 15 mils and dry film thickness of 7 1/2 mils per coat. Paint shall be applied for a total dry film thickness of 15 mils. Apply with mechanical equipment to produce uniform straight edges. At sidewalk curbs and crosswalks, use straightedge to ensure uniform, clean, and straight stripe.



STRIPING PAINT COLORS:

SUBSTITUTION TO COLORS MUST BE APPROVED BY 7 BREW

PMS 000C	WHITE
C: 0%	
M: 0%	
Y: 0%	
K: 0%	
R: 25%	
G: 25%	
B: 25%	

HEX: FFFFFF	BLUE
PMS 293	
C: 100%	
M: 63%	
Y: 0%	
K: 35%	
R: 0	
G: 61	
B: 165	

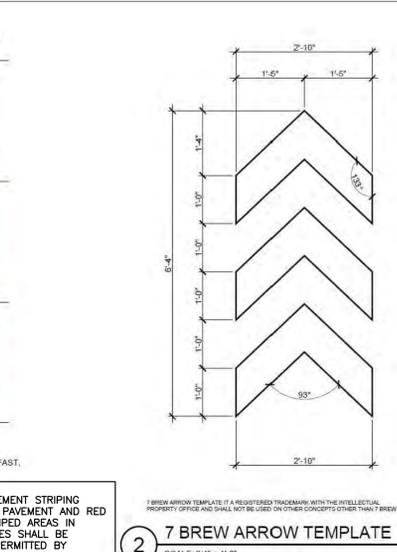
HEX: 003DA5	RED
PMS 202	
C: 29.54%	
M: 95.11%	
Y: 74.72%	
K: 29.59%	
R: 138	
G: 36	
B: 50	

HEX: BA2432	
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PAINT TYPE:

*SHERWIN-WILLIAMS PRO PARK SETBACK, HOTLINE OR AN APPROVED EQUAL.

NOTE: 7 BREW TEXT AND ARROW PAVEMENT STRIPING SHALL BE WHITE ON ASPHALT PAVEMENT AND RED ON CONCRETE PAVEMENT. STRIPED AREAS IN PAVEMENT AND PARKING SPACES SHALL BE PAINTED BLUE, UNLESS NOT PERMITTED BY AUTHORITIES HAVING JURISDICTION.



STRIPING PLAN LEGEND

- 12" SOLID STOP BAR WITH 48" TALL "STOP" TEXT.
- 4" SOLID BLUE PAVEMENT STRIPE, TYPICAL MIDLINES SPACE AT 2'-0" O.C.
- ALIGN 4" SOLID BLUE CROSSWALK MARKER WITH SLIDING DOOR PANEL AT FRONT OPENING.
- SOLID TRIPLE ARROW PAVEMENT MARKER. SEE DETAIL.
- ACCESSIBLE PARKING SPACE (TYP.) SEE DETAIL SHEET FOR ACCESSIBLE PARKING SPACE SIZE, SIGN, SYMBOL, AND STRIPING.
- 48" TALL "LANE #1" PAINTED IN WHITE.
- SOLID YELLOW DIRECTIONAL ARROW PAVEMENT MARKING.
- 4" SINGLE SOLID BLUE PAVEMENT STRIPE. (TYP.)
- STOP BAR. SEE DETAIL.
- STRIPED AREA PAINTED SINGLE YELLOW SOLID LINE/ 4" AT 45° AT 2'-0" O.C.
- 24" CURB AND GUTTER (TYP.) SEE DETAIL.
- WHEEL STOP (TYP.)
- "DO NOT ENTER" PAVEMENT MARKING. SEE DETAIL.
- 4" YELLOW PAINTED STRIPE.

PAVEMENT LEGEND

- FULL DEPTH ASPHALT PAVEMENT
- MILL & OVERLAY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT

NOTE: EXISTING FIELD DATA SHOWN HEREON WAS GATHERED BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024.

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

PRELIMINARY DRAWING
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103 ELM STREET WASHINGTON, MISSOURI 63090

LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
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REVISIONS

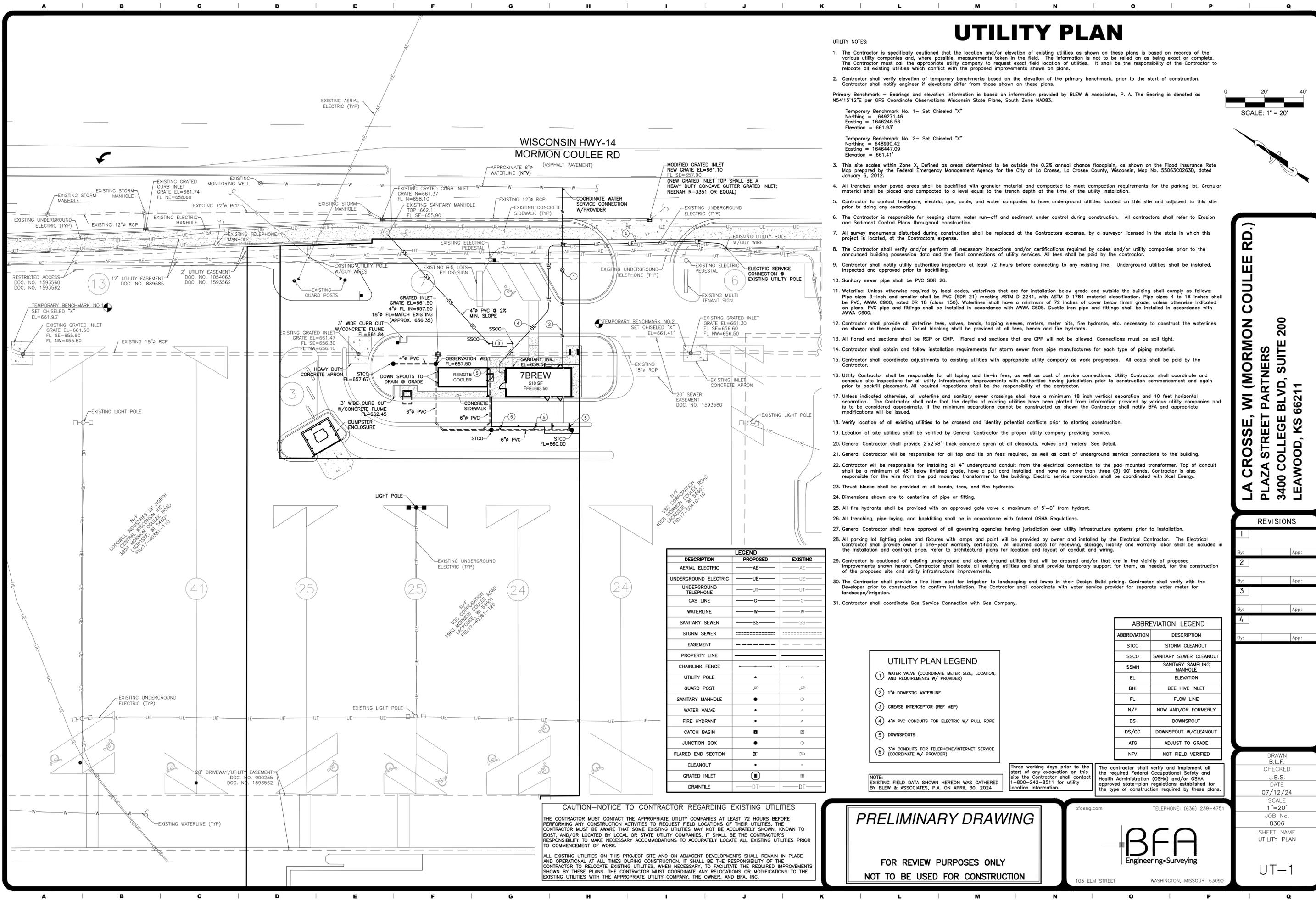
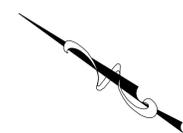
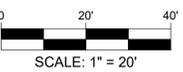
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DRAWN B.L.F.
 CHECKED J.B.S.
 DATE 07/12/24
 SCALE 1"=20'
 JOB No. 8306
 SHEET NAME SITE STRIPING PLAN
 SP-2

UTILITY PLAN

UTILITY NOTES:

- The Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
 - Contractor shall verify elevation of temporary benchmarks based on the elevation of the primary benchmark, prior to the start of construction. Contractor shall notify engineer if elevations differ from those shown on these plans.
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 - All trenches under paved areas shall be backfilled with granular material and compacted to meet compaction requirements for the parking lot. Granular material shall be placed and compacted to a level equal to the trench depth at the time of the utility installation.
 - Contractor to contact telephone, electric, gas, cable, and water companies to have underground utilities located on this site and adjacent to this site prior to doing any excavating.
 - The Contractor is responsible for keeping storm water run-off and sediment under control during construction. All contractors shall refer to Erosion and Sediment Control Plans throughout construction.
 - All survey monuments disturbed during construction shall be replaced at the Contractors expense, by a surveyor licensed in the state in which this project is located, at the Contractors expense.
 - The Contractor shall verify and/or perform all necessary inspections and/or certifications required by codes and/or utility companies prior to the announced building possession date and the final connections of utility services. All fees shall be paid by the contractor.
 - Contractor shall notify utility authorities inspectors at least 72 hours before connecting to any existing line. Underground utilities shall be installed, inspected and approved prior to backfilling.
 - Sanitary sewer pipe shall be PVC SDR 26.
 - Waterline: Unless otherwise required by local codes, waterlines that are for installation below grade and outside the building shall comply as follows: Pipe sizes 3-inch and smaller shall be PVC (SDR 21) meeting ASTM D 2241, with ASTM D 1784 material classification. Pipe sizes 4 to 18 inches shall be PVC, AWWA C900, rated DR 18 (class 150). Waterlines shall have a minimum of 72 inches of cover below finish grade, unless otherwise indicated on plans. PVC pipe and fittings shall be installed in accordance with AWWA C605. Ductile iron pipe and fittings shall be installed in accordance with AWWA C600.
 - Contractor shall provide all waterline tees, valves, bends, tapping sleeves, meters, meter pits, fire hydrants, etc. necessary to construct the waterlines as shown on these plans. Thrust blocking shall be provided at all tees, bends and fire hydrants.
 - All flared end sections shall be RCP or CMP. Flared end sections that are CPP will not be allowed. Connections must be soil tight.
 - Contractor shall obtain and follow installation requirements for storm sewer from pipe manufacturers for each type of piping material.
 - Contractor shall coordinate adjustments to existing utilities with appropriate utility company as work progresses. All costs shall be paid by the Contractor.
 - Utility Contractor shall be responsible for all taping and tie-in fees, as well as cost of service connections. Utility Contractor shall coordinate and schedule site inspections for all utility infrastructure improvements with authorities having jurisdiction prior to construction commencement and again prior to backfill placement. All required inspections shall be the responsibility of the contractor.
 - Unless indicated otherwise, all waterline and sanitary sewer crossings shall have a minimum 18 inch vertical separation and 10 feet horizontal separation. The Contractor shall note that the depths of existing utilities have been plotted from information provided by various utility companies and is to be considered approximate. If the minimum separations cannot be constructed as shown the Contractor shall notify BFA and appropriate modifications will be issued.
 - Verify location of all existing utilities to be crossed and identify potential conflicts prior to starting construction.
 - Location of site utilities shall be verified by General Contractor the proper utility company providing service.
 - General Contractor shall provide 2"x2"x8" thick concrete apron at all cleanouts, valves and meters. See Detail.
 - General Contractor will be responsible for all tap and tie in fees required, as well as cost of underground service connections to the building.
 - Contractor will be responsible for installing all 4" underground conduit from the electrical connection to the pad mounted transformer. Top of conduit shall be a minimum of 48" below finished grade, have a pull cord installed, and have no more than three (3) 90° bends. Contractor is also responsible for the wire from the pad mounted transformer to the building. Electric service connection shall be coordinated with Xcel Energy.
 - Thrust blocks shall be provided at all bends, tees, and fire hydrants.
 - Dimensions shown are to centerline of pipe or fitting.
 - All fire hydrants shall be provided with an approved gate valve a maximum of 5'-0" from hydrant.
 - All trenching, pipe laying, and backfilling shall be in accordance with federal OSHA Regulations.
 - General Contractor shall have approval of all governing agencies having jurisdiction over utility infrastructure systems prior to installation.
 - All parking lot lighting poles and fixtures with lamps and point will be provided by owner and installed by the Electrical Contractor. The Electrical Contractor shall provide owner a one-year warranty certificate. All incurred costs for receiving, storage, liability and warranty labor shall be included in the installation and contract price. Refer to architectural plans for location and layout of conduit and wiring.
 - Contractor is cautioned of existing underground and above ground utilities that will be crossed and/or that are in the vicinity of proposed improvements shown hereon. Contractor shall locate all existing utilities and shall provide temporary support for them, as needed, for the construction of the proposed site and utility infrastructure improvements.
 - The Contractor shall provide a line item cost for irrigation to landscaping and lawns in their Design Build pricing. Contractor shall verify with the Developer prior to construction to confirm installation. The Contractor shall coordinate with water service provider for separate water meter for landscape/irrigation.
 - Contractor shall coordinate Gas Service Connection with Gas Company.



DESCRIPTION	LEGEND	
	PROPOSED	EXISTING
AERIAL ELECTRIC	—AE—	—AE—
UNDERGROUND ELECTRIC	—UE—	—UE—
UNDERGROUND TELEPHONE	—UT—	—UT—
GAS LINE	—G—	—G—
WATERLINE	—W—	—W—
SANITARY SEWER	—SS—	—SS—
STORM SEWER	=====	=====
EASEMENT	-----	-----
PROPERTY LINE	=====	=====
CHAINLINK FENCE	—●—●—	—●—●—
UTILITY POLE	•	•
GUARD POST	•GP	•GP
SANITARY MANHOLE	●	○
WATER VALVE	•	•
FIRE HYDRANT	+	•
CATCH BASIN	■	■
JUNCTION BOX	●	○
FLARED END SECTION	▨	▨
CLEANOUT	•	•
GRATED INLET	■	■
DRAIN TILE	—DT—	—DT—

UTILITY PLAN LEGEND	
①	WATER VALVE (COORDINATE METER SIZE, LOCATION, AND REQUIREMENTS W/ PROVIDER)
②	1" DOMESTIC WATERLINE
③	GREASE INTERCEPTOR (REF MEP)
④	4" PVC CONDUITS FOR ELECTRIC W/ PULL ROPE
⑤	DOWNSPOUTS
⑥	3" CONDUITS FOR TELEPHONE/INTERNET SERVICE (COORDINATE W/ PROVIDER)

ABBREVIATION LEGEND	
STCO	STORM CLEANOUT
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SAMPLING MANHOLE
EL	ELEVATION
BHI	BEE HIVE INLET
FL	FLOW LINE
N/F	NOW AND/OR FORMERLY
DS	DOWNSPOUT
DS/CO	DOWNSPOUT W/CLEANOUT
ATG	ADJUST TO GRADE
NFV	NOT FIELD VERIFIED

NOTE: EXISTING FIELD DATA SHOWN HEREON WAS GATHERED BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

CAUTION—NOTICE TO CONTRACTOR REGARDING EXISTING UTILITIES

THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE PERFORMING ANY CONSTRUCTION ACTIVITIES TO REQUEST FIELD LOCATIONS OF THEIR UTILITIES. THE CONTRACTOR MUST BE AWARE THAT SOME EXISTING UTILITIES MAY NOT BE ACCURATELY SHOWN, KNOWN TO EXIST, AND/OR LOCATED BY LOCAL OR STATE UTILITY COMPANIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE NECESSARY ACCOMMODATIONS TO ACCURATELY LOCATE ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF WORK.

ALL EXISTING UTILITIES ON THIS PROJECT SITE AND ON ADJACENT DEVELOPMENTS SHALL REMAIN IN PLACE AND OPERATIONAL AT ALL TIMES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE EXISTING UTILITIES, WHEN NECESSARY, TO FACILITATE THE REQUIRED IMPROVEMENTS SHOWN BY THESE PLANS. THE CONTRACTOR MUST COORDINATE ANY RELOCATIONS OR MODIFICATIONS TO THE EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANY, THE OWNER, AND BFA, INC.

PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY
 NOT TO BE USED FOR CONSTRUCTION

bfaeng.com TELEPHONE: (636) 239-4751

BFA
 Engineering-Surveying

103 ELM STREET WASHINGTON, MISSOURI 63090

LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

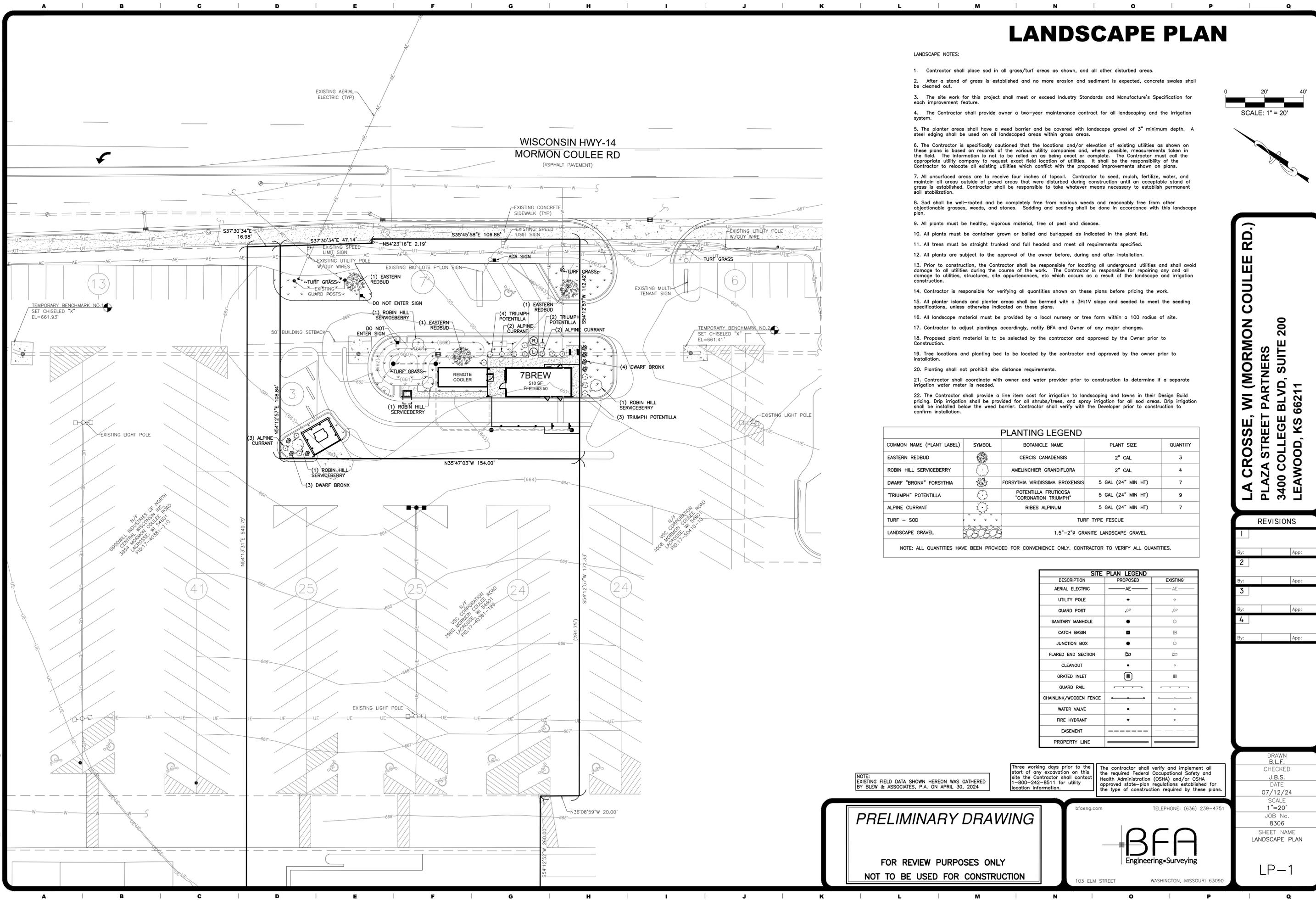
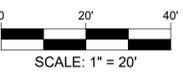
REVISIONS	
1	By: _____ App: _____
2	By: _____ App: _____
3	By: _____ App: _____
4	By: _____ App: _____

DRAWN B.L.F.
 CHECKED J.B.S.
 DATE 07/12/24
 SCALE 1"=20'
 JOB No. 8306
 SHEET NAME UTILITY PLAN
 UT-1

LANDSCAPE PLAN

LANDSCAPE NOTES:

- Contractor shall place sod in all grass/turf areas as shown, and all other disturbed areas.
- After a stand of grass is established and no more erosion and sediment is expected, concrete swales shall be cleaned out.
- The site work for this project shall meet or exceed Industry Standards and Manufacturer's Specification for each improvement feature.
- The Contractor shall provide owner a two-year maintenance contract for all landscaping and the irrigation system.
- The planter areas shall have a weed barrier and be covered with landscape gravel of 3" minimum depth. A steel edging shall be used on all landscaped areas within grass areas.
- The Contractor is specifically cautioned that the locations and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
- All un surfaced areas are to receive four inches of topsoil. Contractor to seed, mulch, fertilize, water, and maintain all areas outside of paved areas that were disturbed during construction until an acceptable stand of grass is established. Contractor shall be responsible to take whatever means necessary to establish permanent soil stabilization.
- Sod shall be well-rooted and be completely free from noxious weeds and reasonably free from other objectionable grasses, weeds, and stones. Sodding and seeding shall be done in accordance with this landscape plan.
- All plants must be healthy, vigorous material, free of pest and disease.
- All plants must be container grown or balled and burlapped as indicated in the plant list.
- All trees must be straight trunked and full headed and meet all requirements specified.
- All plants are subject to the approval of the owner before, during and after installation.
- Prior to construction, the Contractor shall be responsible for locating all underground utilities and shall avoid damage to all utilities during the course of the work. The Contractor is responsible for repairing any and all damage to utilities, structures, site appurtenances, etc which occurs as a result of the landscape and irrigation construction.
- Contractor is responsible for verifying all quantities shown on these plans before pricing the work.
- All planter islands and planter areas shall be bermed with a 3H:1V slope and seeded to meet the seeding specifications, unless otherwise indicated on these plans.
- All landscape material must be provided by a local nursery or tree farm within a 100 radius of site.
- Contractor to adjust plantings accordingly, notify BFA and Owner of any major changes.
- Proposed plant material is to be selected by the contractor and approved by the Owner prior to construction.
- Tree locations and planting bed to be located by the contractor and approved by the owner prior to installation.
- Planting shall not prohibit site distance requirements.
- Contractor shall coordinate with owner and water provider prior to construction to determine if a separate irrigation water meter is needed.
- The Contractor shall provide a line item cost for irrigation to landscaping and lawns in their Design Bid pricing. Drip irrigation shall be provided for all shrubs/trees, and spray irrigation for all sod areas. Drip irrigation shall be installed below the weed barrier. Contractor shall verify with the Developer prior to construction to confirm installation.



PLANTING LEGEND

COMMON NAME (PLANT LABEL)	SYMBOL	BOTANICAL NAME	PLANT SIZE	QUANTITY
EASTERN REDBUD		CERCIS CANADENSIS	2" CAL	3
ROBIN HILL SERVICEBERRY		AMELINCHER GRANDIFLORA	2" CAL	4
DWARF "BRONX" FORSYTHIA		FORSYTHIA VIRIDISSIMA BROXENSIS	5 GAL (24" MIN HT)	7
"TRIUMPH" POTENTILLA		POTENTILLA FRUTICOSA "CORONATION TRIUMPH"	5 GAL (24" MIN HT)	9
ALPINE CURRANT		RIBES ALPINUM	5 GAL (24" MIN HT)	7
TURF - SOD		TURF TYPE FESCUE		
LANDSCAPE GRAVEL		1.5"-2" GRANITE LANDSCAPE GRAVEL		

NOTE: ALL QUANTITIES HAVE BEEN PROVIDED FOR CONVENIENCE ONLY. CONTRACTOR TO VERIFY ALL QUANTITIES.

SITE PLAN LEGEND

DESCRIPTION	PROPOSED	EXISTING
AERIAL ELECTRIC	—AE—	—AE—
UTILITY POLE	•	•
GUARD POST	• _{GP}	• _{GP}
SANITARY MANHOLE	•	•
CATCH BASIN	■	■
JUNCTION BOX	•	•
FLARED END SECTION	▢	▢
CLEANOUT	•	•
GRADED INLET	■	■
GUARD RAIL	—	—
CHAINLINK/WOODEN FENCE	—	—
WATER VALVE	•	•
FIRE HYDRANT	•	•
EASEMENT	---	---
PROPERTY LINE	---	---

NOTE: EXISTING FIELD DATA SHOWN HEREON WAS GATHERED BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024.

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

PRELIMINARY DRAWING

FOR REVIEW PURPOSES ONLY
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103 ELM STREET WASHINGTON, MISSOURI 63090

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REVISIONS

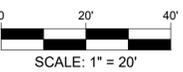
NO.	DATE	BY	APP.
1			
2			
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DRAWN B.L.F.
CHECKED J.B.S.
DATE 07/12/24
SCALE 1"=20'
JOB No. 8306

SHEET NAME LANDSCAPE PLAN

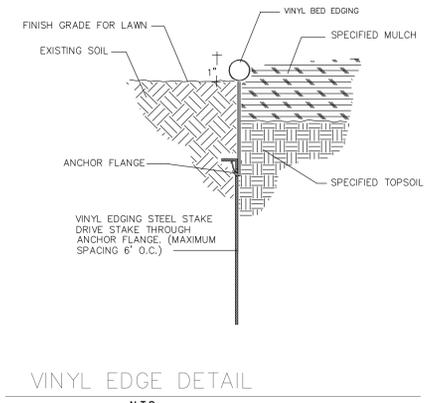
LP-1

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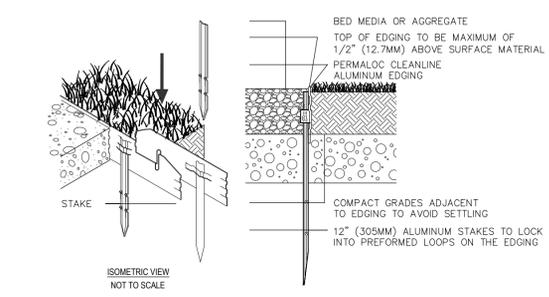


permaloc
WORLD'S BEST LANDSCAPE EDGING

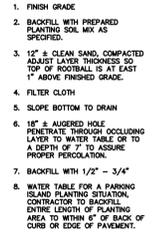
PERMALOC CORPORATION
13305 BARRY STREET
HOLLAND, MI 49424
1-800-356-9660
PHONE: (616) 399-9600
FAX: (616) 399-9770
www.permaloc.com



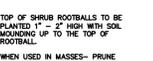
VINYL EDGE DETAIL
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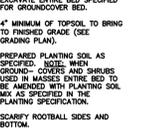
ALTERNATE #1: PERMALOC ALUMINUM EDGE DETAIL
N.T.S.



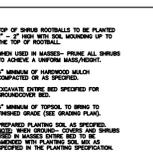
POOR DRAINAGE CONDITION
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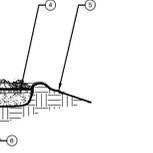
REFER TO PLANT SCHEDULE FOR SPACING



SHRUB/GROUND COVER PLANTING
N.T.S.



REFER TO PLANT SCHEDULE FOR SPACING



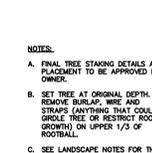
SHRUB/GROUND COVER PLANTING ON SLOPE
N.T.S.

CANOPY TREE PLANTING
N.T.S.

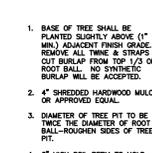
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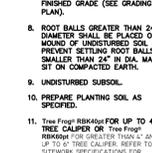
LANSCAPE NOTES:



LANSCAPE NOTES:



LANSCAPE NOTES:



LANSCAPE NOTES:

GENERAL:

- All natural vegetation shall be maintained where it does not interfere with construction or the permanent plan of operation. Every effort possible shall be made to protect existing structures or vegetation from damage due to equipment usage. Contractor shall at all times protect all materials and work against injury to public.
- The landscape contractor shall be responsible for any coordination and sequencing with other site related work being performed by other contractors. Refer to additional drawings for further coordination of work to be done.
- underground facilities, structures and utilities must be considered approximate only. There may be others not presently known or shown. It shall be the landscape contractor's responsibility to determine or verify the existence of and exact location of the above (Call utility location services in municipality).
- Plant material are to be planted in the same relationship to grade as was grown in nursery conditions. All planting beds shall be cultivated to 6" depth minimum and graded smooth immediately before planting of plants. Plant groundcover to within 12" of trunk of trees or shrubs planted within the area.
- It shall be the landscape contractor's responsibility to:
 - Verify all existing and proposed features shown on the drawings prior to commencement of work.
 - Report all discrepancies found with regard to existing conditions or proposed design to the landscape architect immediately for a decision.
 - State the locations of all proposed plant material and obtain the approval of the owner's representative or landscape architect ten (10) days prior to installation.
 - Items shown on this drawing take precedence over the material list. It shall be the landscape contractor's responsibility to verify all quantities and conditions prior to implementation of this plan. No substitutions of types or size of plant materials will be accepted without written approval from the landscape architect.
 - Provide single-stem trees unless otherwise noted in plant schedule.
 - All plant material shall comply with the recommendations and requirements of ANSI Z60.1 "American Standards for Nursery Stock."
 - It shall be the contractor's responsibility to provide for inspection of the plant material by the Landscape Architect (or Owner's Representative) prior to acceptance. Inspections may take place before, during or after installation. Plants not conforming exactly to the plant list will not be accepted and shall be replaced at the landscape contractor's expense.
 10. All bids are to have unit prices listed. The Owner has the option to delete any portion of the contract prior to signing the contract or beginning work. This will be a unit price contract; quotes shall be valid for 12 months.
 - Should auger equipment be utilized in excavating any plant pits, vertical sides of plant pits shall be thoroughly scarified to avoid creation of "polished side walls" prior to plant material installation.
 - All excess topsoil, rocks, debris and/or tainted soils shall be removed by the general contractor prior to plant project being turned over to the landscape contractor to commence landscape installation.

13. Keep all plant material (except turf) a minimum of 36" clear of fire hydrants.

14. Landscape contractor shall kill & remove all existing weeds within the project site.

15. All tags, nursery stakes, labels, etc. shall be removed by the landscape contractor at completion of all landscape installation.

16. Landscape contractor shall be in compliance with all federal, state and local laws/regulations relating to insect infestation and/or plant diseases.

17. All substitutions of plant material shall be submitted to Owner for approval.

PRUNING:

- Lightly prune trees at time of planting. Prune only the crossover limbs, intermediate leaders and/or any broken branches. Some interior limbs and lateral branches may be pruned. However, do not remove the terminal buds of branches.
- Seed and fertilization operations shall occur between May 1 and June 15th or between September 1 and October 15th unless directed by others in writing AND irrigation system is operating.
- Watering of seeded or sowed lawns shall begin immediately and shall continue to be provided continuously for the following 72 hours. Regardless, the landscape contractor shall be responsible for all landscape maintenance until project turnover.

MISC. MATERIAL:

- Provide stakes and deadman of sound, new hardwood, free of knots, and winter freezing. Additionally, only 3-ply tying material shall be used.

TURF:

- All disturbed lawn areas to be seeded with a mixture of turf-type fescue (300# per acre and bluegrass (10# per acre). Lawn areas shall be unconditionally warranted for a period of 90 days from date of final acceptance. Areas more than one square foot per any 50 square feet shall be replaced.
- Seed and fertilization operations shall occur between May 1 and June 15th or between September 1 and October 15th unless directed by others in writing AND irrigation system is operating.
- Watering of seeded or sowed lawns shall begin immediately and shall continue to be provided continuously for the following 72 hours. Regardless, the landscape contractor shall be responsible for all landscape maintenance until project turnover.

SIGHT TRIANGLES:

- No landscape material or other obstructions shall be placed or be maintained within the sight triangle area so as not to impede the vision between a height of three (3) inches (30") and ten feet (10') above the adjacent street or paving surfaces.
- Sight triangles at the intersection of a public street and a private access way (except for a single family residence) shall also be formed by measuring from the point of intersection of the street frontage curbs and the entrance curb lines a

distance of 35' and connecting the points so established to form the sight triangle area.

TOPSOIL:

- Topsoil mix for all proposed landscape plantings shall be five (5) parts well-drained screened organic topsoil to one (1) part Canadian agtopnum peat moss as per planting details. Rot-till topsoil mix to a depth of 4" minimum and grade smooth.
- Provide a soil analysis, as detailed, made by independent soil-testing agency outlining the % of organic matter, inorganic matter, deleterious material, pH and mineral content.
- Any foreign topsoil used shall be free of roots, stumps, weeds, brush, stones (larger than 1"), litter or any other extraneous or toxic material. Landscape contractor shall be fully responsible for protection all negative soil issues prior to plant installation. Killing and removal of all weeds shall be the responsibility of the landscape contractor as part of this task.
- Landscape Contractor to apply pre-emergent herbicide to all planting beds upon completion of planting operation and before application of shredded bark mulch.
- Initial sitation controls prior to commencement of any grading operation, inspect and maintain all siltation fences on a weekly basis until vegetation is established.

MISC. MATERIAL:

- Provide stakes and deadman of sound, new hardwood, free of knots, and winter freezing. Additionally, only 3-ply tying material shall be used.

TURF:

- All disturbed lawn areas to be seeded with a mixture of turf-type fescue (300# per acre and bluegrass (10# per acre). Lawn areas shall be unconditionally warranted for a period of 90 days from date of final acceptance. Areas more than one square foot per any 50 square feet shall be replaced.
- Seed and fertilization operations shall occur between May 1 and June 15th or between September 1 and October 15th unless directed by others in writing AND irrigation system is operating.
- Watering of seeded or sowed lawns shall begin immediately and shall continue to be provided continuously for the following 72 hours. Regardless, the landscape contractor shall be responsible for all landscape maintenance until project turnover.

SIGHT TRIANGLES:

- No landscape material or other obstructions shall be placed or be maintained within the sight triangle area so as not to impede the vision between a height of three (3) inches (30") and ten feet (10') above the adjacent street or paving surfaces.
- Sight triangles at the intersection of a public street and a private access way (except for a single family residence) shall also be formed by measuring from the point of intersection of the street frontage curbs and the entrance curb lines a

8. Recondition existing lawn areas damaged by Contractor's operations including equipment/material storage and movement of vehicles.

9. Sod Contractor to ensure sod is placed below sidewalk and all paved area elevations to allow for proper drainage.

EROSION CONTROL BLANKET (Where applicable):

- All seeded areas on slopes greater than 4:1 shall receive an erosion control blanket which shall consist of loose straw mat and anchor pins as manufactured by Northern American Green, DS 75 or approved equal. Install per manufacturer's recommendations.

PLUG PLANTING NOTES:

- All plugs to be 4-1/2" deep X 2" diameter minimum.
- Plugs are to be planted in a hole dug with a trowel, spade or planting bar such that the hole is of a minimum diameter and depth to accommodate the plug and its roots, without damage.
- Plugs shall be spaced in a triangulated layout approximately 24" on center. Plugs shall be planted through erosion control blanket where appropriate.
- Obtain plugs from a reputable nursery.
- Water plugs upon completion of planting so that soil is moist but not saturated.
- If planting is delayed more than six hours after delivery, store plugs in the shade, protect from weather and mechanical damage and keep them moist and cool. All plugs shall be planted within 24 hours after delivery.

WARRANTY:

- All plant material (excluding ground cover, perennials and annuals) are to be warranted for a period of 12 months after complete installation of all landscape material at 100% of the installed price.
- Any plant material found to be defective shall be removed and replaced within 30 days of notification or in growth season determined to be best for that plant.
- Only one replacement per tree or shrub shall be required at the end of the warranty, unless loss is due to failure to comply with the warranty.
- Lawn establishment periods will be in effect once the lawn has been mowed three times. Plant establishment periods shall commence on the date of acceptance and 100% completion.
- Written guarantee shall be provided to the owner per conditions outline in #1 above.

Tree Frog® RBK40pt SYSTEM
For up to 4" Caliper Trees
(2) Tree Frog EP™ 32"x2" wood boards
(4) 3/4"x70" strapping (1,800 lb. tensile strength)
(4) Arrowhead™ Anchors

Tree Frog® RBK60pt SYSTEM
For up to 6" Caliper Trees
(4) Tree Frog EP™ 32"x2"x6" wood boards
(8) 3/4"x70" strapping (1,800 lb. tensile strength)
(8) Arrowhead™ Anchors

Tree Frog® RBK INSTALLATION NOTES
Specify Anchor

- Biodegradable (soft or hard soil)
- Nylon (soft soil)
- Heavy Duty (hard soil)

See page 2 for installing root ball tree staking kit with banding machine.

See page 3 for installing root ball tree staking kit with ratchet.

Tree Frog® RBK40pt PLAN VIEW
32" x 26" BOARD W/STRAPPING
ARROWHEAD ANCHOR
EXISTING SUBSOIL
TEMPORARY SAUCER
FINISH GRADE
MIXED SOIL AS SPECIFIED

Tree Frog® RBK60pt PLAN VIEW
(8) 3/4"x70" STRAPPING
ARROWHEAD ANCHOR
EXISTING SUBSOIL
TEMPORARY SAUCER
FINISH GRADE
MIXED SOIL AS SPECIFIED

Tree Frog® RBK60pt DIAGRAM
(8) 3/4"x70" STRAPPING (1,800 LB TENSILE STRENGTH)
3" STAPLE GUIDES (3 PER BOARD)
NOTE - FOR UP TO 4" CALIPER TREES-ANCHORS ARE TO BE DRIVEN TO DEEPEST POSSIBLE DEPTH ACCORDING TO SOIL TYPE.

Tree Frog® RBK60pt DIAGRAM
(8) 3/4"x70" STRAPPING (1,800 LB TENSILE STRENGTH)
3" STAPLE GUIDES (2 PER BOARD)
NOTE - FOR UP TO 6" CALIPER TREES AND FOR PALMS UNDER 20" WITH CUT LARGE ROOT BALL - ANCHORS ARE TO BE DRIVEN TO DEEPEST POSSIBLE DEPTH ACCORDING TO SOIL TYPE.

Tree Frog® RBK40pt SYSTEM
www.treefrog.com
352-735-7411
"TREE FROG" TREE STAKING
N.T.S.

LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

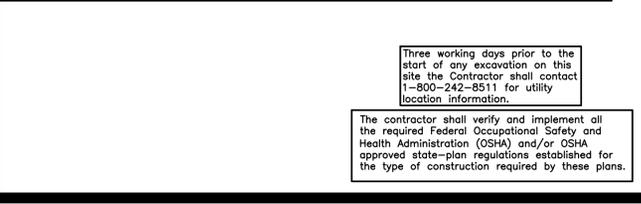
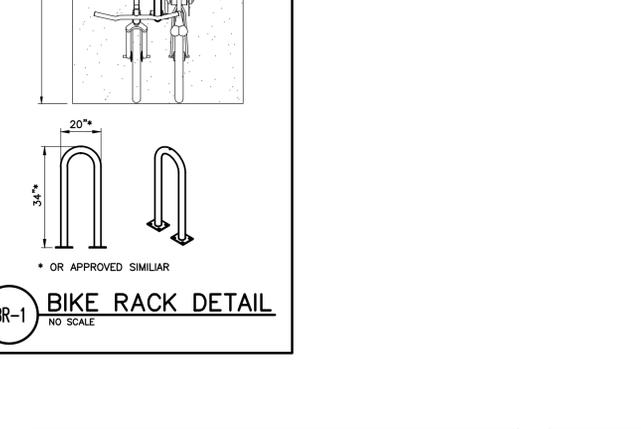
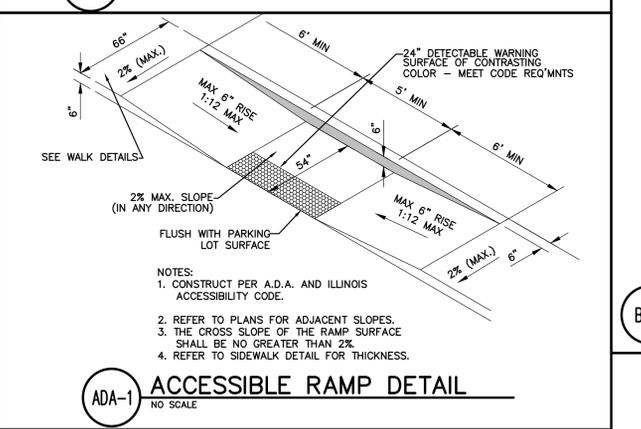
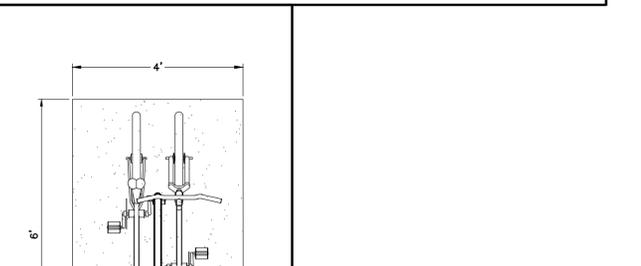
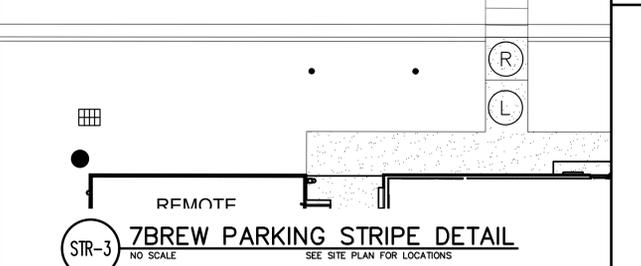
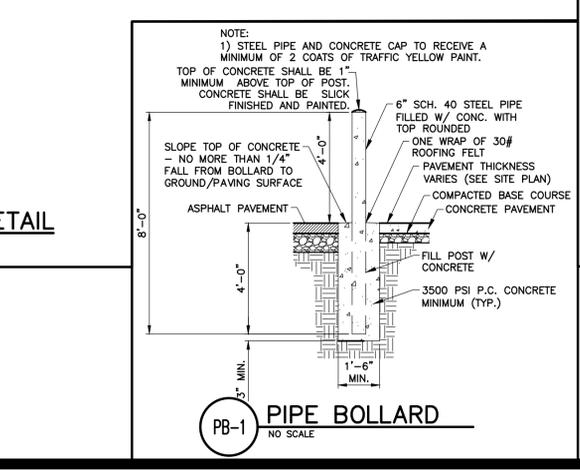
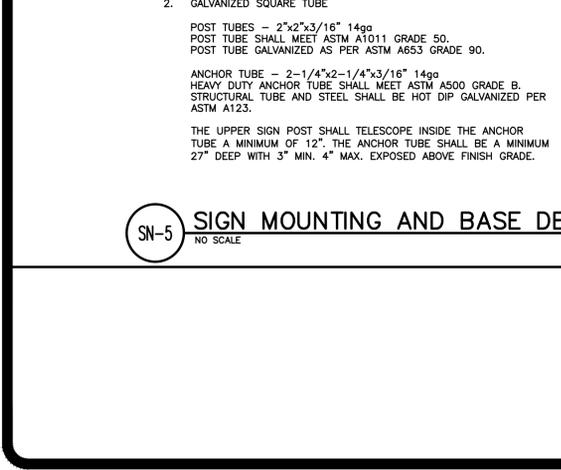
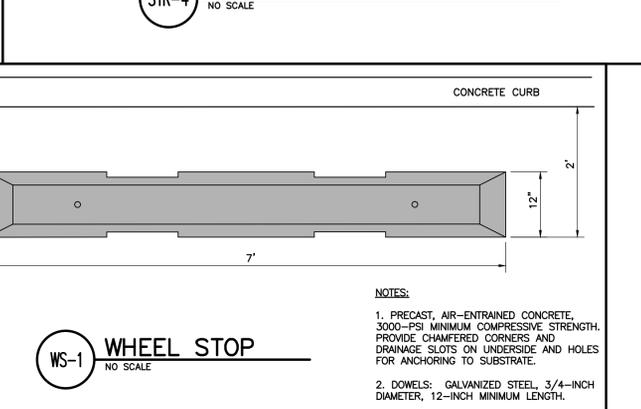
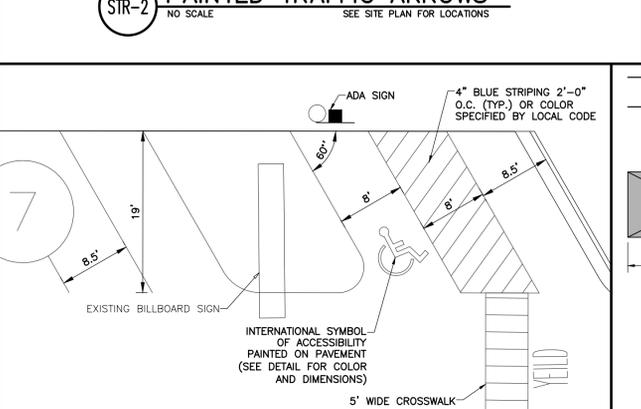
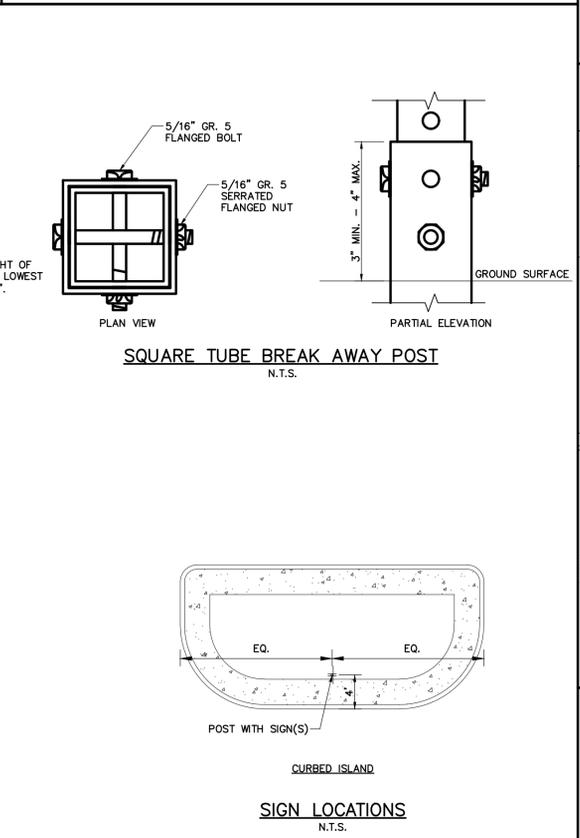
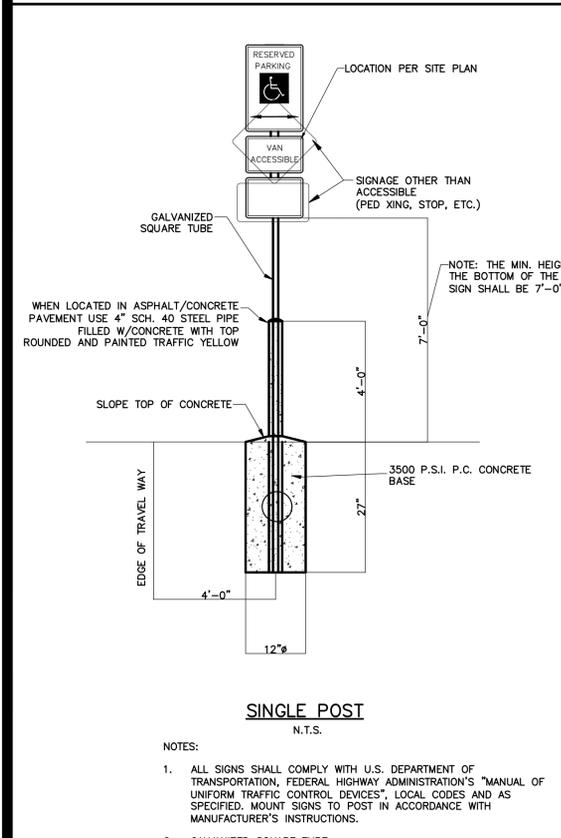
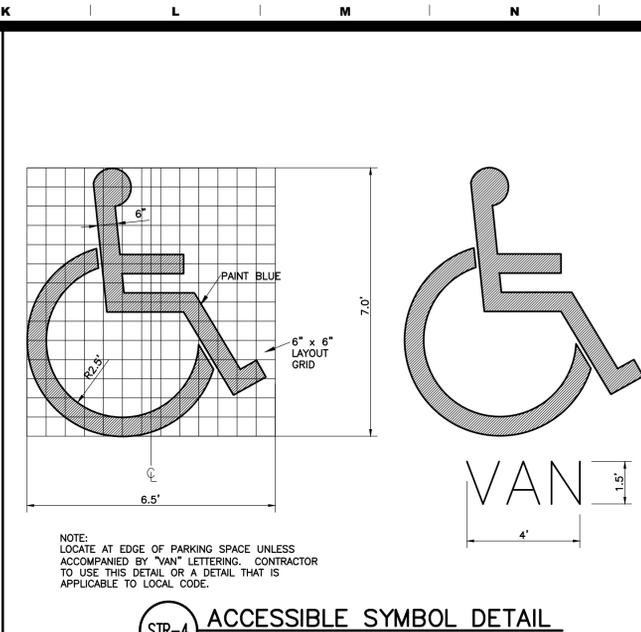
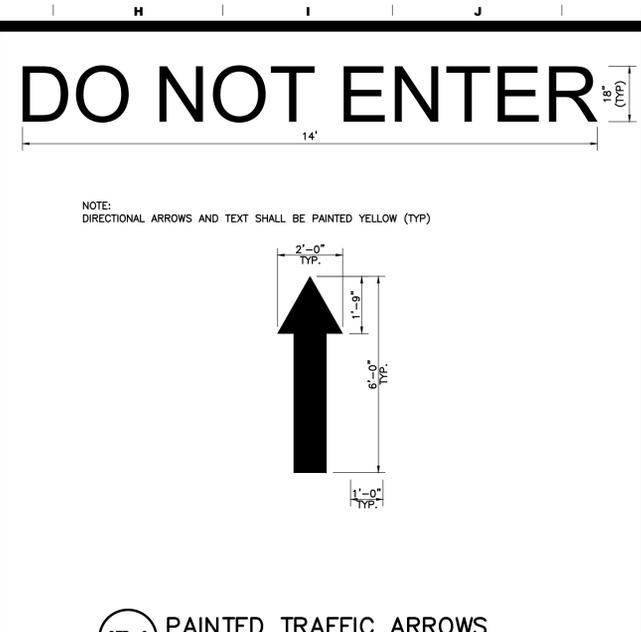
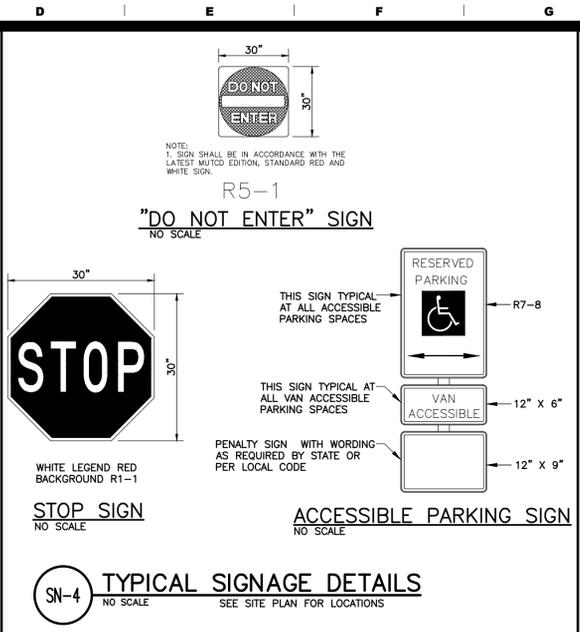
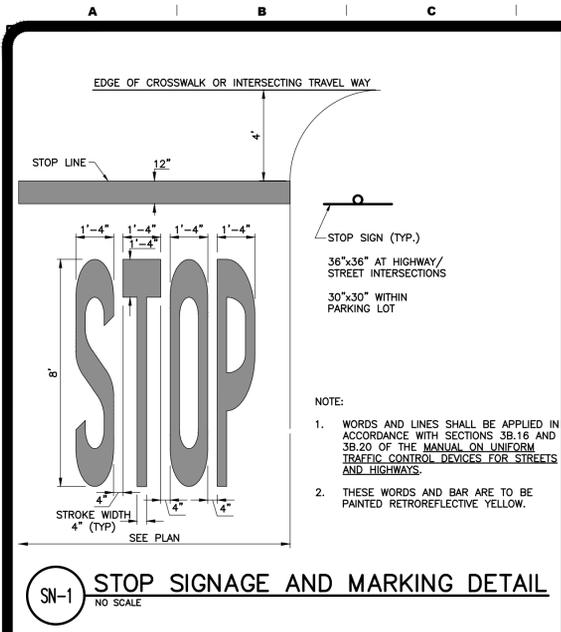
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J.B.S.
DATE
07/12/24
SCALE
1"=20'
JOB No.
8306

SHEET NAME
LANDSCAPE DETAILS
LP-2

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3400 COLLEGE BLVD, SUITE 200
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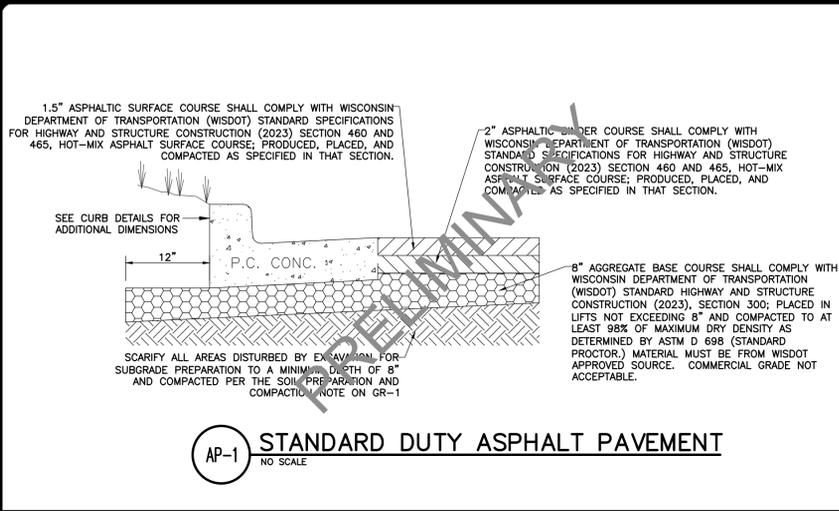
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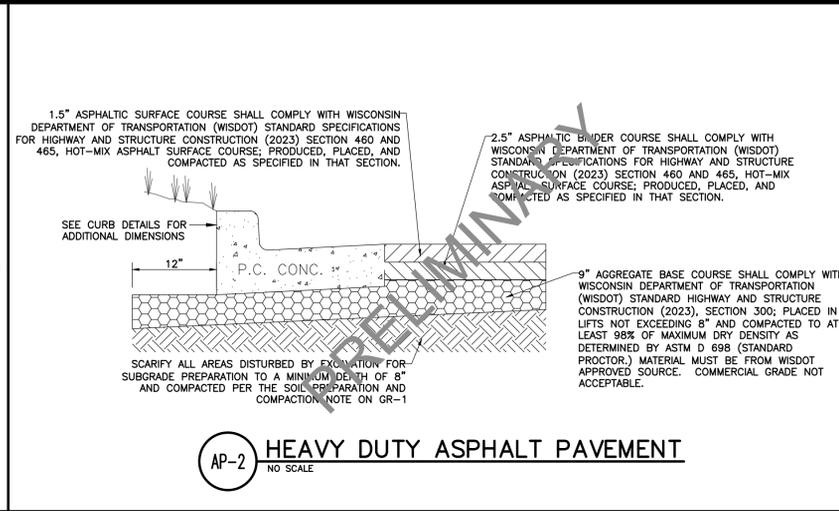
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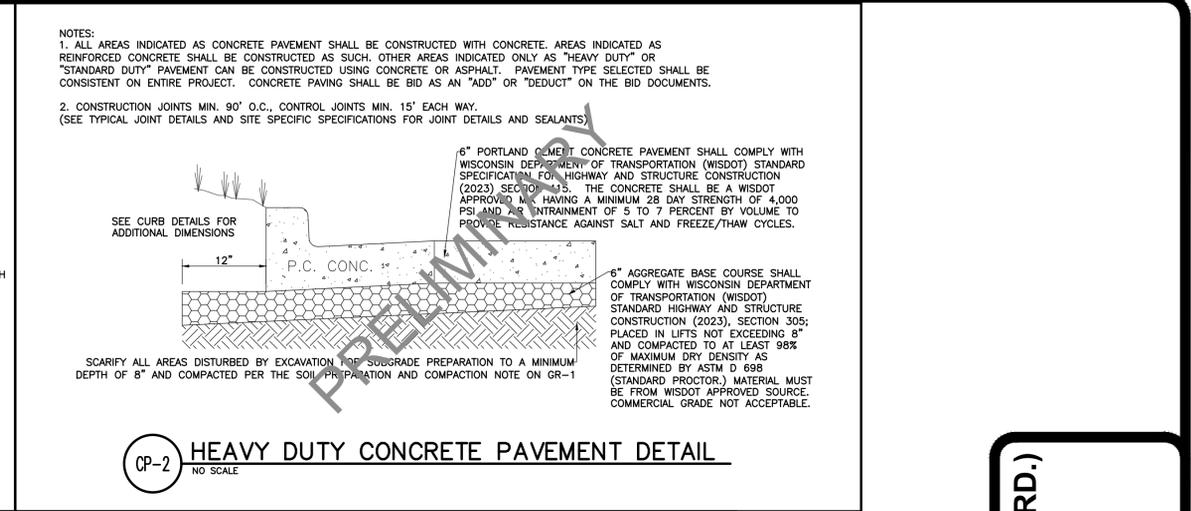
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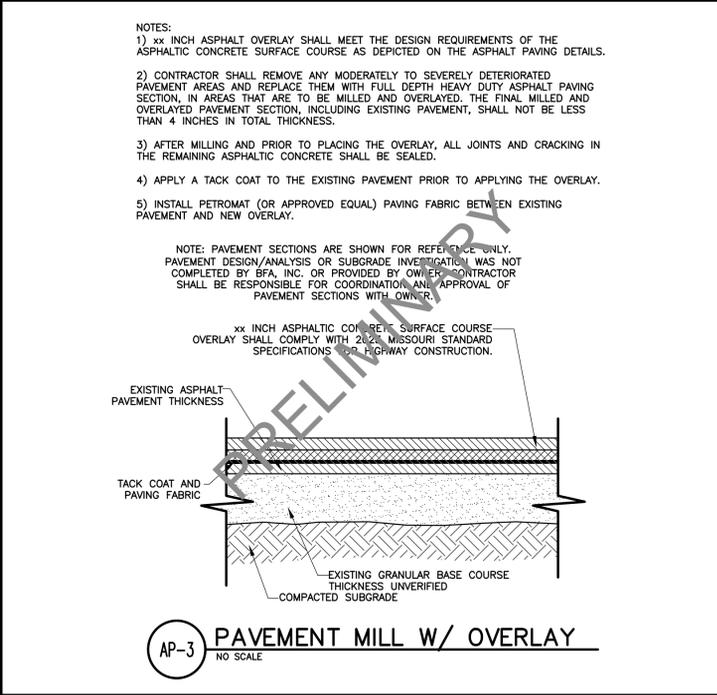
AP-1 STANDARD DUTY ASPHALT PAVEMENT
NO SCALE



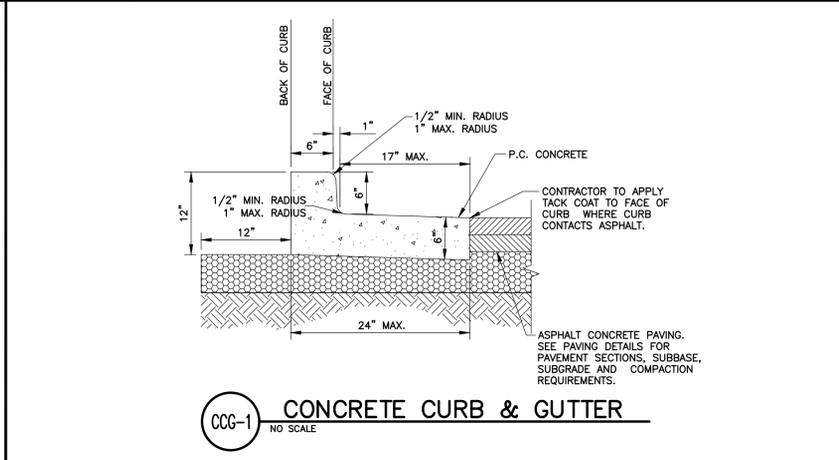
AP-2 HEAVY DUTY ASPHALT PAVEMENT
NO SCALE



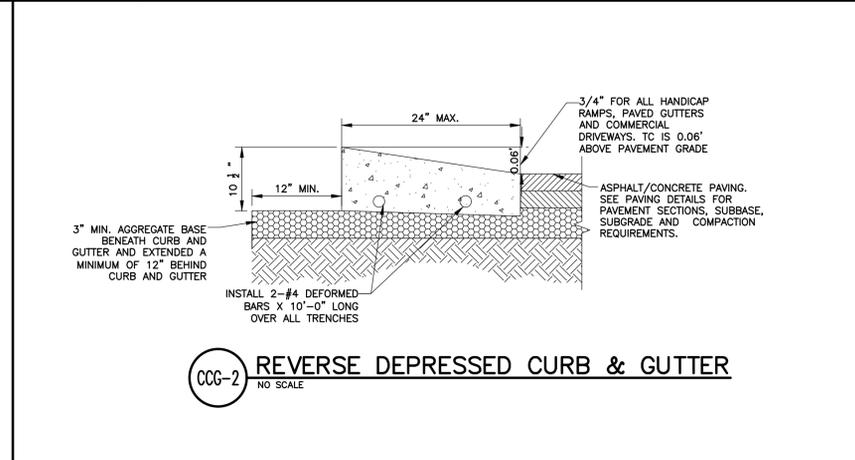
CP-2 HEAVY DUTY CONCRETE PAVEMENT DETAIL
NO SCALE



AP-3 PAVEMENT MILL W/ OVERLAY
NO SCALE



CCC-1 CONCRETE CURB & GUTTER
NO SCALE



CCC-2 REVERSE DEPRESSED CURB & GUTTER
NO SCALE

NOTES:
1) xx INCH ASPHALT OVERLAY SHALL MEET THE DESIGN REQUIREMENTS OF THE ASPHALTIC CONCRETE SURFACE COURSE AS DEPICTED ON THE ASPHALT PAVING DETAILS.
2) CONTRACTOR SHALL REMOVE ANY MODERATELY TO SEVERELY DETERIORATED PAVEMENT AREAS AND REPLACE THEM WITH FULL DEPTH HEAVY DUTY ASPHALT PAVING SECTION, IN AREAS THAT ARE TO BE MILLED AND OVERLAYED, THE FINAL MILLED AND OVERLAYED PAVEMENT SECTION, INCLUDING EXISTING PAVEMENT, SHALL NOT BE LESS THAN 4 INCHES IN TOTAL THICKNESS.
3) AFTER MILLING AND PRIOR TO PLACING THE OVERLAY, ALL JOINTS AND CRACKING IN THE REMAINING ASPHALTIC CONCRETE SHALL BE SEALED.
4) APPLY A TACK COAT TO THE EXISTING PAVEMENT PRIOR TO APPLYING THE OVERLAY.
5) INSTALL PETROMAT (OR APPROVED EQUAL) PAVING FABRIC BETWEEN EXISTING PAVEMENT AND NEW OVERLAY.

NOTE: PAVEMENT SECTIONS ARE SHOWN FOR REFERENCE ONLY. PAVEMENT DESIGN/ANALYSIS OR SUBGRADE INVESTIGATION WAS NOT COMPLETED BY BFA, INC. OR PROVIDED BY OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND APPROVAL OF PAVEMENT SECTIONS WITH OWNER.

xx INCH ASPHALTIC CONCRETE SURFACE COURSE OVERLAY SHALL COMPLY WITH 2023 MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

1.5" ASPHALTIC SURFACE COURSE SHALL COMPLY WITH WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION (2023) SECTION 460 AND 465, HOT-MIX ASPHALT SURFACE COURSE; PRODUCED, PLACED, AND COMPACTED AS SPECIFIED IN THAT SECTION.

2.5" ASPHALTIC BINDER COURSE SHALL COMPLY WITH WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION (2023) SECTION 460 AND 465, HOT-MIX ASPHALT SURFACE COURSE; PRODUCED, PLACED, AND COMPACTED AS SPECIFIED IN THAT SECTION.

9" AGGREGATE BASE COURSE SHALL COMPLY WITH WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD HIGHWAY AND STRUCTURE CONSTRUCTION (2023), SECTION 300; PLACED IN LIFTS NOT EXCEEDING 8" AND COMPACTED TO AT LEAST 98% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR). MATERIAL MUST BE FROM WISDOT APPROVED SOURCE. COMMERCIAL GRADE NOT ACCEPTABLE.

CONTRACTOR TO APPLY TACK COAT TO FACE OF CURB WHERE CURB CONTACTS ASPHALT.

ASPHALT CONCRETE PAVING. SEE PAVING DETAILS FOR PAVEMENT SECTIONS, SUBBASE, SUBGRADE AND COMPACTION REQUIREMENTS.

6" PORTLAND CEMENT CONCRETE PAVEMENT SHALL COMPLY WITH WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD SPECIFICATION FOR HIGHWAY AND STRUCTURE CONSTRUCTION (2023) SECTION 405. THE CONCRETE SHALL BE A WISDOT APPROVED MIX HAVING A MINIMUM 28 DAY STRENGTH OF 4,000 PSI AND AIR ENTRAINMENT OF 5 TO 7 PERCENT BY VOLUME TO PROVIDE RESISTANCE AGAINST SALT AND FREEZE/THAW CYCLES.

6" AGGREGATE BASE COURSE SHALL COMPLY WITH WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD HIGHWAY AND STRUCTURE CONSTRUCTION (2023), SECTION 305; PLACED IN LIFTS NOT EXCEEDING 8" AND COMPACTED TO AT LEAST 98% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR). MATERIAL MUST BE FROM WISDOT APPROVED SOURCE. COMMERCIAL GRADE NOT ACCEPTABLE.

ASPHALT/CONCRETE PAVING. SEE PAVING DETAILS FOR PAVEMENT SECTIONS, SUBBASE, SUBGRADE AND COMPACTION REQUIREMENTS.

INSTALL 2-#4 DEFORMED BARS X 10'-0" LONG OVER ALL TRENCHES

NOTES:
1. ALL AREAS INDICATED AS CONCRETE PAVEMENT SHALL BE CONSTRUCTED WITH CONCRETE. AREAS INDICATED AS REINFORCED CONCRETE SHALL BE CONSTRUCTED AS SUCH. OTHER AREAS INDICATED ONLY AS "HEAVY DUTY" OR "STANDARD DUTY" PAVEMENT CAN BE CONSTRUCTED USING CONCRETE OR ASPHALT. PAVEMENT TYPE SELECTED SHALL BE CONSISTENT ON ENTIRE PROJECT. CONCRETE PAVING SHALL BE BID AS AN "ADD" OR "DEDUCT" ON THE BID DOCUMENTS.
2. CONSTRUCTION JOINTS MIN. 90' O.C., CONTROL JOINTS MIN. 15' EACH WAY. (SEE TYPICAL JOINT DETAILS AND SITE SPECIFIC SPECIFICATIONS FOR JOINT DETAILS AND SEALANTS)

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LA CROSSE, WI (MORMON COULEE RD.)
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LEAWOOD, KS 66211

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By:	App:
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By:	App:
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By:	App:

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

PRELIMINARY DRAWING

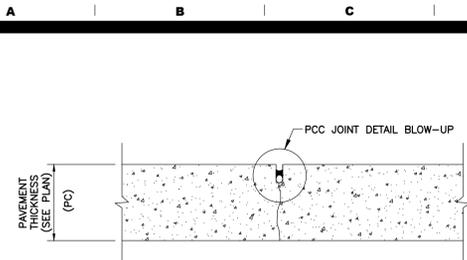
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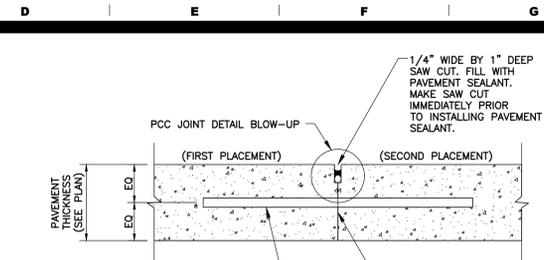
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SHEET NAME DETAIL SHEET 2
DTL-2



NOTE:
1. PROVIDE CONTRACTION JOINTS AT SPACING OF 12'-0" O.C., MAXIMUM EACH WAY WITH NO SECTION OF PAVING BEING LESS THAN 5'-0" WIDE.

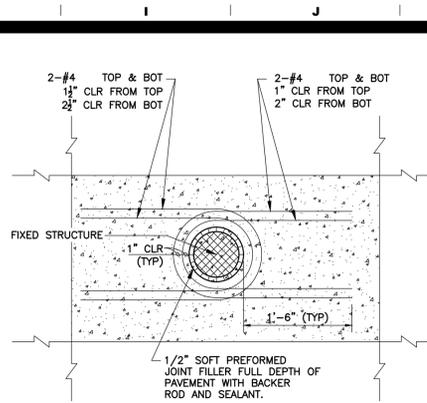
CONTRACTION JOINT



3/4" DIAMETER DOWEL FOR 6" THICK PAVEMENTS AND 1/2" DIAMETER DOWEL FOR 4" OR 5" THICK PAVEMENTS. DOWELS TO BE 10" LONG CENTERED WITH JOINT SPACED AT 18" ON CENTER. DOWEL TO BE INSTALLED IN FORM WITH AN APPROVED ALIGNMENT DEVICE. LIGHTLY OIL FULL LENGTH OF DOWEL.

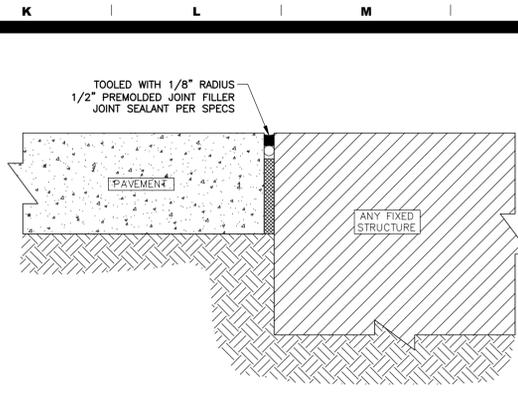
APPLY CURING COMPOUND TO SLAB FACE AT A COVERAGE RATE OF 300 SF MAX PER GALLON TO ACT AS A BOND BREAKER AT LEAST 48 HOURS PRIOR TO PLACING NEW SLAB.

CONSTRUCTION JOINT



TYPICAL ROUND FIXED STRUCTURE PLAN DETAIL

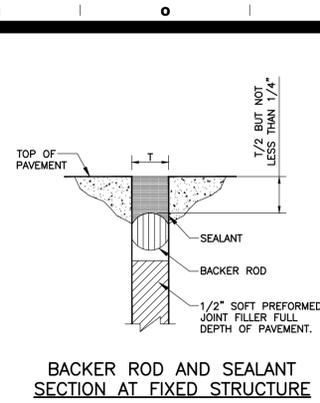
USES: MANHOLES, LIGHT POLE BASES AND BOLLARDS



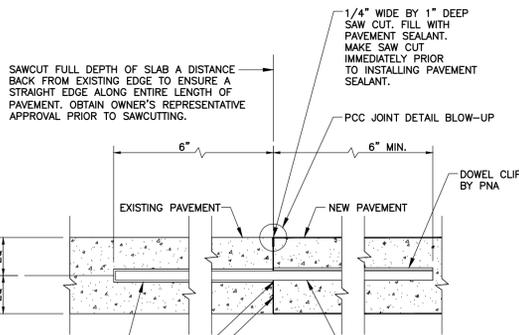
ISOLATION JOINT

NOTES:
ISOLATION JOINT TO BE USED FOR FIXED STRUCTURES SUCH AS BUILDINGS, RETAINING WALLS/DOCK WALLS, DROP INLETS, MANHOLES, LIGHT POLE BASES AND BOLLARDS. PAVEMENT IS NOT CONSIDERED A FIXED STRUCTURE.

CJ-2 ISOLATION JOINT DETAILS
NO SCALE

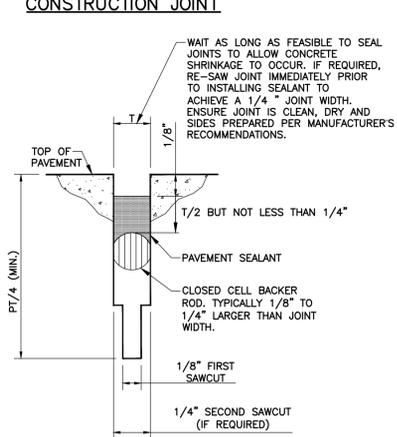


BACKER ROD AND SEALANT SECTION AT FIXED STRUCTURE



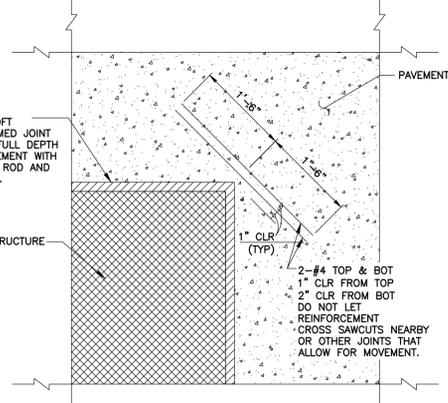
CONSTRUCTION JOINT TO EXISTING PAVEMENT

CJ-1 CONCRETE JOINT DETAILS
NO SCALE



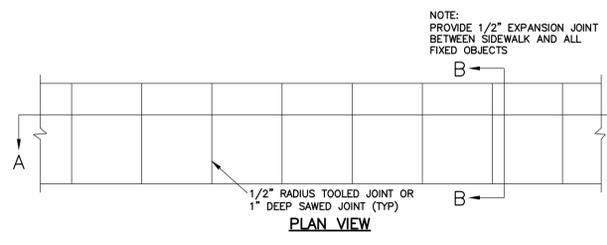
NOTES:
1. ENSURE JOINTS ARE CLEAN AND DRY PRIOR TO THE APPLICATION OF THE JOINT SEALANT.
2. INSTALL CLOSED CELL BACKER ROD AFTER JOINTS HAVE BEEN CLEANED AND DRIED IN ACCORDANCE WITH SEALANT MANUFACTURER'S REQUIREMENTS.
3. INSTALL BACKER ROD AT CONSISTENT AND UNIFORM DEPTH.
4. JOINT SEALANT APPLICATION SHALL BE IN STRICT COMPLIANCE WITH SEALANT MANUFACTURER'S REQUIREMENTS.

JOINT DETAIL BLOW-UP (TYP.)



TYPICAL RECTANGULAR FIXED STRUCTURE PLAN DETAIL

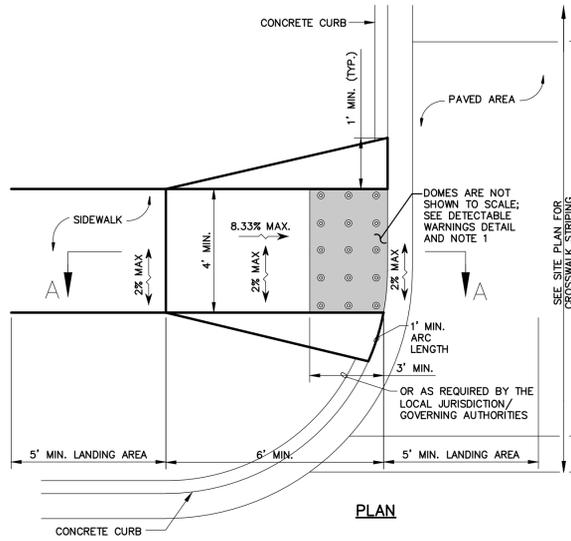
USES: BUILDINGS, RETAINING WALLS/DOCK WALLS AND DROP INLETS



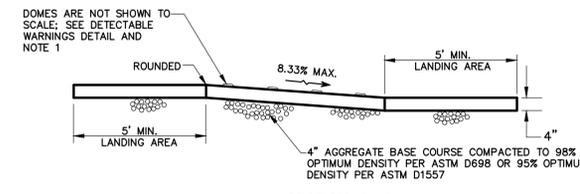
SECTION A-A

SECTION B-B

CS-1 CONCRETE SIDEWALK DETAIL
NO SCALE



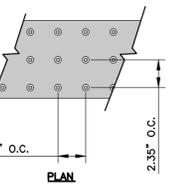
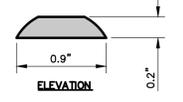
PLAN



SECTION A-A

CS-2 ADA RAMP IN SIDEWALK DETAIL
NO SCALE

NOTES:
1. THE SURFACE OF RAMP SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.
2. RAMP SIDE SLOPE VARIES UNIFORMLY FROM A MAXIMUM OF UP TO 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO TOP OF THE RAMP.
3. CONSTRUCT PER A.D.A. STANDARDS.
4. REFER TO PLANS FOR ADJACENT SLOPES.
5. THE CROSS SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 1:50.



NOTE: PREFABRICATED PANELS PER A.D.A. ACCESSIBILITY GUIDELINES SECTION 4.29.2 & 4.29.2 SHALL BE USED.

DETECTABLE WARNINGS DETAIL

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

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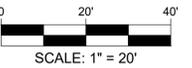
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JOB No. 8036
SHEET NAME DTL-3
DETAIL SHEET 3

DTL-3

PRE DEVELOPMENT DRAINAGE AREA MAP



TOPOGRAPHIC LEGEND	
DESCRIPTION	EXISTING
AERIAL ELECTRIC	AE
UNDERGROUND ELECTRIC	UE
UNDERGROUND TELEPHONE	UT
GAS LINE	G
WATERLINE	W
SANITARY SEWER	SS
STORM SEWER	-----
EASEMENT	---
PROPERTY LINE	---
CHAINLINK/WOODEN FENCE	--- ---
CONTOURS	---100---
UTILITY POLE	○
GUARD POST	⊥
SANITARY MANHOLE	○
WATER VALVE	•
FIRE HYDRANT	•
CATCH BASIN	⊞
JUNCTION BOX	○
FLARED END SECTION	▷
CLEANOUT	•
GRADED INLET	⊞
SOIL BORING	⊙

PRE-DEVELOPMENT	
IN ACRES	
IMPERVIOUS AREA	0.56±
PERVIOUS AREA	0.07±
TOTAL SITE	0.63±

LA CROSSE, WI (MORMON COULEE RD.)
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3	By: _____ App: _____
4	By: _____ App: _____

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CHECKED	J.B.S.
DATE	07/12/24
SCALE	1"=20'
JOB No.	8306
SHEET NAME	PRE DEVELOPMENT DA MAP
DA-1	

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 BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024

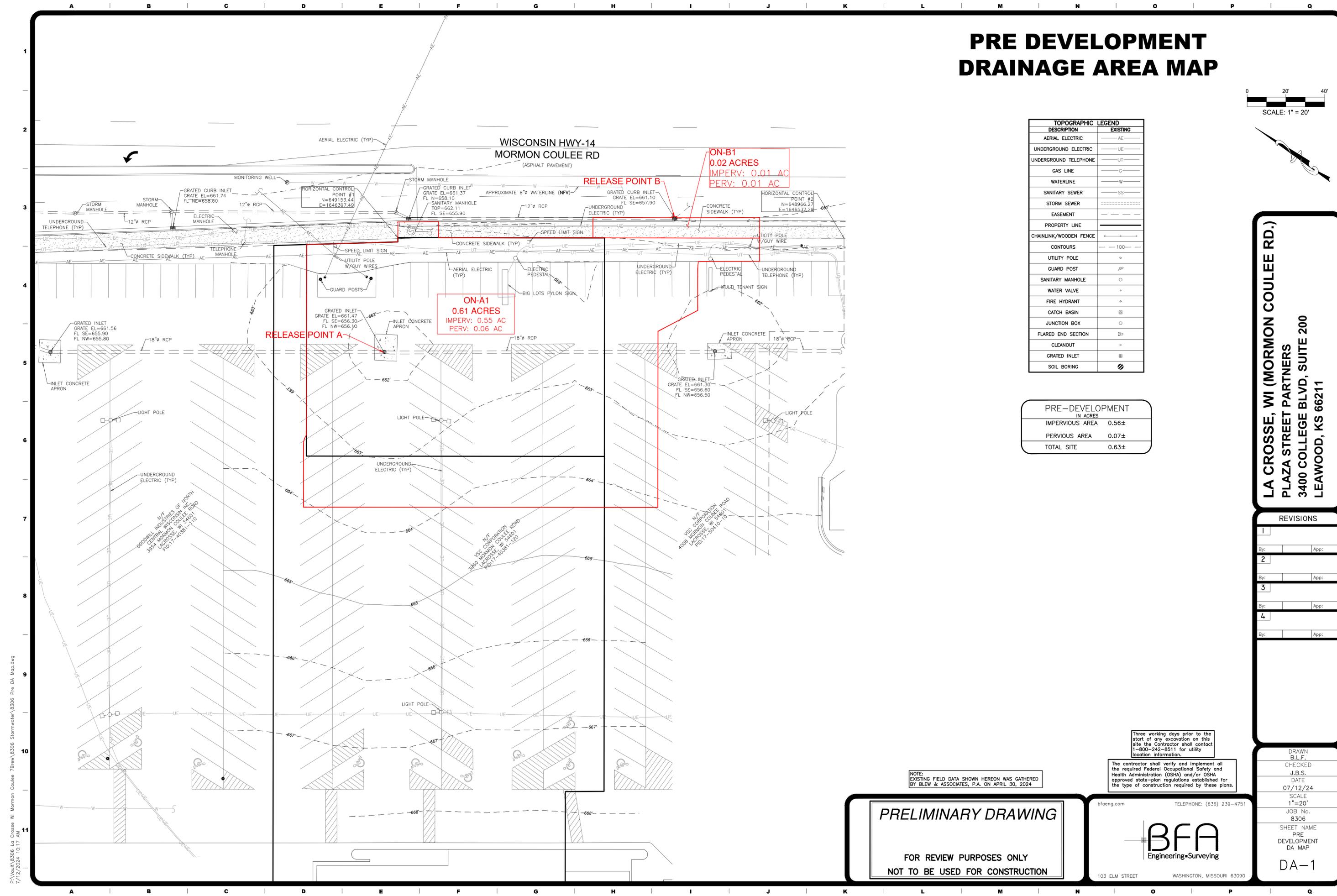
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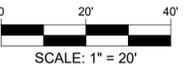
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POST DEVELOPMENT DRAINAGE AREA MAP



TOPOGRAPHIC LEGEND	
DESCRIPTION	EXISTING
AERIAL ELECTRIC	AE
UNDERGROUND ELECTRIC	UE
UNDERGROUND TELEPHONE	UT
GAS LINE	G
WATERLINE	W
SANITARY SEWER	SS
STORM SEWER	SS
EASEMENT	---
PROPERTY LINE	---
CHAINLINK/WOODEN FENCE	---
CONTOURS	100
UTILITY POLE	o
GUARD POST	GP
SANITARY MANHOLE	o
WATER VALVE	o
FIRE HYDRANT	o
CATCH BASIN	o
JUNCTION BOX	o
FLARED END SECTION	o
CLEANOUT	o
GRADED INLET	o
SOIL BORING	o

POST DEVELOPMENT	
	IN ACRES
IMPERVIOUS AREA	0.49±
PERVIOUS AREA	0.14±
TOTAL SITE	0.63±

LA CROSSE, WI (MORMON COULEE RD.)
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3	By: _____ App: _____
4	By: _____ App: _____

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CHECKED	J.B.S.
DATE	07/12/24
SCALE	1"=20'
JOB No.	8306
SHEET NAME	POST DEVELOPMENT DA MAP
DA-2	

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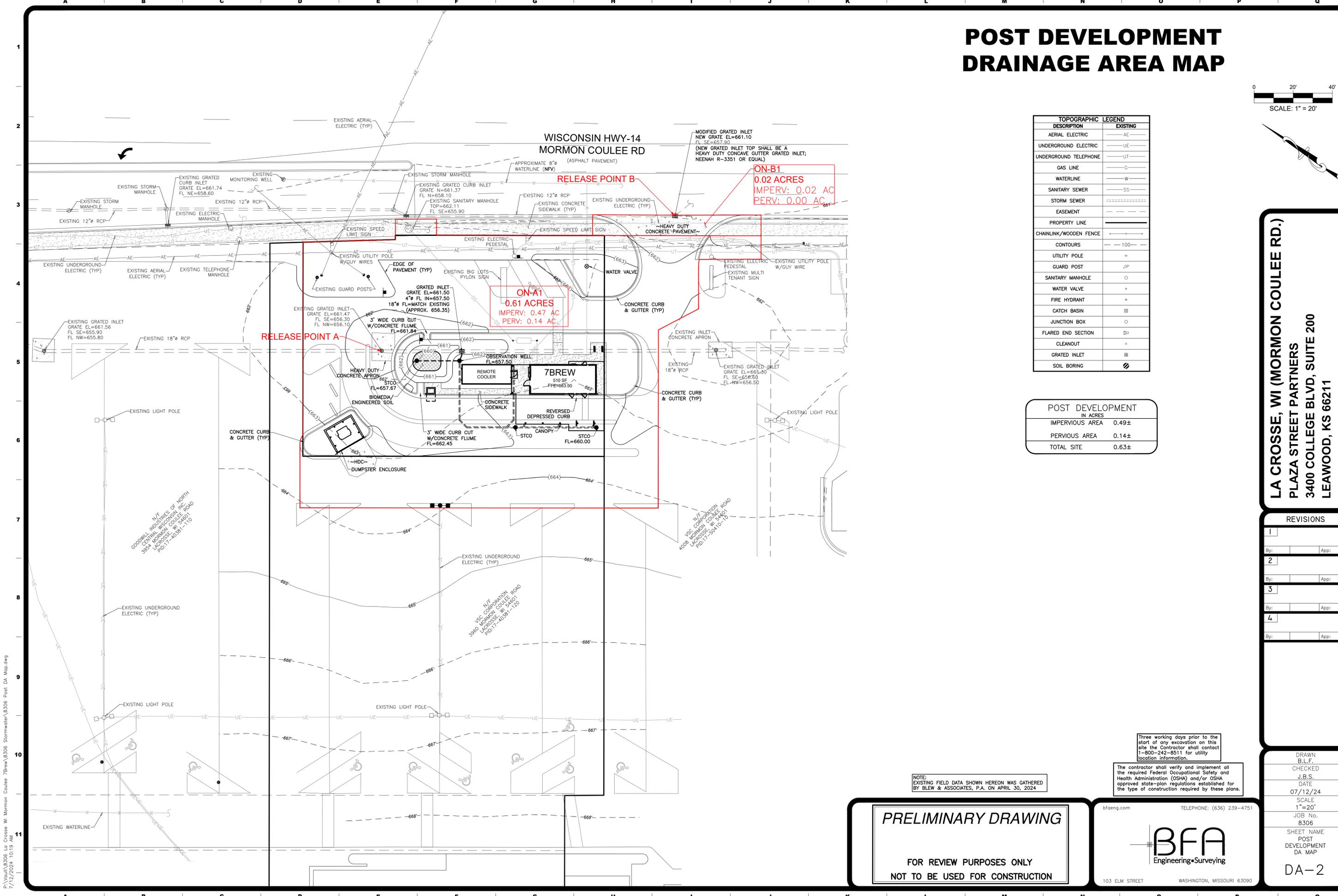
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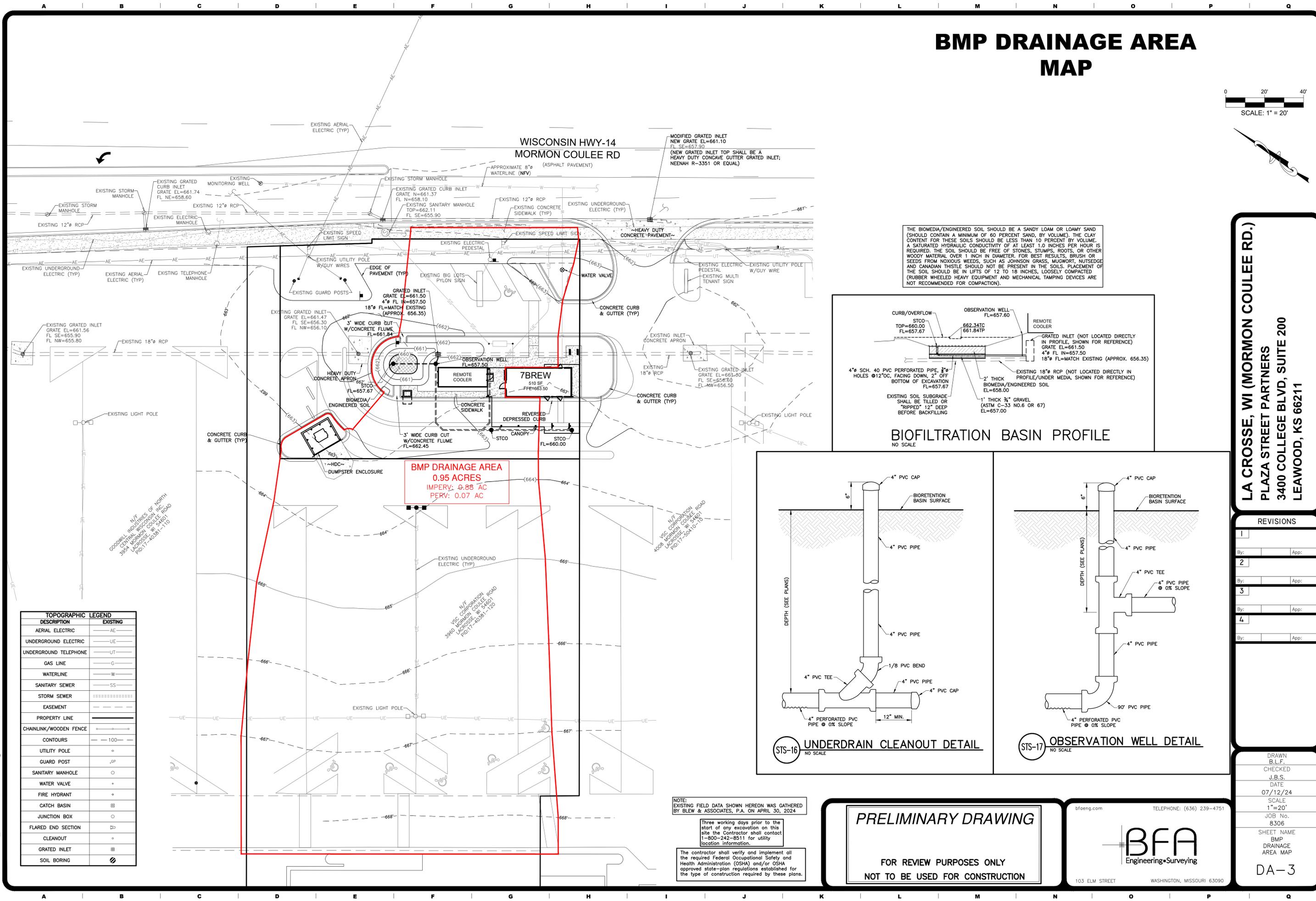
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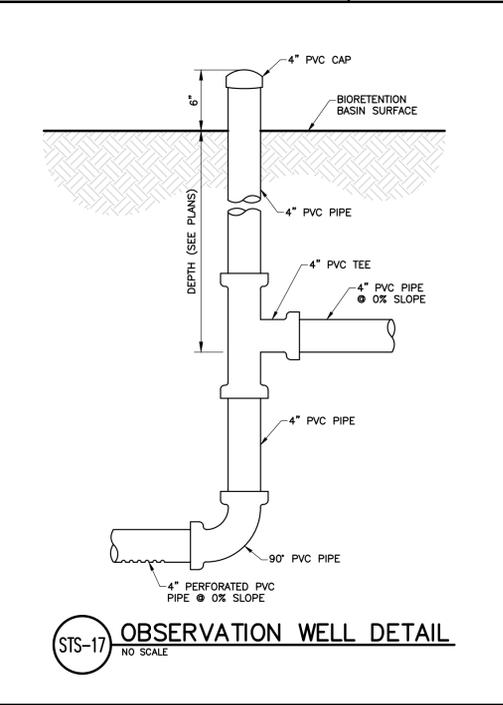
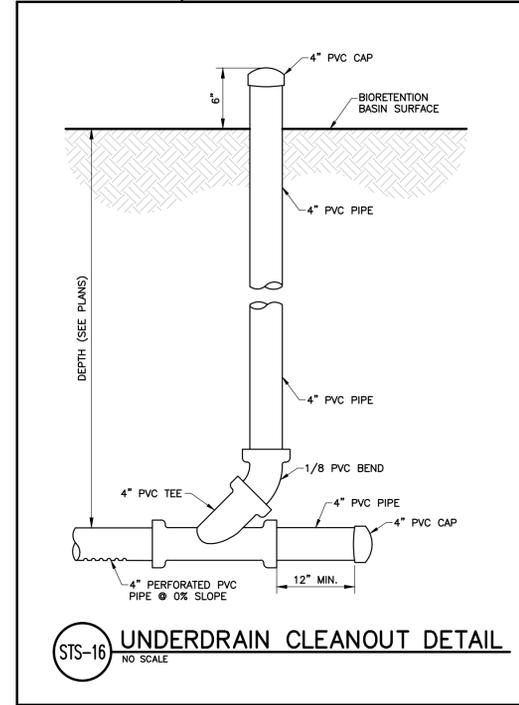
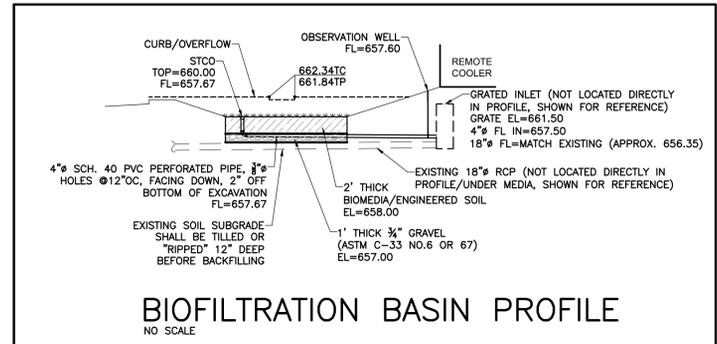


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BMP DRAINAGE AREA MAP



THE BIOMEDIA/ENGINEERED SOIL SHOULD BE A SANDY LOAM OR LOAMY SAND (SHOULD CONTAIN A MINIMUM OF 60 PERCENT SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 10 PERCENT BY VOLUME. A SATURATED HYDRAULIC CONDUCTIVITY OF AT LEAST 1.0 INCHES PER HOUR IS REQUIRED. THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1 INCH IN DIAMETER. FOR BEST RESULTS, BRUSH OR SEEDS FROM NOXIOUS WEEDS, SUCH AS JOHNSON GRASS, MUGWORT, NUTSEDGE AND CANADIAN THISTLE SHOULD NOT BE PRESENT IN THE SOILS. PLACEMENT OF THE SOIL SHOULD BE IN LIFTS OF 12 TO 18 INCHES, LOOSELY COMPACTED (RUBBER WHEELED HEAVY EQUIPMENT AND MECHANICAL TAMPING DEVICES ARE NOT RECOMMENDED FOR COMPACTION).



TOPOGRAPHIC LEGEND	
DESCRIPTION	EXISTING
AERIAL ELECTRIC	AE
UNDERGROUND ELECTRIC	UE
UNDERGROUND TELEPHONE	UT
GAS LINE	G
WATERLINE	W
SANITARY SEWER	SS
STORM SEWER	SS
EASEMENT	---
PROPERTY LINE	---
CHAINLINK/WOODEN FENCE	---
CONTOURS	---100---
UTILITY POLE	o
GUARD POST	oP
SANITARY MANHOLE	o
WATER VALVE	o
FIRE HYDRANT	o
CATCH BASIN	o
JUNCTION BOX	o
FLARED END SECTION	o
CLEANOUT	o
GRADED INLET	o
SOIL BORING	o

NOTE: EXISTING FIELD DATA SHOWN HEREON WAS GATHERED BY BLEW & ASSOCIATES, P.A. ON APRIL 30, 2024

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-242-8511 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

PRELIMINARY DRAWING
FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

bfaeng.com TELEPHONE: (636) 239-4751

103 ELM STREET WASHINGTON, MISSOURI 63090

LA CROSSE, WI (MORMON COULEE RD.)
PLAZA STREET PARTNERS
3400 COLLEGE BLVD, SUITE 200
LEAWOOD, KS 66211

REVISIONS	
1	By: App:
2	By: App:
3	By: App:
4	By: App:

DRAWN B.L.F.
CHECKED J.B.S.
DATE 07/12/24
SCALE 1"=20'
JOB No. 8306
SHEET NAME BMP DRAINAGE AREA MAP
DA-3

GENERAL STRUCTURAL NOTES

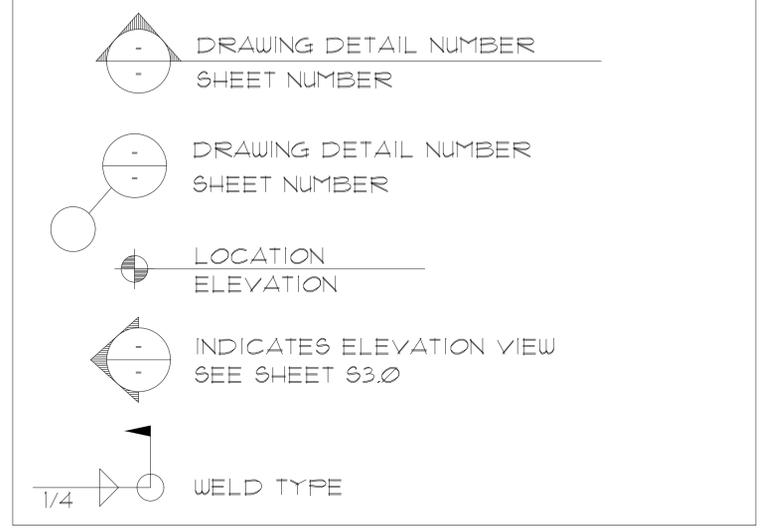
1. 2015 International Building Code Design Criteria, as amended and adopted by the State of Wisconsin
 - A. Floor Live Load.....50 psf
 - B. Roof Live Load.....20 psf
 - C. Roof Snow Load Data
 - Ground Snow Load P_g.....40 psf
 - Flat-roof Snow Load P_f.....28 psf
 - Exposure Factor C_e.....1.0
 - Importance Factor I_s.....1.0
 - Thermal Factor C_t.....1.0
 - E. Wind Design Data
 - Ultimate Design Wind Speed V_{ult}.....115 mph
 - Risk Category.....C
 - Internal Pressure Coefficient.....+/-0.18
 - Component & Cladding.....See ASCE 7-10 Chapter 30
 - F. Earthquake Design Data
 - Risk Category.....II
 - Importance Factor I_e.....1.0
 - Mapped Spectral Parameters
 - S_s.....0.053g
 - S₁.....0.036g
 - Site Class.....D
 - Design Spectral Parameters
 - S_s.....0.057g
 - S₁.....0.057g
 - Seismic Design Category.....A
 - Seismic Force Resisting System.....H
 - Steel system not specifically detailed for seismic resistance
 - Design Base Shear.....0.4 kips
 - Seismic Response Coefficient C_s.....0.019
 - Response Modifications Factor R.....3
 - Analysis Procedure.....Equivalent Lateral Force Procedure
 - G. Frost Depth.....4'-0"
 2. Earthwork
 - A. Foundation Design Values (G.C. to verify during construction).
 - i. Allowable Soil Bearing Pressure - 1500 psf (Assumed, G.C. to field verify soil bearing)
 - ii. Coefficient of Friction - 0.25
 - iii. Passive Earth Pressure - 200 psf/ft of depth
 - B. The building pad area shall be stripped of all frozen soil, debris, vegetation, and topsoil. All fill soils and any remaining loose natural soil shall be excavated to expose suitable natural soil.
 - C. Proof roll the entire building pad area to locate and remove all soft spots. Replace with compacted structural fill.
 - D. Place all footings and slabs on undisturbed natural soil or on properly compacted structural fill. Contractor shall verify that soil under footings is suitable to support footings.
 - E. Structural Fill: Structural fill should consist of well-graded sandy gravels with a maximum particle size of 3 inches and 5 to 15 percent fines (materials passing the No. 200 sieve). The liquid limit of fines should not exceed 35 and the plasticity index should be below 15. All fill soils should be free from topsoils, highly organic material, frozen soil, and other deleterious materials. Structural fill should be placed in maximum 8-inch thick loose lifts at a moisture content within 2 percent of optimum and compacted to at least 95 percent of modified proctor density (ASTM D1557) under the building and 90 percent under concrete flatwork.
 - F. It is the responsibility of the contractor to ensure that the depth of the bottom of the foundation is far enough below the adjacent grade to ensure adequate frost protection.
3. Concrete and Reinforcement
 - A. Materials Standards
 - 1. Concrete
 - a. Footings and Foundation Walls: Exposure Classes F1, S0, W0, C1 f'c=3500 p.s.i., max. w/cm ratio=0.25
 - b. Air content for Exposures F1-F3 must meet the requirements of Table 19.3.3.1 of ACI 318-14. Air-entraining admixtures shall conform to ASTM C260.
 - c. Calcium Chloride admixture shall not be used in Exposures S2 and S3
 - d. Normal weight Aggregates - ASTM C33
 - 2. Reinforcing
 - a. Rebar - ASTM A615 Grade 60 (F_y=60 ksi)
 - b. Welded wire mesh - ASTM A1064
 - c. Epoxy - Simpson SET-XP (ICC-ES ESR-2508), Hilti HIT-HY 200 (ICC-ES ESR-3181), or Powers Fasteners FE1000+ (ICC-ES ESR-2583)
 - 3. Anchor Rods/Bolts
 - a. Steel column anchor rods/bolts - ASTM F1554 Grade 36 with ASTM A563 heavy hex nuts and hardened washers
 - b. Wood framing anchors - ASTM A307 with A36 plate washers
 - c. Headed stud anchors (HSA) - ASTM A108
 - d. Adhesive (epoxy) anchors - Simpson SET-XP (ICC-ES ESR-2508), Hilti HIT-HY 200 (ICC-ES ESR-3181), or Powers Fasteners FE1000+ (ICC-ES ESR-2583)
 - e. The symbols CL, AR, CL, AB, as shown in the drawings indicate the center line of the anchor rod/bolt pattern, not the center line of any individual anchor rod/bolt.
 - 4. Grout
 - a. Grout under steel base plates shall be non-shrink, non-metallic grout complying with ASTM C1107.
 - b. Compressive strength (f'c) shall be 5000 p.s.i. at 28 days.
 - c. Install per manufacturer's recommendations.
 - B. Detail reinforcing to comply with ACI 318 'Manual of Standard Practice for Detailing Reinforcing Concrete Structures' and the Concrete Reinforcing Steel Institute (CRSI) recommendations.
 - 1. Minimum clear concrete cover for reinforcement shall be as follows unless noted otherwise:
 - a. Concrete cast directly against and permanently exposed to earth - 3"
 - b. Concrete exposed to weather or earth:
 - 1. #5 bars or smaller - 1 1/2"
 - 2. #6 bars or larger - 2"
 - c. Concrete not exposed to weather or in contact with the ground - 3/4"
 - d. Slabs on grade - as shown in details, 3/4" min. from T.O. slabs not exposed to weather
 - 2. Lap Splice Lengths: 40 bar diameters or 2'-0" minimum (unless noted otherwise.)
 - 3. Stagger splices in walls so that no two adjacent bars are spliced in the same location, unless shown otherwise.
 - 4. Make all bars continuous around corners or provide corner bars of equal size and spacing.
 - 5. Vertical bars in walls, grade beams, and piers to terminate in footings with ACI standard hooks (12 bar diameters) to within 4' of the bottom of the footing unless noted otherwise.
 - 6. Horizontal wall reinforcing shall terminate at the ends of walls with a 90 degree hook plus a 6 bar diameter extension unless shown otherwise.
 - 7. Horizontal wall reinforcing shall be continuous through construction and control joints.
 - 8. Splices in horizontal reinforcement shall be staggered. Splices in two curtains (where used) shall not occur in the same location.
 - 9. Use chairs or other support devices as required for proper clearance.
 - C. Welding of rebar is not allowed unless specifically indicated in the drawings. All embedments, reinforcing, and dowels shall be securely tied to framework or to adjacent reinforcing prior to placement of the concrete. Tack welding of rebar joints in grade beams, walls, or cages is not allowed. When welding of rebar is shown in the drawings, all rebar to be welded shall be ASTM A106 Grade 60.

4. Wood
 - A. General Framing
 - 1. Dimensional lumber joists and headers shall be Spruce-Pine Fir (South) #2 or better.
 - 2. Wall studs shall be Spruce-Pine-Fir (South) stud grade or better. Top plates shall be Spruce-Pine-Fir (South) #2 or better.
 - 3. All multiple beams and headers shall be nailed using 2 rows of 16d nails @ 12" o.c.
 - 4. Glulam Beams to be 24F-V4 SF horizontally laminated members, Fb=2400psi, Fc=650psi, Fv=650psi.
 - 5. All point loads shall be solid blocked to the foundation.
 - 6. Double trimmers shall be used to support beams and headers greater than 6'-0" unless noted otherwise on the drawings.
 - 7. Nailing shall be as indicated on the drawings or in Table 2304.10.1 of the International Building Code, whichever is more restrictive.
 - 8. The contractor shall comply with the 2015 version of the International Building Code.
 - 9. The contractor may substitute deeper, wider, or better grades of lumber. Any changes must be approved by the engineer.
 - 10. Provide mild steel plate washers at all bolt heads and nuts bearing on wood.
 - 11. All fasteners (nails, screws, bolts, etc.) to be installed in preservative treated wood shall meet the requirements of IBC 2304.10.5.
 - B. Wood Shear Walls:
 - 1. Shear walls shall be sheathed with 5/8" APA rated plywood sheathing and nailed with 8d @ 6" o.c. edge, and @ 12" o.c. field unless noted otherwise in the Shear Wall Plan on sheet S2.0. Use #8 self-drilling screws in lieu of nails where sheathing is attached to steel members.
 - 2. Sheathing shall extend continuous from floor sill plate to top plate of upper wall and be nailed per the required edge spacing along the sill plate.
 - 3. Nails shall be placed not less than 1/2" from the edge of panel and drive so that their head or crown is flush with the surface of the sheathing.
 - 4. All horizontal edges shall be blocked with 2" nominal or wider framing.
 - 5. Where panels are applied on both faces of a wall or nail spacing is less than 4' o.c. one of the following must be used:
 - a. Panel joints shall be offset to fall on different framing members or
 - b. Framing at panel joints shall be 3" nominal or thicker or
 - c. Framing at panel joints shall be (2) 2x fastened with (2) 10d nails @ 12" o.c.
 - 6. Nails or screws on each side shall be staggered. See the Shear Wall Schedule on sheet S2.0.
 - C. Floor Sheathing
 - 1. Typical floor sheathing shall be 3/4" T&G STRUCTO-CRETE structural panels by USG attached with minimum #12 self-drilling screws @ 6" o.c. on all edges, and @ 12" o.c. along intermediate framing members.
 - 2. Install 4"x8" sheathing panels with long dimension at right angles to framing with end joints staggered.
 - 3. Solid joist blocking required at all bearing points.
 - D. Roof Sheathing
 - 1. Typical roof sheathing shall be 3/4" T&G plywood (48/24 span rating) attached with minimum #12 self-drilling screws @ 6" o.c. on all edges, and @ 12" o.c. along intermediate framing members.
 - 2. Wood structural panel sheathing shall comply with DOC P6 1 or P6 2 and shall be manufactured using exterior glue.
 - 3. Install 4"x8" sheathing panels with long dimension at right angles to framing with end joints staggered.
 - E. Structural Steel (ASD Design Basis)
 - A. Material:
 - 1. Angles, Plates, and Channels: ASTM A36 (F_y = 36 ksi.)
 - 2. Wide Flanges: ASTM A589 (F_y = 50 ksi.)
 - 3. Tubes (HSS): ASTM A500 Grade B (F_y = 46 ksi.)
 - 4. Pipes: ASTM A53, Grade B (F_y = 35 ksi.)
 - B. Fabrication and construction shall comply with the latest edition of the following Codes and Standards:
 - 1. American Institute of Steel Construction (AISC) 'Specification for Structural Steel Buildings.' (360-10)
 - 2. AISC 'Code of Standard Practice.'
 - 3. American Welding Society (AWS): Structural Welding Code (specific items do not apply when they conflict with the AISC requirements).
 - C. Welding:
 - 1. Certification of Welders: All shop and field welding shall be executed by AWS certified welders. Certification shall be considered current if dated within the past 12 months. Welders will be considered certified if they have been certified by AWS and their work records are current within every six month period thereafter as required by AWS. Certification and records must comply with AWS Standards. Certification and appropriate records must be provided to the inspector prior to beginning work.
 - 2. Electrodes: E-10XX or as noted otherwise. E-60XX may be used for welding steel floor and roof decks.
 - 3. Minimum Welds: All intersecting steel shapes which are not bolted shall be connected by a fillet weld and all around, unless noted otherwise.
 - 4. Welds reinforcing bars shall be ASTM A106 Grade 60.
 - 5. All flare bevel and flare V groove welds shall be filled flush.
 - D. Bolted Connections:
 - 1. Use ASTM A307 bolts for all wood connections unless noted otherwise.
 - 2. Use ASTM A325 bolts for all steel connections unless noted otherwise.
 - E. All structural steel, except plates embedded in concrete or masonry, to have one coat (min.) of gray shop primer, 15 mil minimum thickness.

LIST OF ABBREVIATIONS

AR	ANCHOR ROD	LB5	FOUNDS
APPROX.	APPROXIMATELY	LF	LINEAR FOOT
ARCH.	ARCHITECTURAL)	LLH	LONG LEG HORIZONTAL
B.O.	BOTTOM OF	LLV	LONG LEG VERTICAL
C	CENTER LINE	MAX	MAXIMUM
CONC.	CONCRETE	MECH	MECHANICAL
CONT	CONTINUOUS	MFR	MANUFACTURER
DBL	DOUBLE	MIN	MINIMUM
DIA	DIAMETER	MISC	MISCELLANEOUS
DIM	DIMENSION	N.T.S.	NOT TO SCALE
DBA	DEFORMED BAR ANCHOR		
EA	EACH	O.C.	ON CENTER
E.F.	EACH FACE	O.P.P.	OPPOSITE
ELEV	ELEVATION		
ENGR	ENGINEER	FCF	FOUNDS PER CUBIC FOOT
EQ	EQUAL	FL	FLATE
E.W.	EACH WAY	FLF	FOUNDS PER LINEAR FOOT
EXIST	EXISTING	PREFAB	PREFABRICATED
FND	FOUNDATION	FSF	FOUNDS PER SQUARE FOOT
FLR	FLOOR	FSI	FOUNDS PER SQUARE INCH
FT	FEET	REINF	REINFORCING
GA	GAGE	RTU	ROOF TOP UNIT
GALV	GALVANIZED	SIM	SIMILAR
G.B.	GYPSPUM BOARD	STD	STANDARD
HD	HOLD/DOWN	STRUCT	STRUCTURAL
HORIZ	HORIZONTAL	SQ	SQUARE
H.S.A.	HEADED STUD ANCHOR		
HSS	HOLLOW STRUCTURAL SECTION	T&B	TOP AND BOTTOM
ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS	THRU	THROUGH
IBC	INTERNATIONAL BUILDING CODE	TOF	TOP OF
IN	INCHES	T.O.F.	TOP OF FOOTING
K	KIPS	T.O.S.	TOP OF STEEL
KLF	KIPS PER LINEAL FOOT	T.O.W.	TOP OF WALL
KPS	KIPS PER SQUARE FOOT	TYP	TYPICAL
		UNO.	UNLESS NOTED OTHERWISE
		VERT	VERTICAL

SYMBOLS AND MARKS LEGEND



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consulting engineer

ANDREA L. BAZO
E-42640
WICHITA
KS
PROFESSIONAL ENGINEER
7/1/2024

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PLAZA STREET PARTNERS, LLC
MORMON COULEE RD, LA CROSSE, WISCONSIN 54601

REVISIONS

No.	Description	Date

sheet issue date: 07/11/2024
project no.: 22.34.73
sheet contents: GENERAL STRUCTURAL NOTES
sheet no.: S1.0





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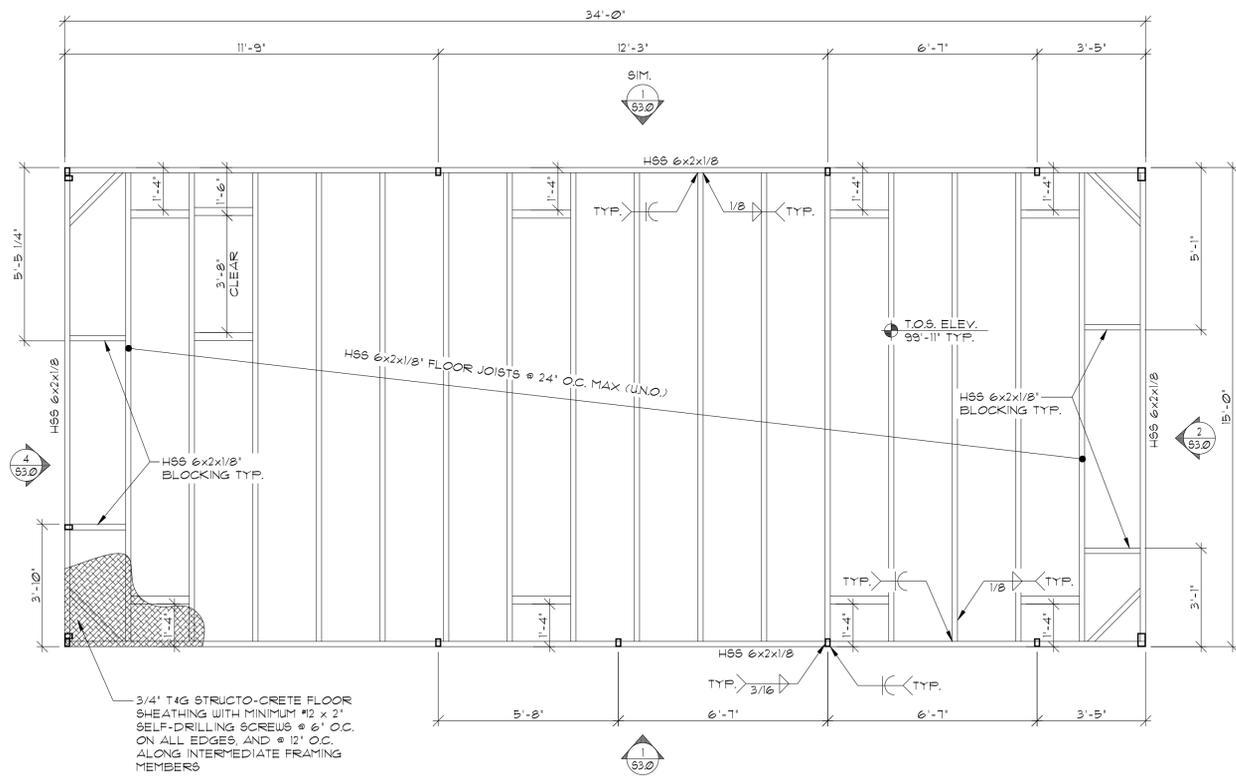
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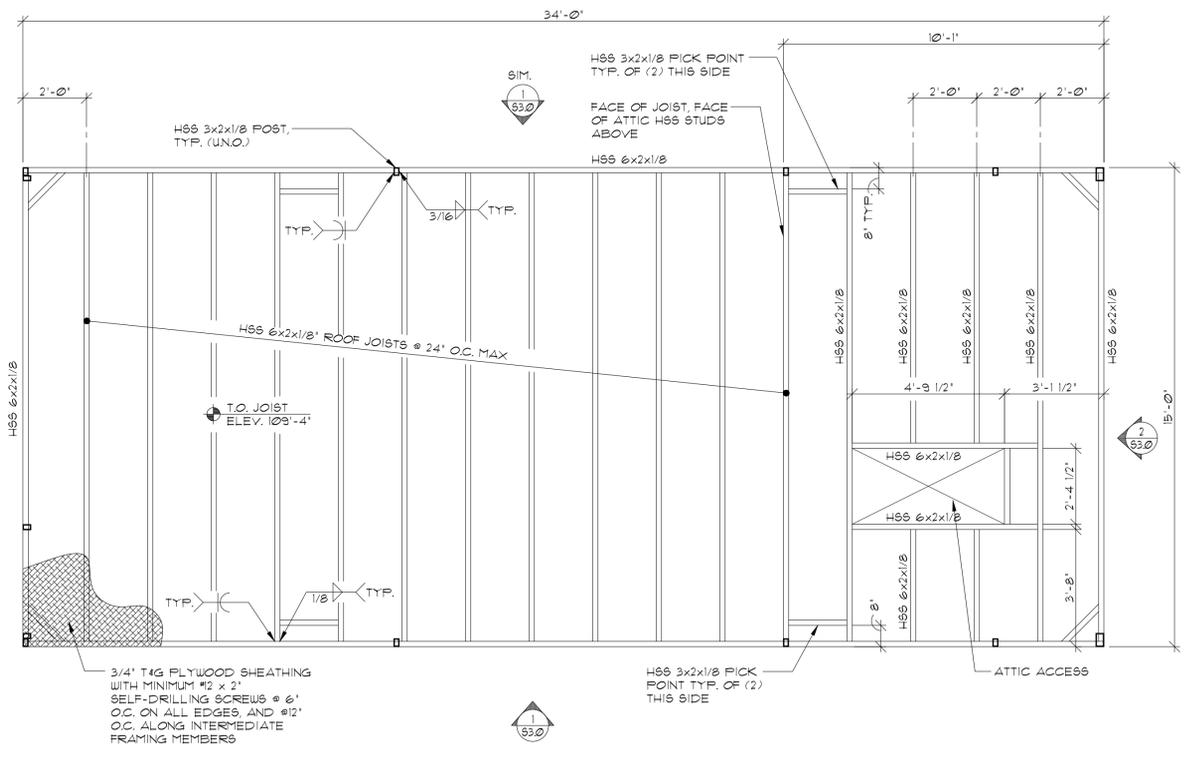
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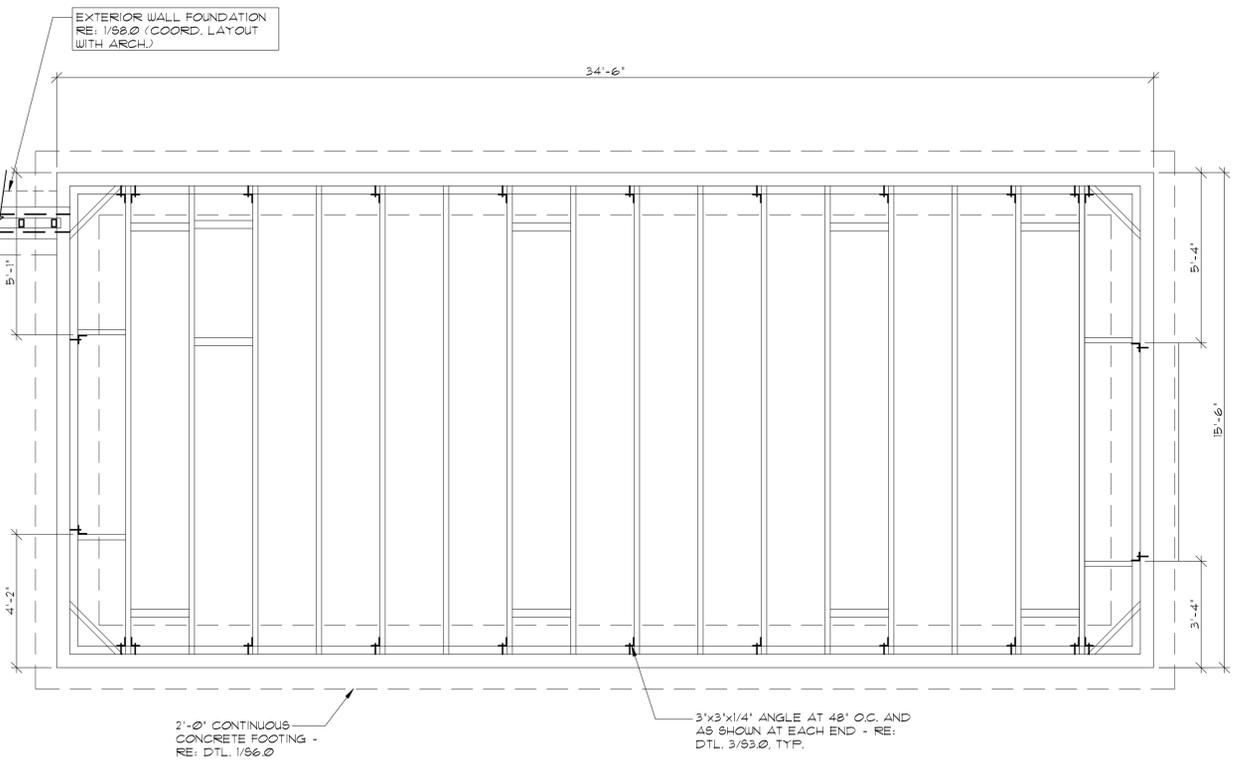
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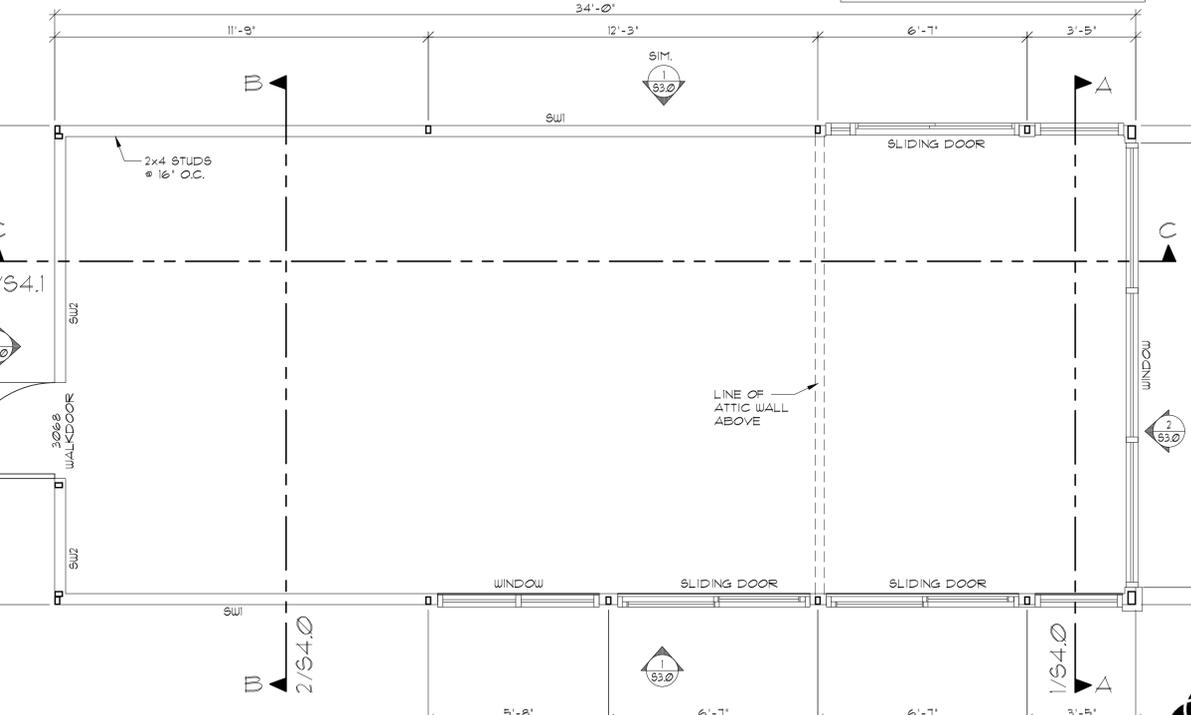
1 FLOOR FRAMING PLAN
NOTE:
1. PERIMETER DIMENSIONS ARE TO FACE OF TUBE FRAMING, UNO.



2 ROOF FRAMING PLAN
NOTE:
1. PERIMETER DIMENSIONS ARE TO FACE OF TUBE FRAMING, UNO.



3 FOUNDATION PLAN
NOTE:
1. PERIMETER DIMENSIONS ARE TO FACE OF FDN. WALL, UNO.



4 FLOOR PLAN / SHEAR WALL PLAN
NOTE:
1. PERIMETER DIMENSIONS ARE TO FACE OF TUBE FRAMING, UNO.

SHEAR WALL SCHEDULE		
MARK	SHEATHING	NAILING
SW1	5/8" PLYWD. ONE SIDE	8d @ 6"/12"
SW2	5/8" PLYWD. ONE SIDE	8d @ 4"/12"

NOTE: USE #8 SELF-DRILLING SCREWS IN LIEU OF 8d NAILS WHERE ATTACHING TO STEEL MEMBERS



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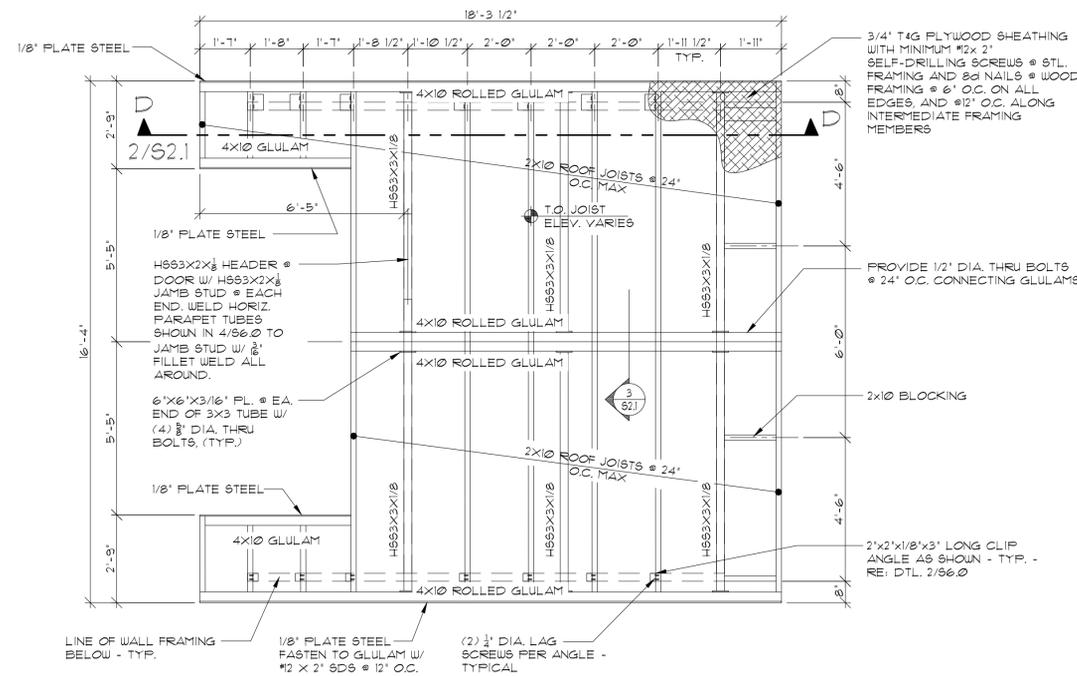
REVISIONS		
No.	Description	Date

sheet issue date: 07/11/2024
project no.: 22.34.73
sheet contents: PLAN VIEWS
sheet no.: S2.0

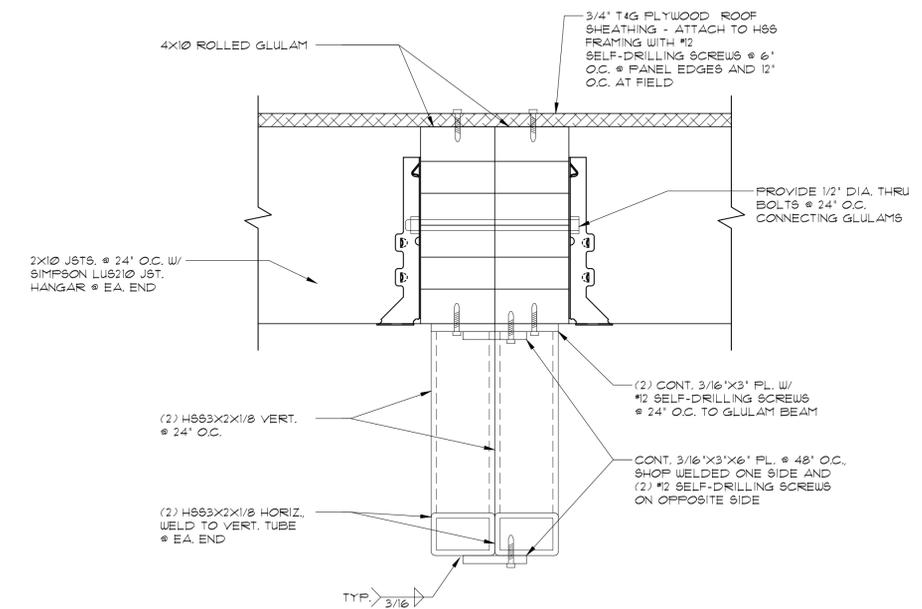


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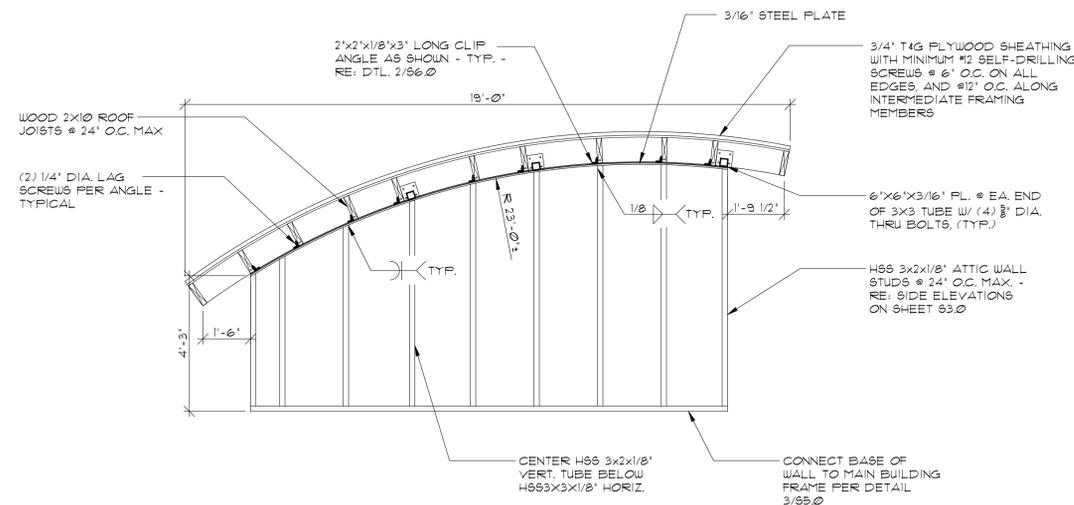
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1 UPPER ROOF FRAMING PLAN 3/8"=1'-0"



3 UPPER ROOF FRAMING SECTION 3'-11'-0"



2 UPPER ROOF SECTION D-D 3/8"=1'-0"

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FRAMING ELEVATIONS

sheet no.:

S2.1



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project no.:

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sheet contents:

FRAMING ELEVATIONS AND DETAIL

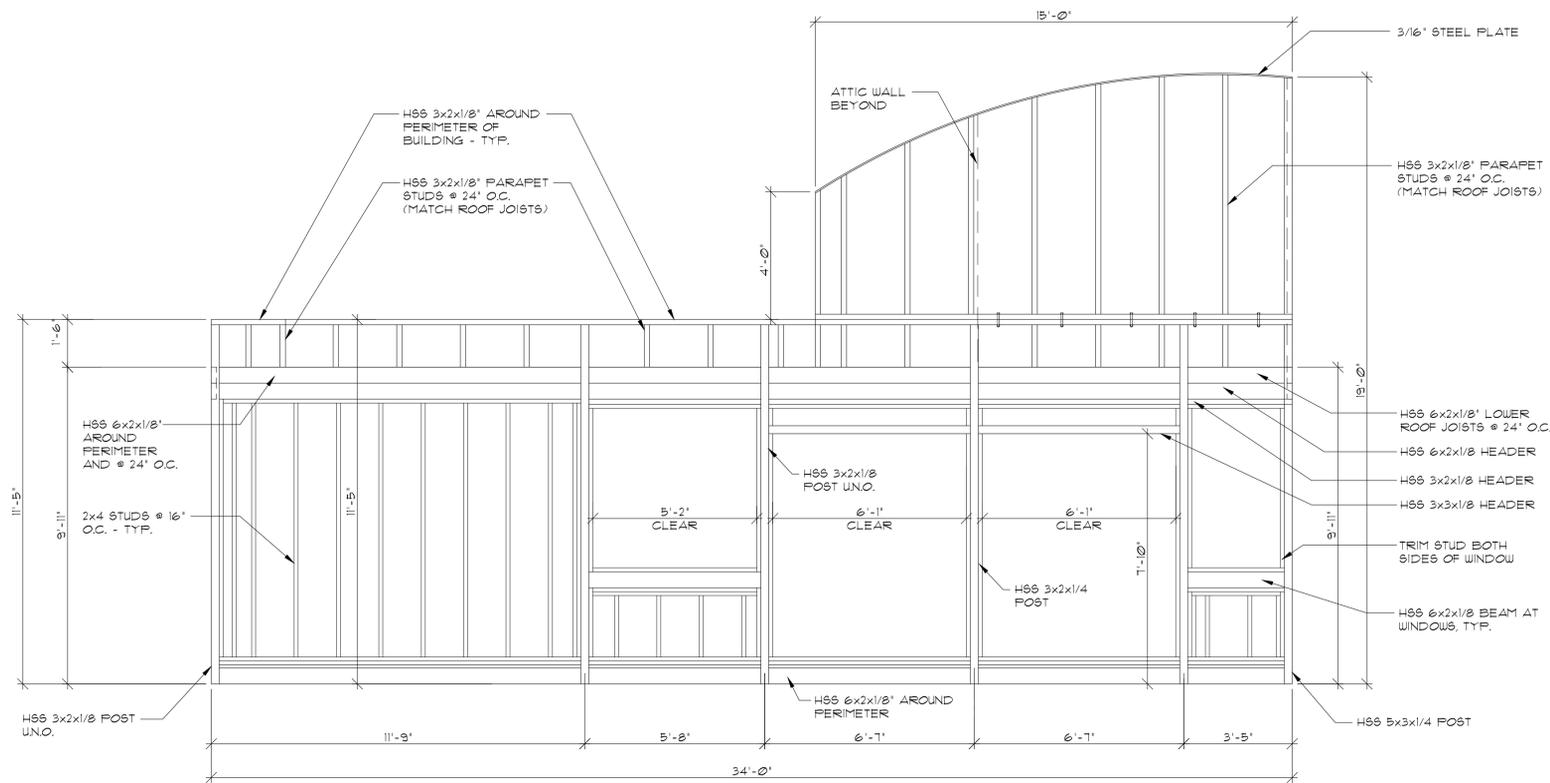
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S3.0



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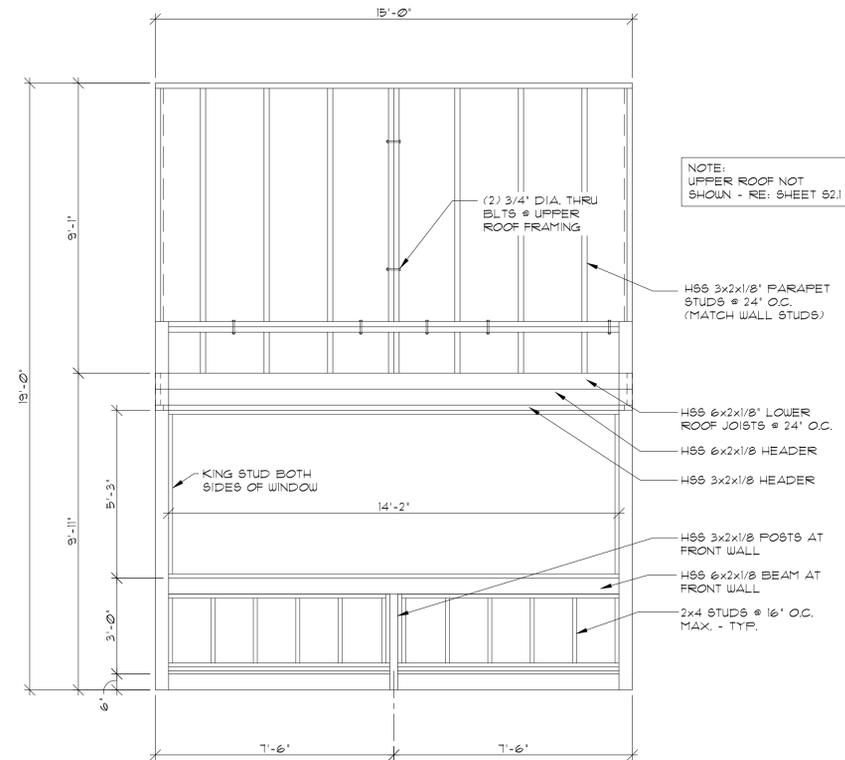
NOTE:
UPPER ROOF NOT
SHOWN - RE: SHEET 92.1



1 SIDE FRAMING ELEVATION A

3/8" x 1'-0"

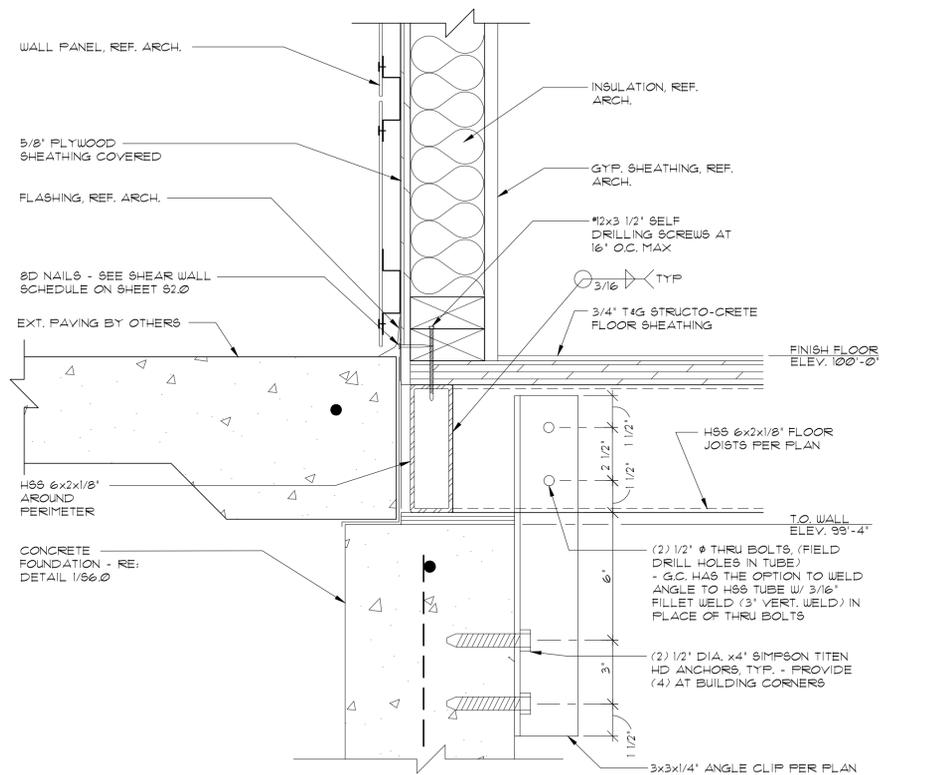
NOTE:
UPPER ROOF NOT
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2 END FRAMING ELEVATION B

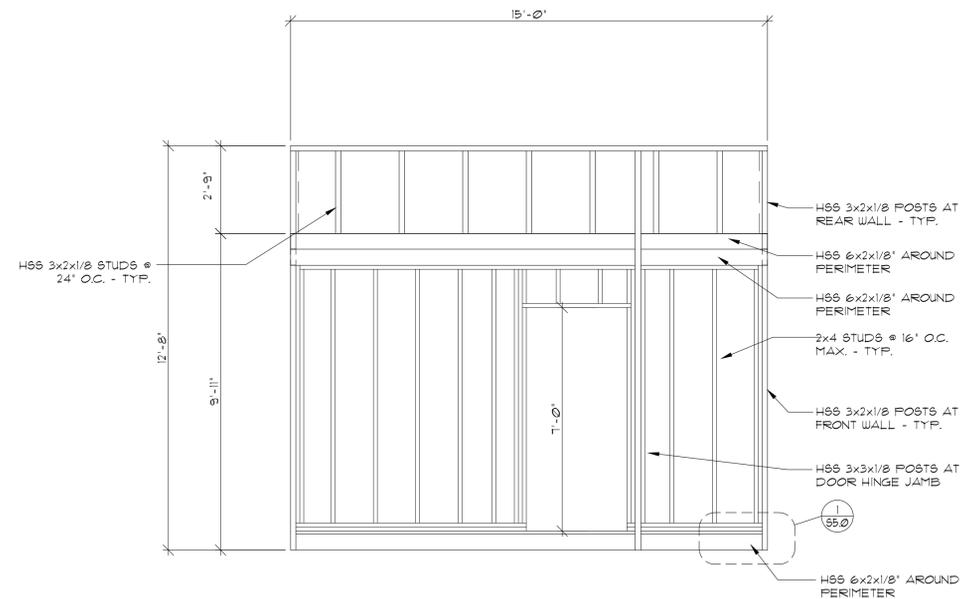
3/8" x 1'-0"

NOTE:
WALL SHEATHING NOT
SHOWN FOR CLARITY



3 TYPICAL BASE ATTACHMENT DETAIL

3/8" x 1'-0"



4 END FRAMING ELEVATION C

3/8" x 1'-0"



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sheet issue date:

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22.34.73

sheet contents:

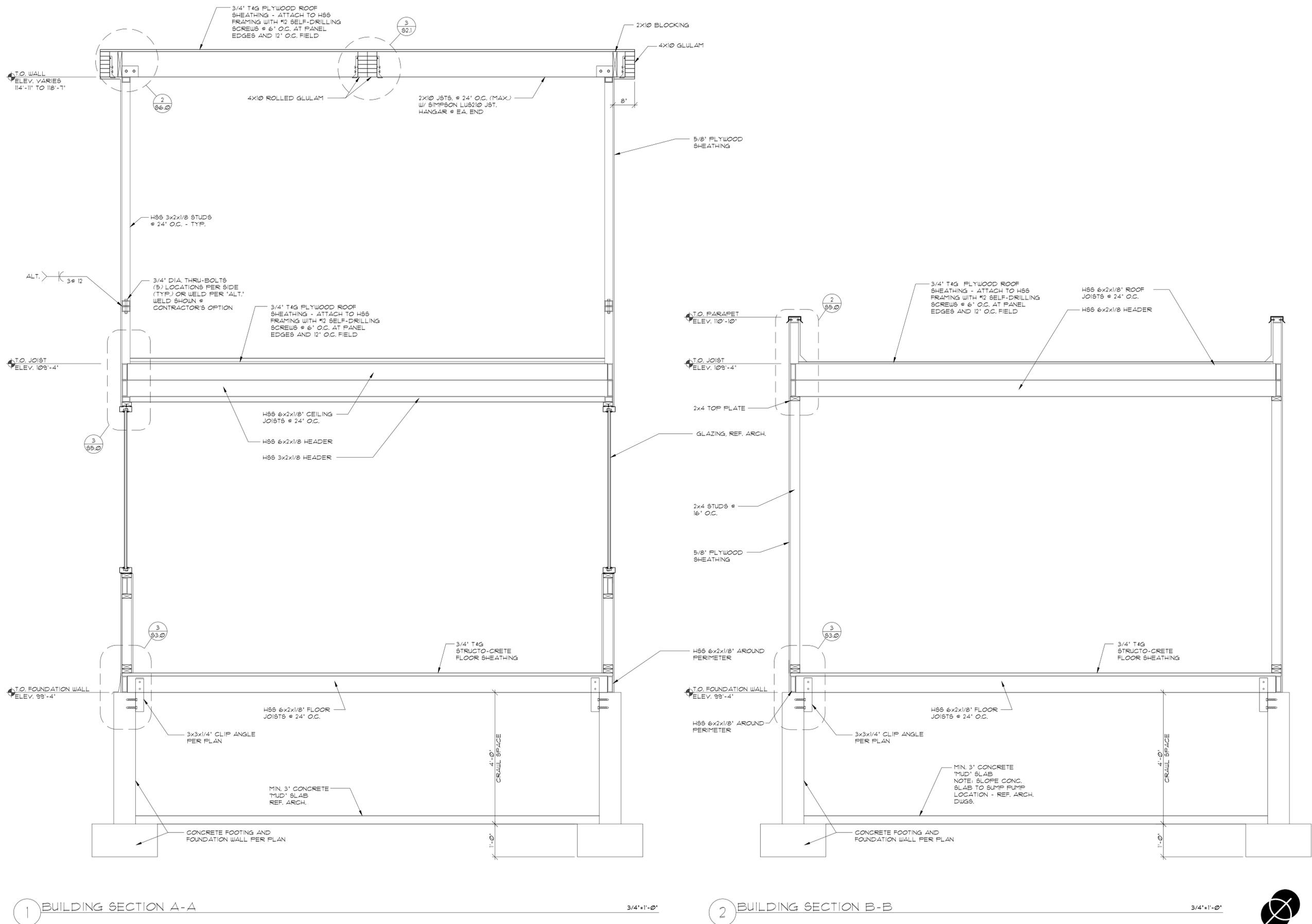
SECTIONS

sheet no.:

S4.0



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1 BUILDING SECTION A-A

3/4" x 1'-0"

2 BUILDING SECTION B-B

3/4" x 1'-0"



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No.	Description	Date

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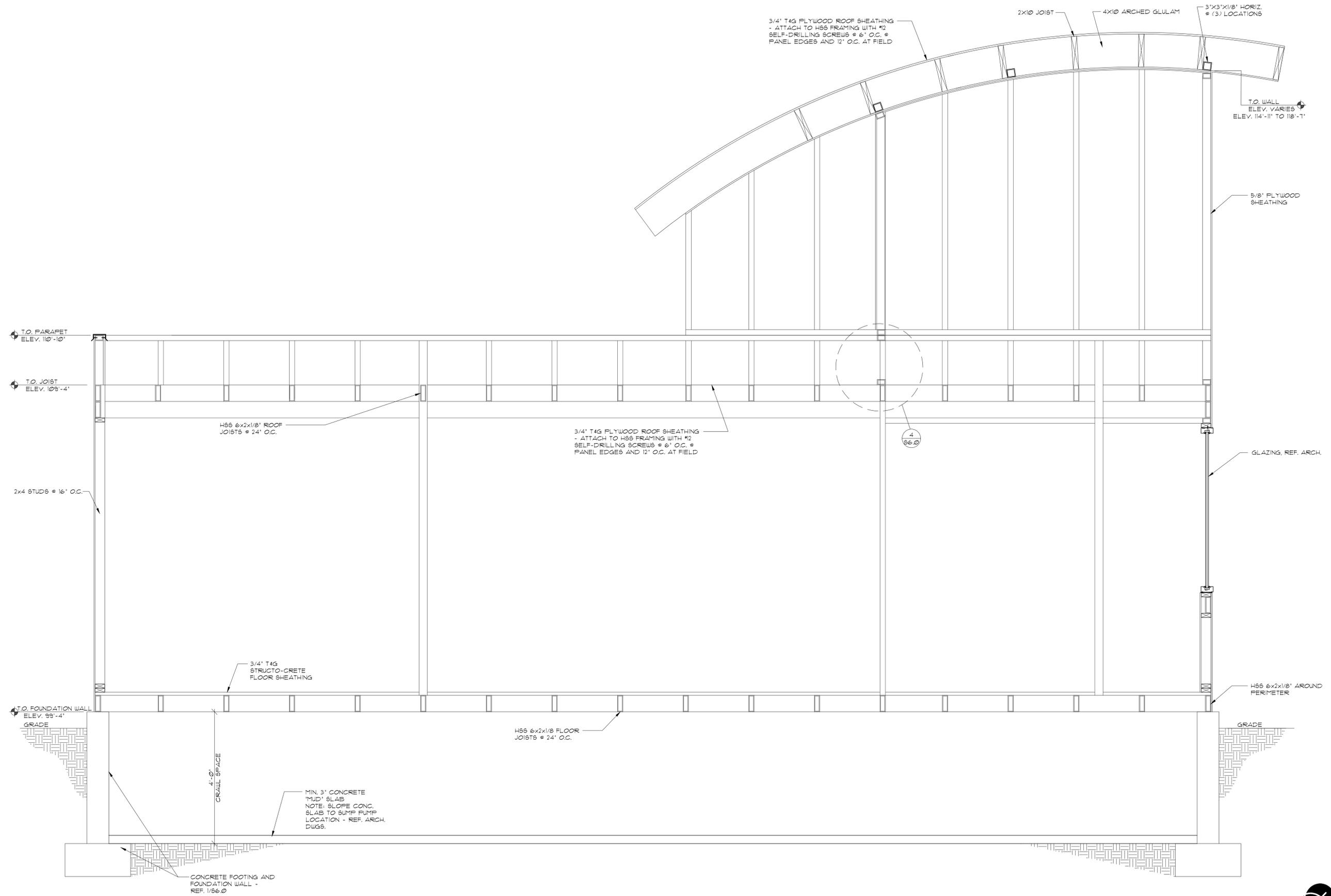
SECTIONS

sheet no.:

S4.1



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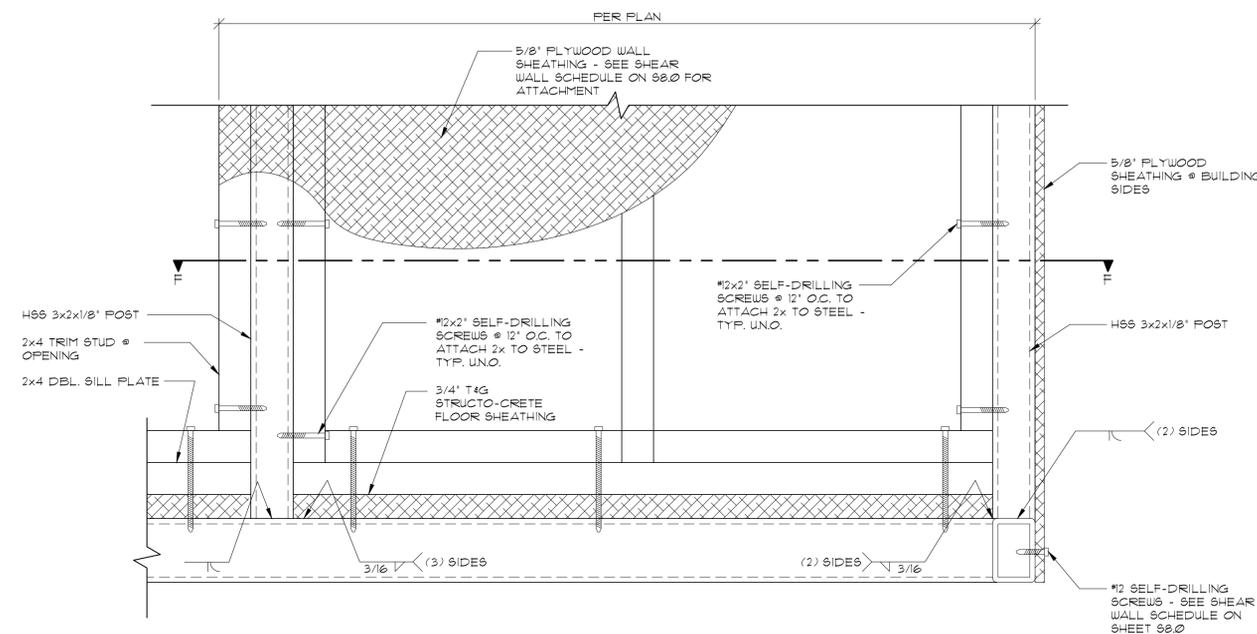
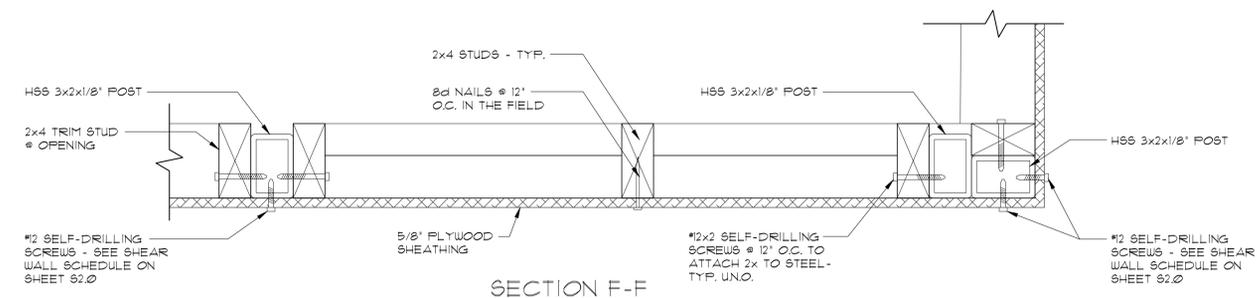
1 BUILDING SECTION C-C

3/4"=1'-0"

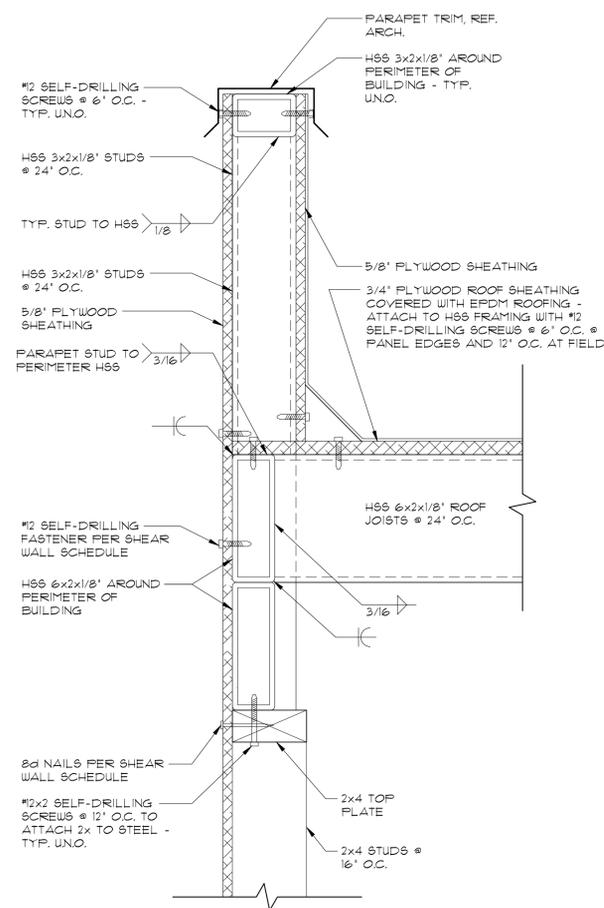


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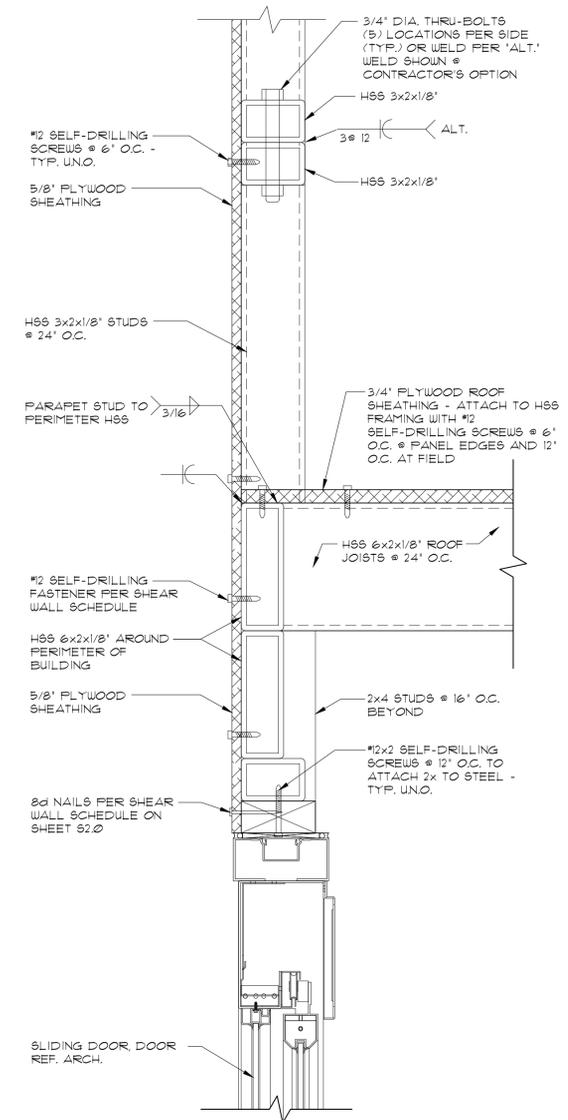
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1 SHEAR PANEL BASE DETAIL 3'-11"-0"



2 CONNECTION DETAIL 3'-11"-0"



3 CONNECTION DETAIL AT ATTIC 3'-11"-0"

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project no.:

22.34.73

sheet contents:

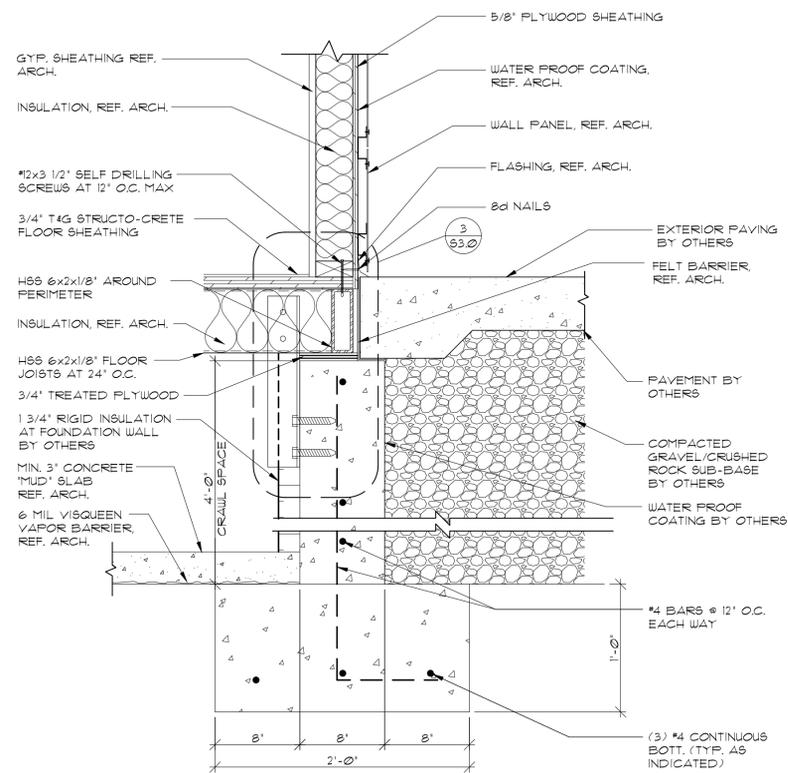
DETAILS

sheet no.:

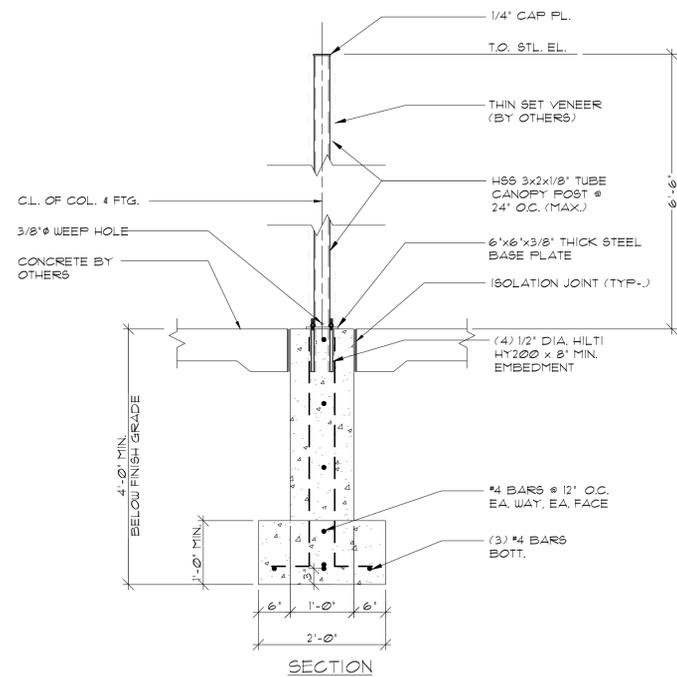
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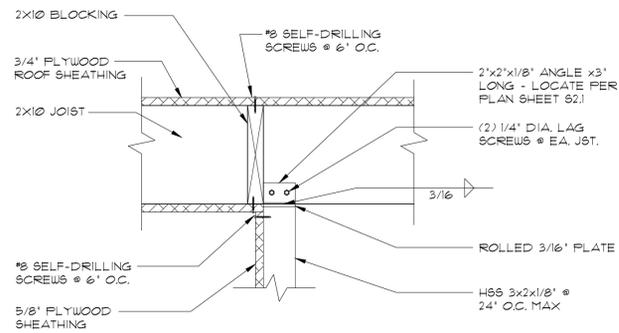
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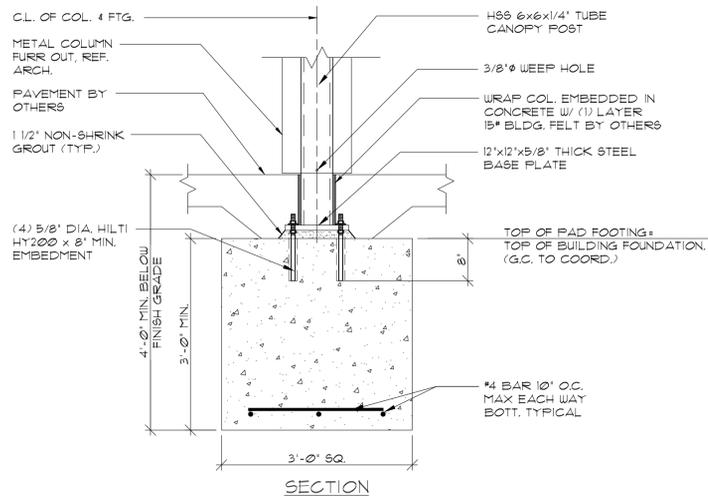
1 FOUNDATION DETAIL 1 1/2' x 1'-0"



5 FOOTING DETAIL AT EXTERIOR WALL 3/4' x 1'-0"
NOTE: SEE PARTIAL FOUNDATION PLAN 5/58.0

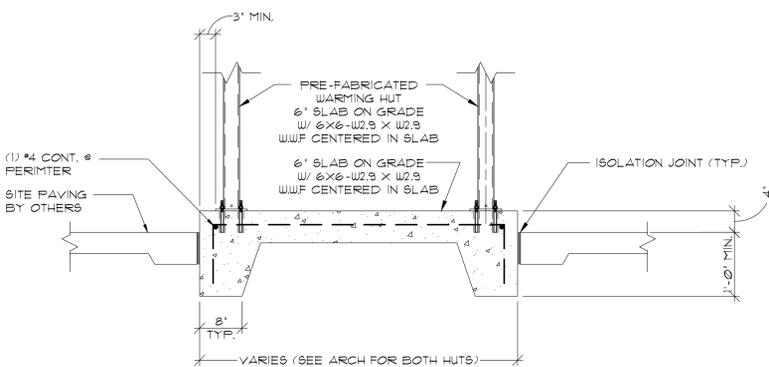


2 HIGH ROOF CONNECTION DETAIL 1 1/2' x 1'-0"

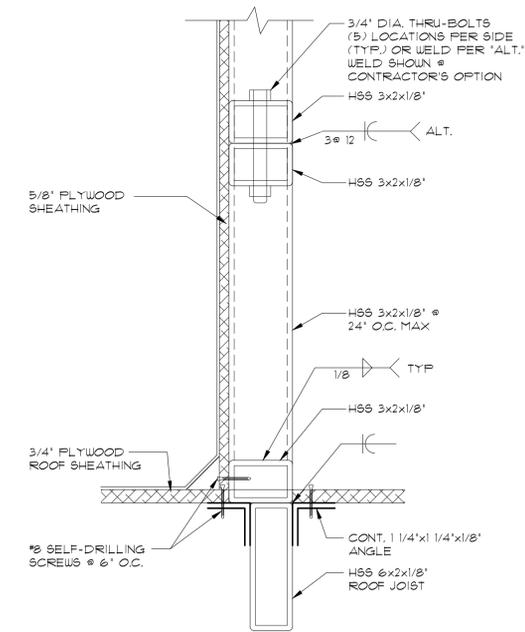


3 TYPICAL COLUMN PAD FOOTING DETAIL AT CANOPY 3/4' x 1'-0"

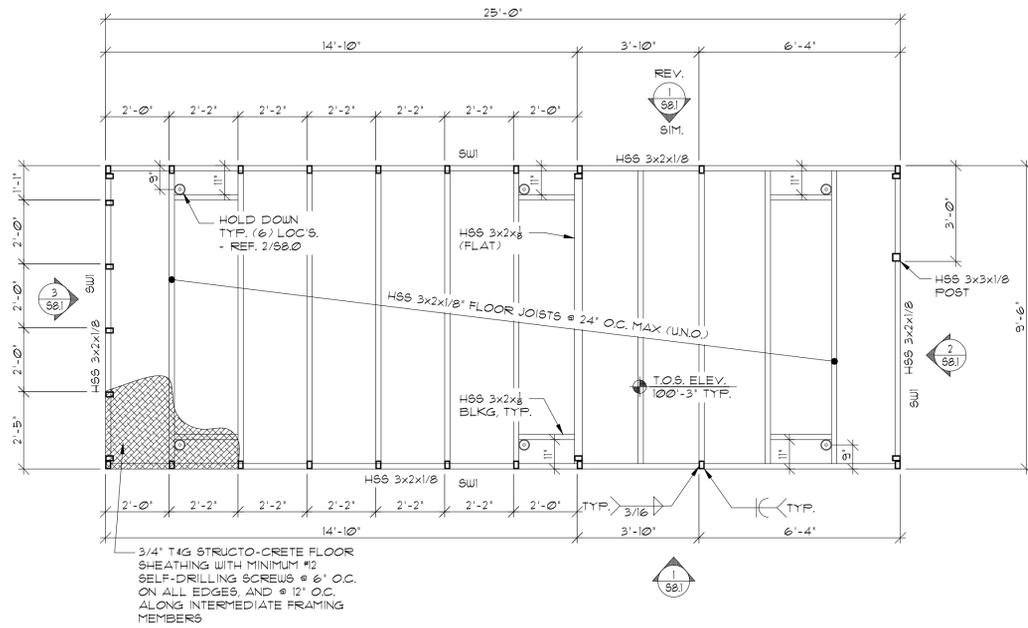
NOTE:
1. SEE CANOPY PLAN FOR LOCATIONS
2. TOP OF FOOTING TO BE PLACED 6\"/>



6 WARMING HUT SLAB DETAIL 3/4' x 1'-0"
NOTE: SEE ARCH/ CIVIL FOR LOCATIONS.

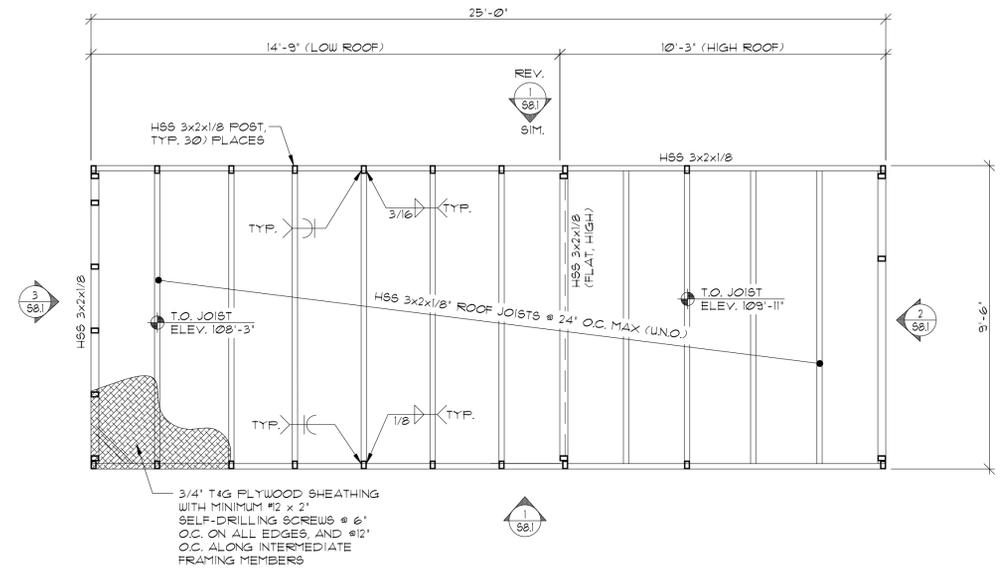


4 UPPER WALL CONNECTION DETAIL 3' x 1'-0"



3 COOLER FLOOR FRAMING PLAN 3/8"=1'-0"

NOTE:
1. PERIMETER DIMENSIONS ARE TO FACE OF TUBE FRAMING, U.N.O.

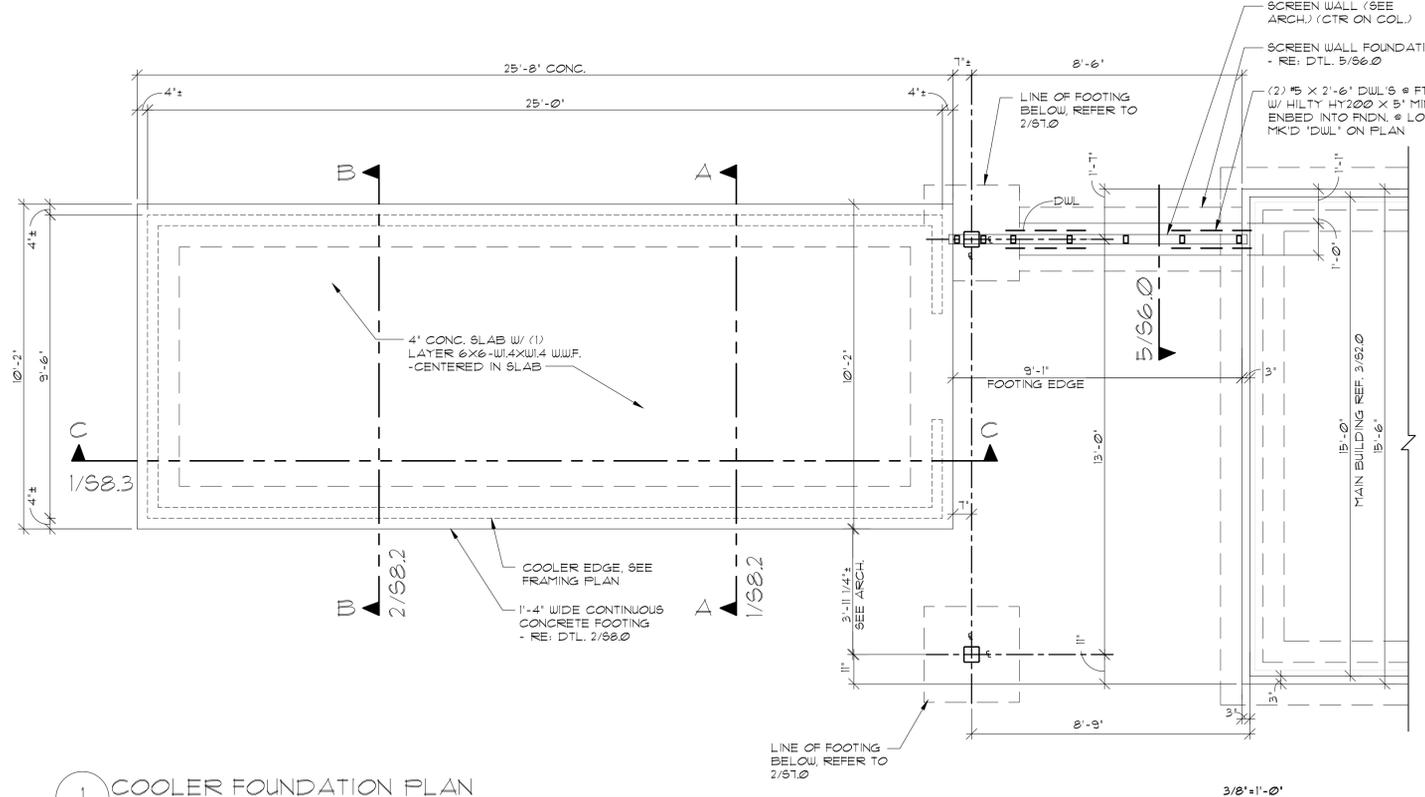


4 COOLER ROOF FRAMING PLAN 3/8"=1'-0"

NOTE:
1. PERIMETER DIMENSIONS ARE TO FACE OF TUBE FRAMING, U.N.O.

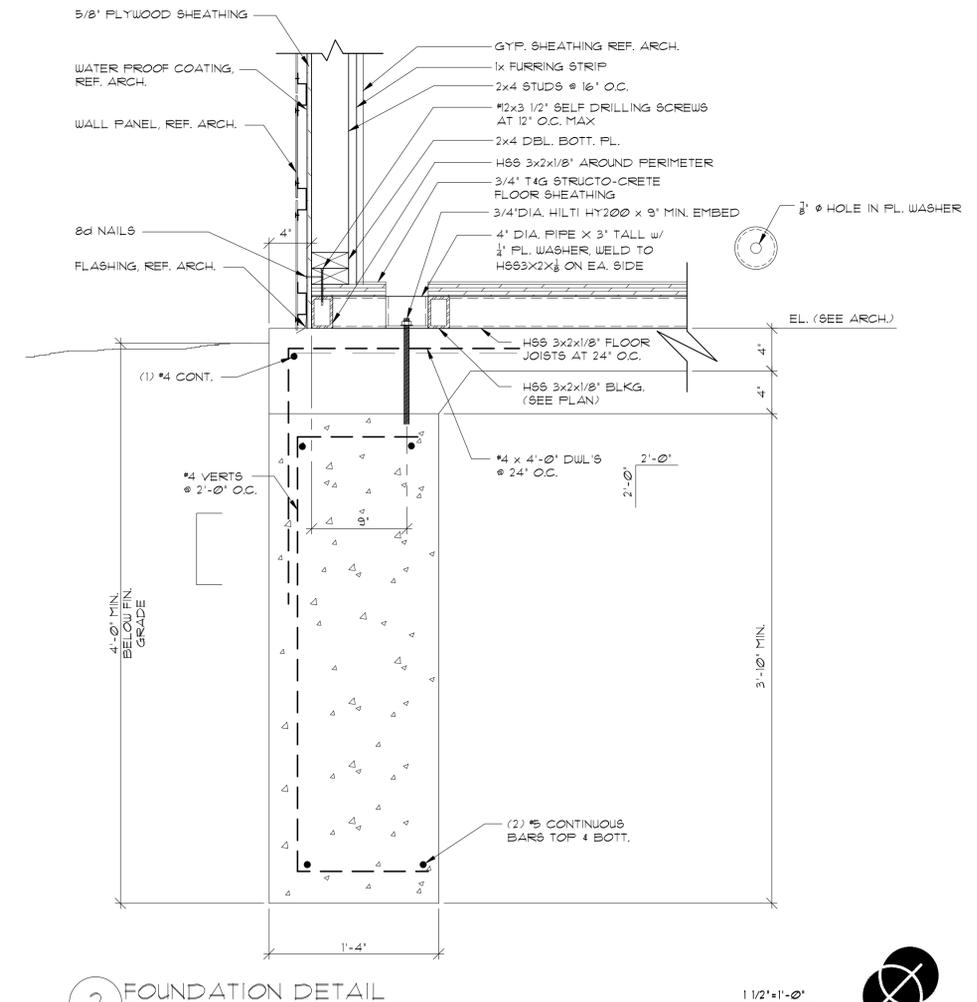
SHEAR WALL SCHEDULE		
MARK	SHEATHING	NAILING
SW1	5/8" FLYWD. ONE SIDE	8d @ 6"/12"

NOTE: USE #8 SELF-DRILLING SCREWS IN LIEU OF 8d NAILS WHERE ATTACHING TO STEEL MEMBERS



1 COOLER FOUNDATION PLAN 3/8"=1'-0"

NOTE:
1. PERIMETER DIMENSIONS ARE TO FACE OF SLAB, U.N.O.
2. GC. TO COORDINATE LOCATION ON SITE WITH ARCHITECT.



2 FOUNDATION DETAIL 1/2"=1'-0"

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913.624.1610

consulting engineer
ANDREA L. BAZO
E-42040
WICHITA
KS
PROFESSIONAL ENGINEER
7/1/2024

7 BREW DRIVE THRU - LA CROSSE, WI - MORMON COULLEE
PLAZA STREET PARTNERS, LLC
MORMON COULLEE RD, LA CROSSE, WISCONSIN 54601

REVISIONS

No.	Description	Date

sheet issue date:
07/11/2024
project no.:
22.34.73
sheet contents:
COOLER PLAN VIEWS
FNDN. PLAN & DTLS.
sheet no.:
S8.0

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project no.:

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sheet contents:

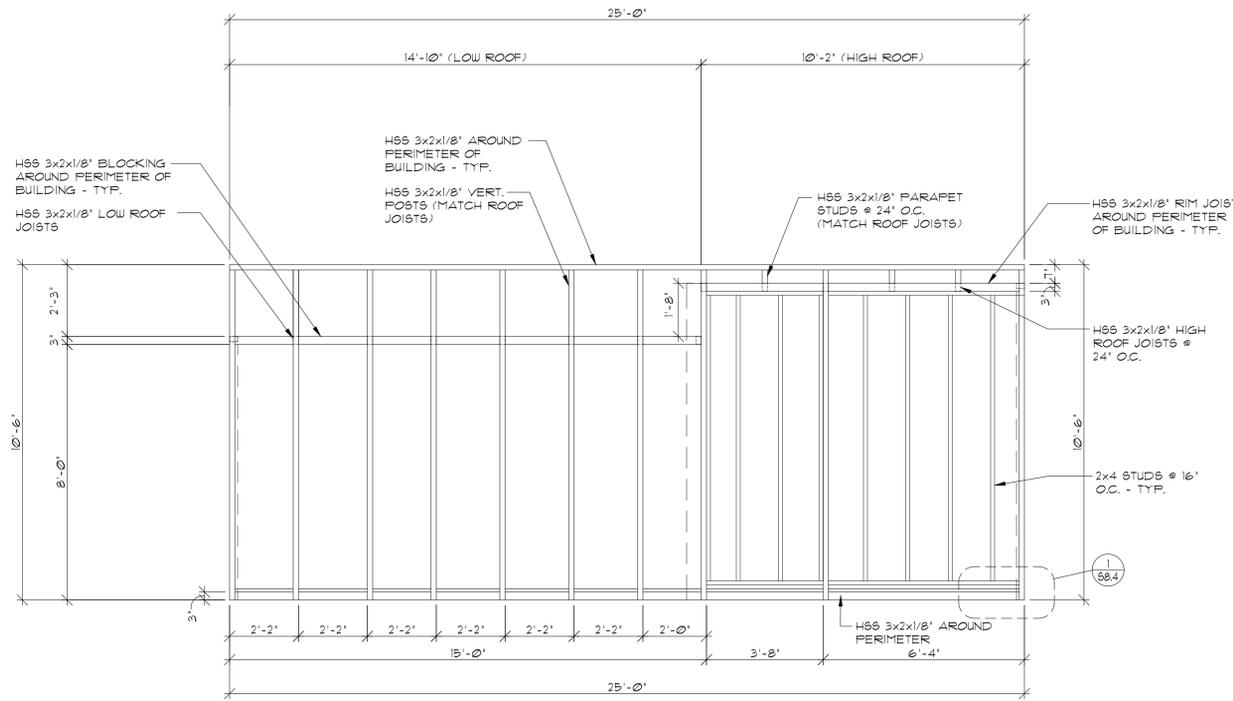
COOLER FRAMING ELEVATIONS

sheet no.:

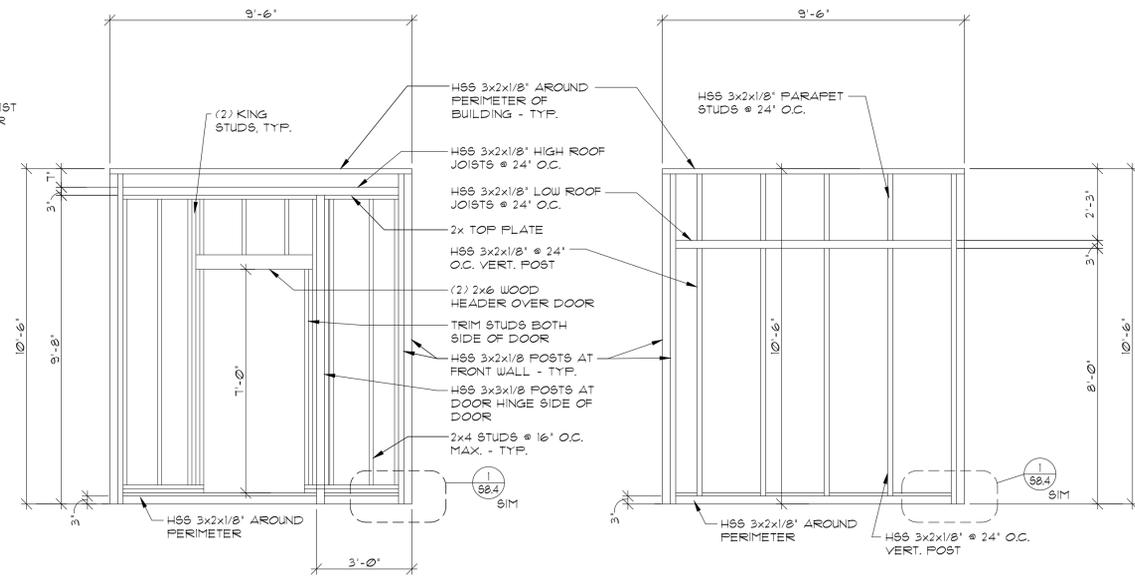
S8.1



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1 COOLER SIDE FRAMING ELEVATION A 3/8" x 1'-0"



2 COOLER END FRAMING ELEVATION B 3/8" x 1'-0"

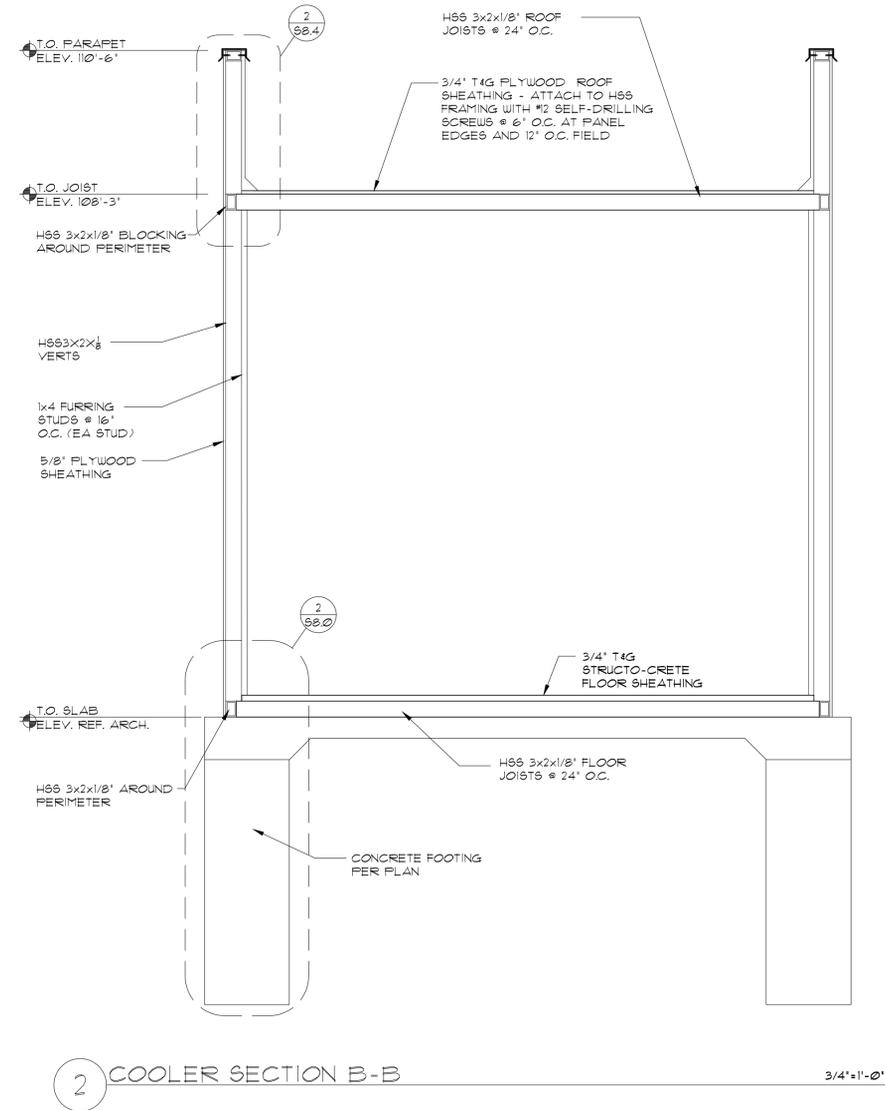
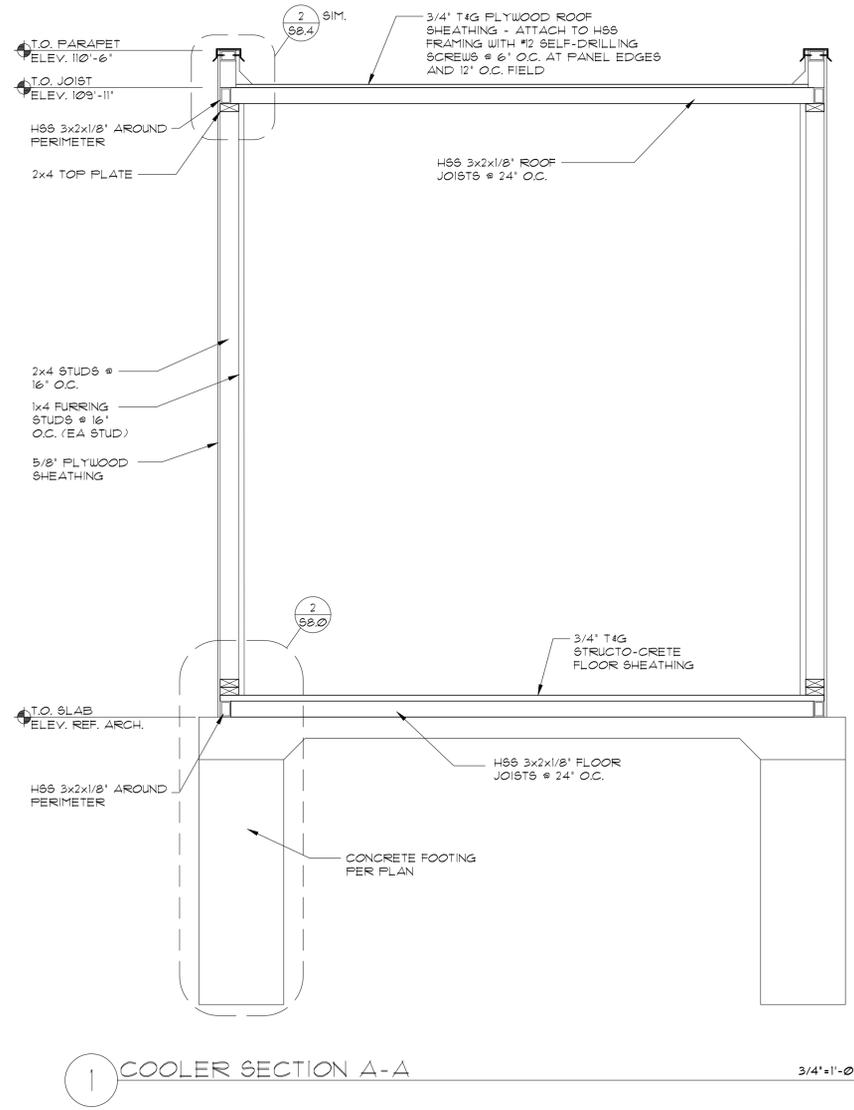
3 COOLER END FRAMING ELEVATION B 3/8" x 1'-0"

NOTE:
WALL SHEATHING NOT
SHOWN FOR CLARITY



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REVISIONS		
No.	Description	Date

sheet issue date:

07/11/2024

project no.:

22.34.73

sheet contents:

COOLER SECTIONS

sheet no.:

S8.2

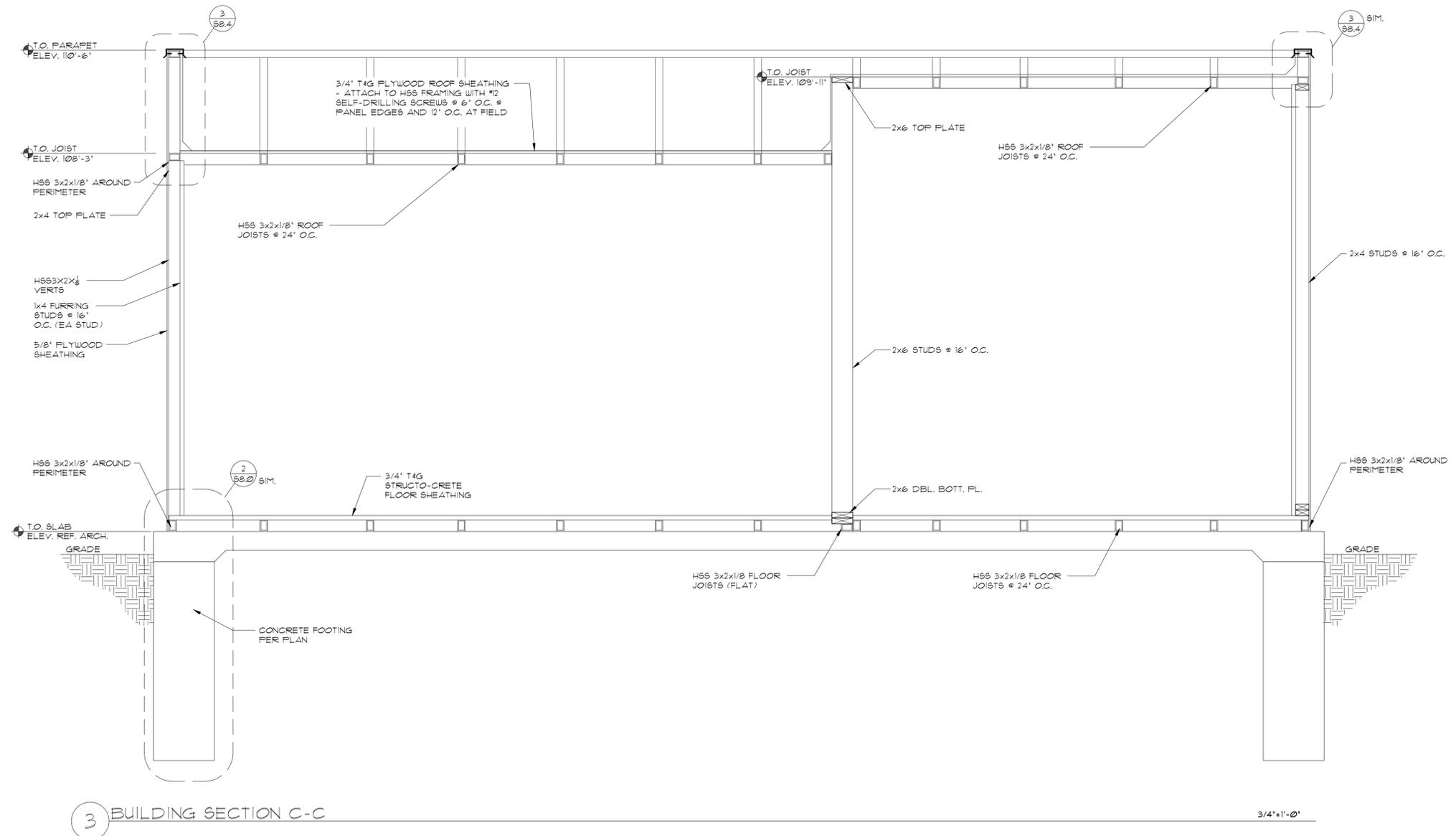


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3 BUILDING SECTION C-C

3/4"=1'-0"

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No.	Description	Date
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sheet issue date: 07/11/2024

project no.: 22.34.73

sheet contents: COOLER SECTION

sheet no.: S8.3



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No.	Description	Date

sheet issue date:

07/11/2024

project no.:

22.34.73

sheet contents:

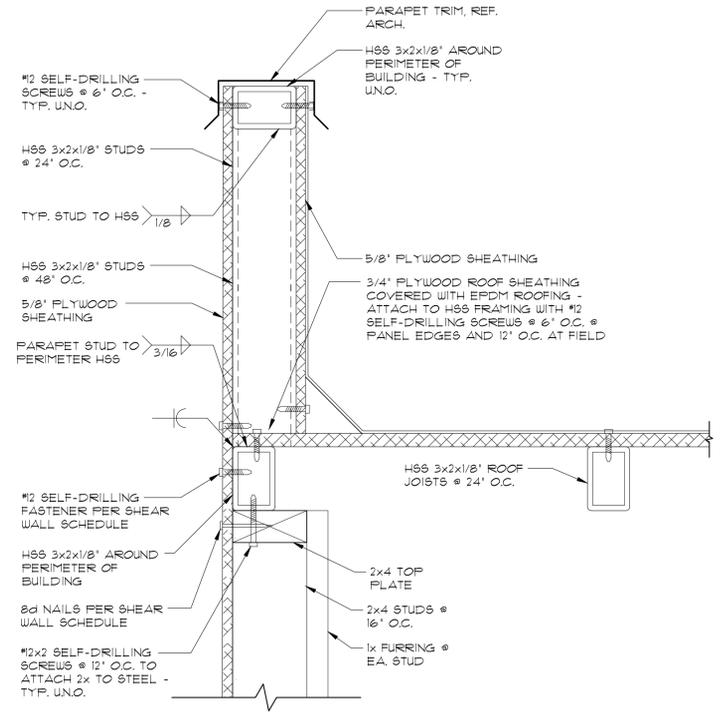
COOLER DETAILS

sheet no.:

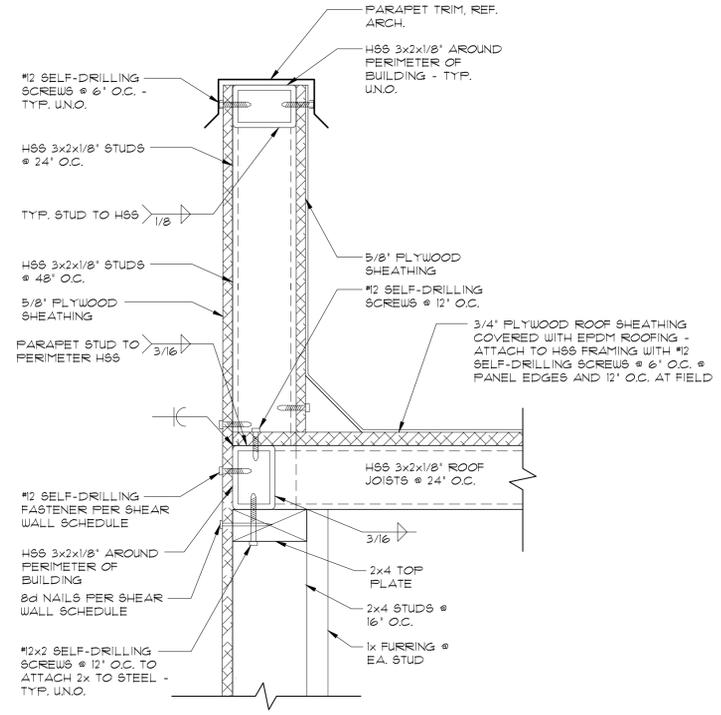
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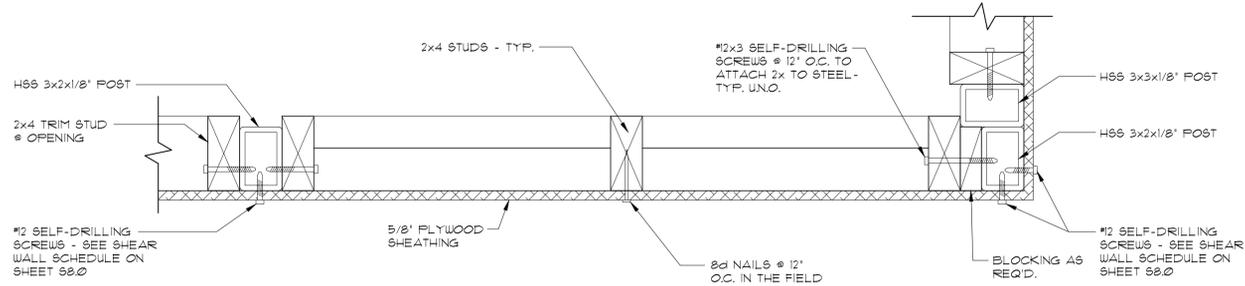
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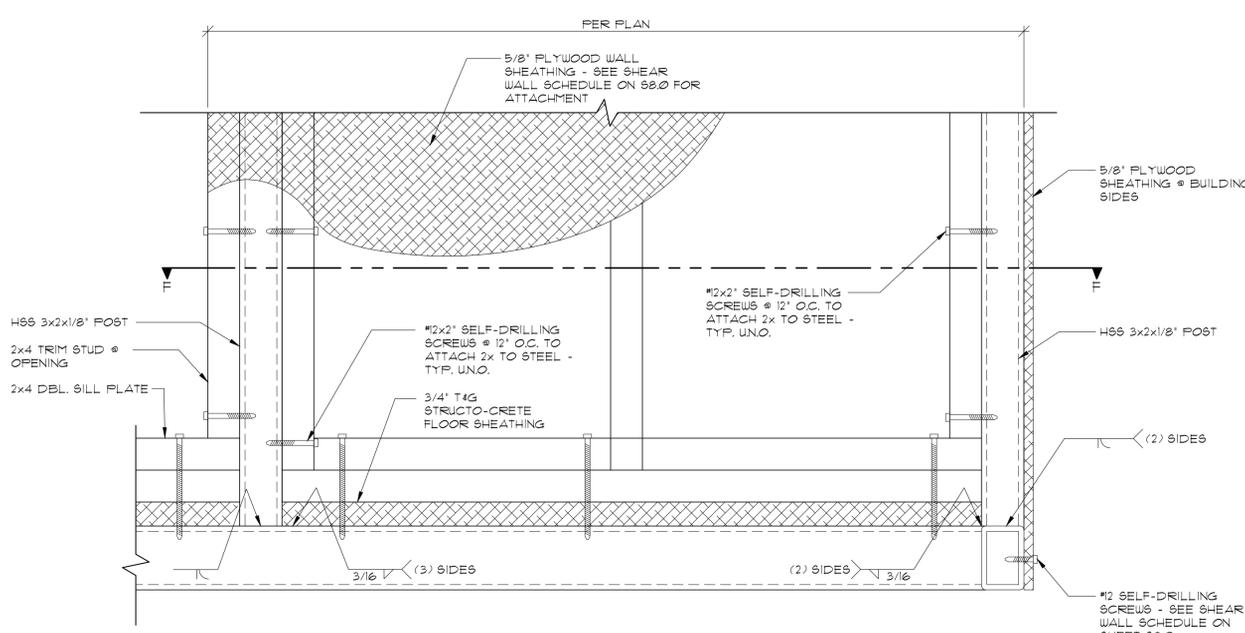
3 CONNECTION DETAIL 3'-11"-0"



3 CONNECTION DETAIL 3'-11"-0"



SECTION F-F



1 SHEAR PANEL BASE DETAIL 3'-11"-0"



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No.	Description	Date

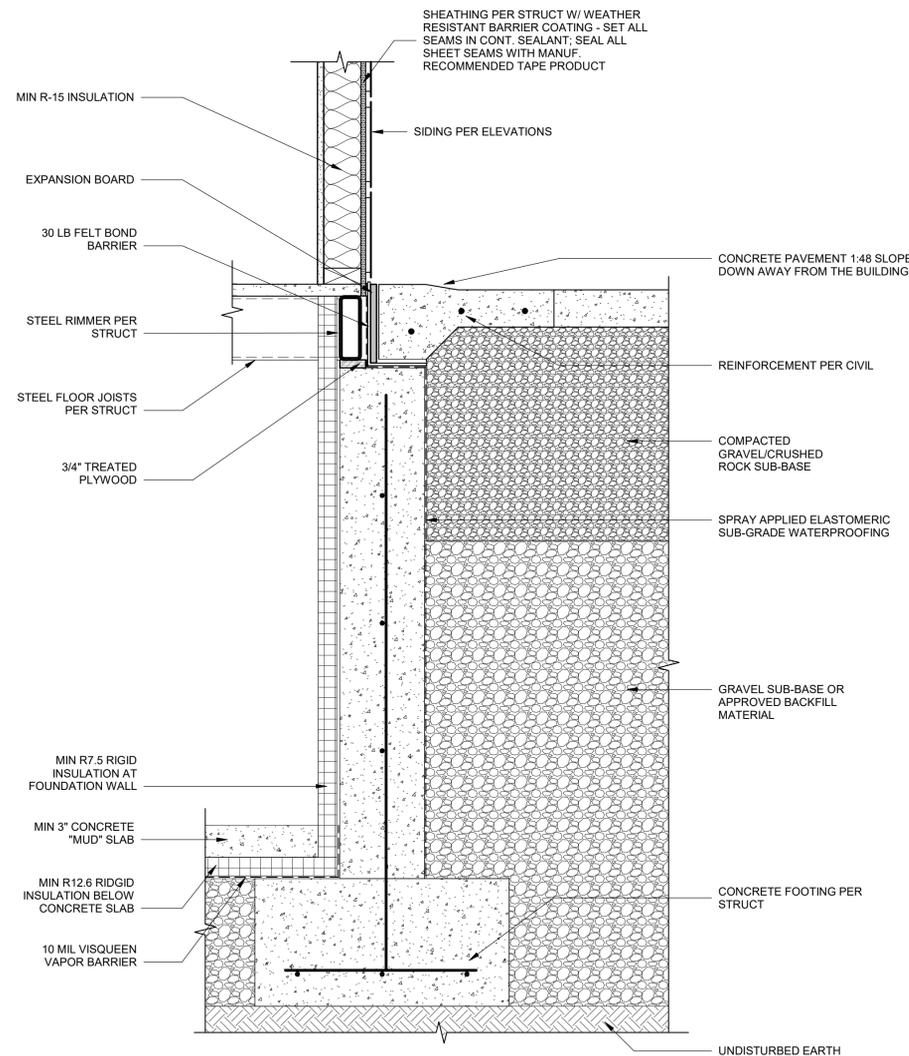
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07/12/2024

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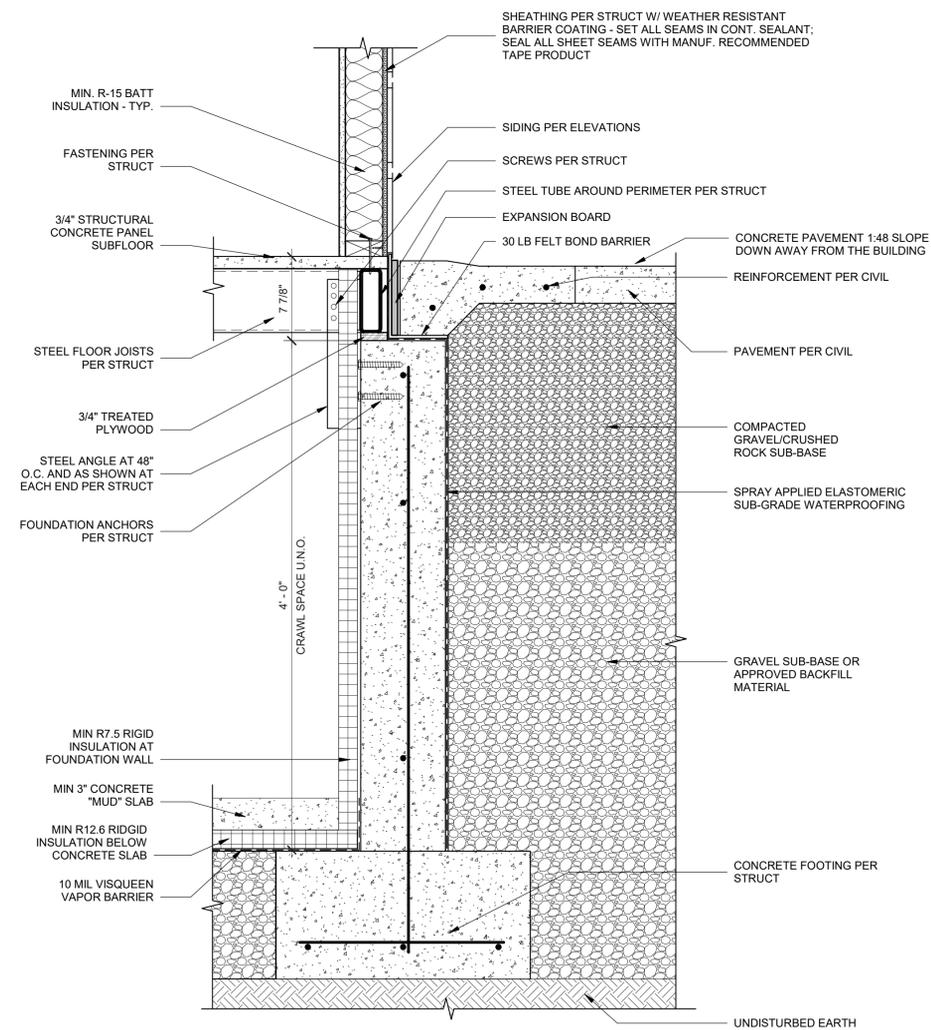
sheet contents:
FOUNDATION DETAILS

sheet no.:

A1.1



2 FOUNDATION AT REAR
1 1/2" = 1'-0"



1 FOUNDATION DETAIL AT SIDE WALLS - FLUSH GRADE
1 1/2" = 1'-0"

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No.	Description	Date

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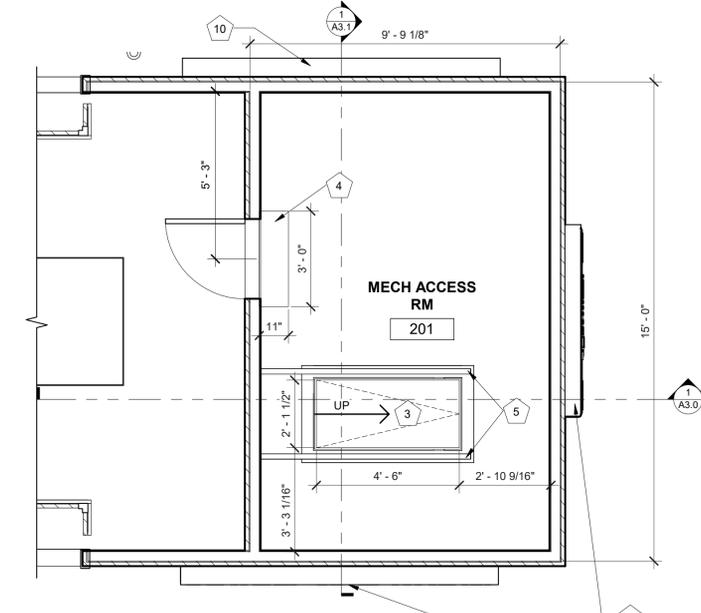
project no.:
22.34.73

sheet contents:
FLOOR PLAN

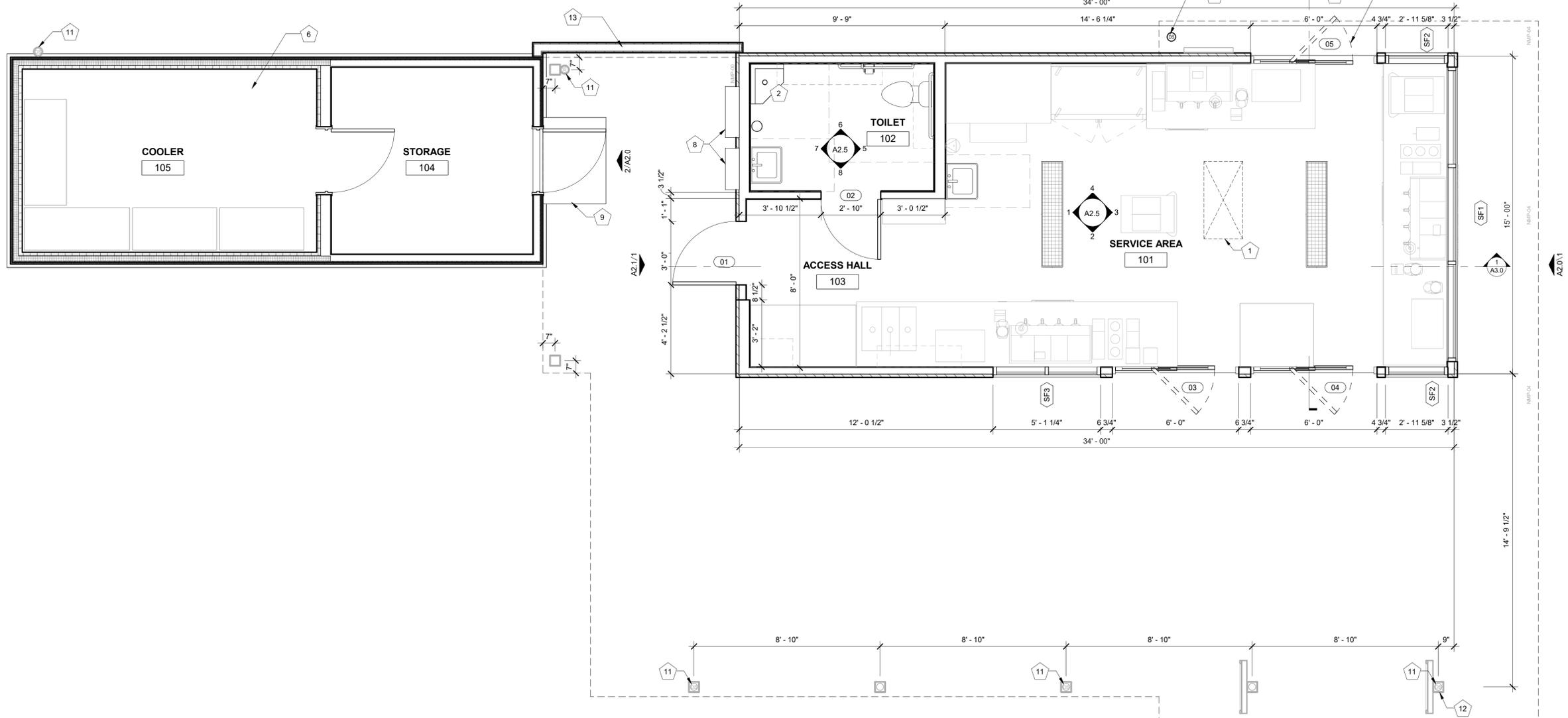
sheet no.:

A1.2

NOTE NO.	NOTE TEXT
1	ACCESS DOOR FOR CRAWLSPACE ACCESS
2	MOP SINK RE: PLUMBING DRAWINGS
3	MECH. ACCESS DOOR AND LADDER - SUPPLIED BY OWNER
4	STEP, CENTER ON DOOR
5	PREFABRICATED COMPLIANT MECHANICAL SERVICE GUARDRAIL PER IBC SECTION 1015 - EACH SIDE
6	PREFABRICATED WALK-IN COOLER BY NATIONAL MODULAR MANUFACTURING; COORDINATE LOCATION & SPECS W/ CIVIL & STRUCT
7	ADA AUTO/MANUAL EGRESS CAPABLE
8	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; SEE ELECTRICAL
9	RUBBERIZED RAMP TO COOLER DOOR; LESS THAN 36" RUN LENGTH
10	STOREFRONT SIGNS - SUPPLIED AND INSTALLED BY SIGN CONTRACTOR
11	DOWNSPOUT CONNECTION TO STORMWATER SYSTEM; REF CIVIL
12	SITE CONTRACTOR TO COORDINATE CIVIL AND STRUCTURAL DRAWINGS TO ENSURE ALL CANOPY COLUMN FOUNDATION PLATES AND BOLTS ARE CONSTRUCTED IN A MANNER THAT CONCEALS THEIR CONNECTIONS COMPLETELY BELOW GRADE; TYP.
13	SITE SCREEN WALL
14	DOWNSPOUT TO GRADE



2 MECH ACCESS RM
3/8" = 1'-0"



1 FLOOR PLAN
3/8" = 1'-0"

7/12/2024 3:31:45 PM C:\Users\Vanessa\Documents\22.34.73_La Crosse WI - Mormon Coulee_Permitting_vanessaBWH88.rvt
7 Brew Template V3.0
2022-11-20_LAYOUT V04

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No. Description Date

sheet issue date:
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project no.:
22.34.73

sheet contents:
FINISH AND FIXTURE
PLANS

sheet no.:

A1.3

EQUIPMENT AND FIXTURE SCHEDULE

ITEM NO.	QTY.	MANUFACTURER	PRODUCT	PRODUCT NO.	SIZE	NOTES
EQ-1	1	NATIONAL MODULAR MANUFACTURING	REMOTE WALK-IN COOLER W/ STORAGE	CUSTOM	202 SQUARE FEET	
EQ-1.2	1	SUPPLIED WITH COOLER	WALK-IN CONDENSER			
EQ-2	1	BUNN WATER HEATER	HOT WATER MACHINE	HSX-ELEMENT		
EQ-3	1	LA MARZOCCO	ESPRESSO MACHINE	LINEA PB (AV) - 3		
EQ-4	2	LA MARZOCCO	ESPRESSO MACHINE	LINEA PB (AV) - 4		
EQ-5	2	MANITOWOC	ICE MAKER HEADS	IVF 1800 C		A
EQ-6	1	MANITOWOC	ICE MAKER BIN	LB 1760	60"	
EQ-7	27	TORRANI	SYRUP RACK			C
EQ-8	3	VITAMIX	BLENDER			C
EQ-9	3	STAINLESS STEEL VENDOR	STAINLESS STEEL STORAGE SHELVING		(A) SS 42" x 36" x 36" (B) SS 36" x 60" x 72" (C) SS 12" x 36" x 80" (D) SS 36" x 36" x 84"	B
EQ-10	2	SPACEMAN	CHILLER MACHINE	6695-C		
EQ-10.1	1	SPACEMAN	STAND/ROOLING CART	CART-550		
EQ-11	3	MAZZER	COFFEE BEAN GRINDER	ROBUR S NERO		
EQ-12	1	MAZZER	DECAF COFFEE BEAN GRIDER	SUPER JOLLY PRO V (E) NERO		
EQ-13	3	RUBBERMAID	TRASH CONTAINER			C
EQ-14	1	ATOSA	REACH-IN COOLER	MCF8723GR	54"	B
EQ-15	3	LA CROSSLR	MOBILE ICE BINS	513034 CL-24ICCB-31	36"	B
EQ-16	1	TRAUlsen	UNDERCOUNTER COOLER	CULC-36R-GD	36"	B
EQ-17	3	STRONGMAY	AIR CURTAIN	49947	36"	D
EQ-18	4	BLEND TECH	RAPID RINSER			B
EQ-19	3	T&S BRASS	RINSE WELL W/ STEM	B-2282-01-F05		
EQ-20	1	ATOSA	HAND WASH SINK	MRS-HS-18(W)	18" x 14" x 5"	B
EQ-21	2	EPOXY-COATED WALL SHELF	WALL-MOUNTED SHELF		48" x 14"	B
EQ-22	4	EPOXY-COATED SHELVING UNIT	COOLER SHELVING		(2) 24" x 48" (2) 24" x 60"	B
EQ-23	1	STAINLESS WALL SHELF	WALL-MOUNTED SHELF		36" x 14"	B
EQ-24	1	MULTIPURPOSE DRY CHEMICAL (2A:10BC) FIRE EXTINGUISHER	FIRE EXTINGUISHER	PER NFPA 10		C

GENERAL SCHEDULE NOTES:

ALL EQUIPMENT TO BE INSTALLED BY A LICENSED INSTALLER AND TO MANUFACTURER SPECIFICATIONS

EQUIPMENT SCHEDULE NOTES:

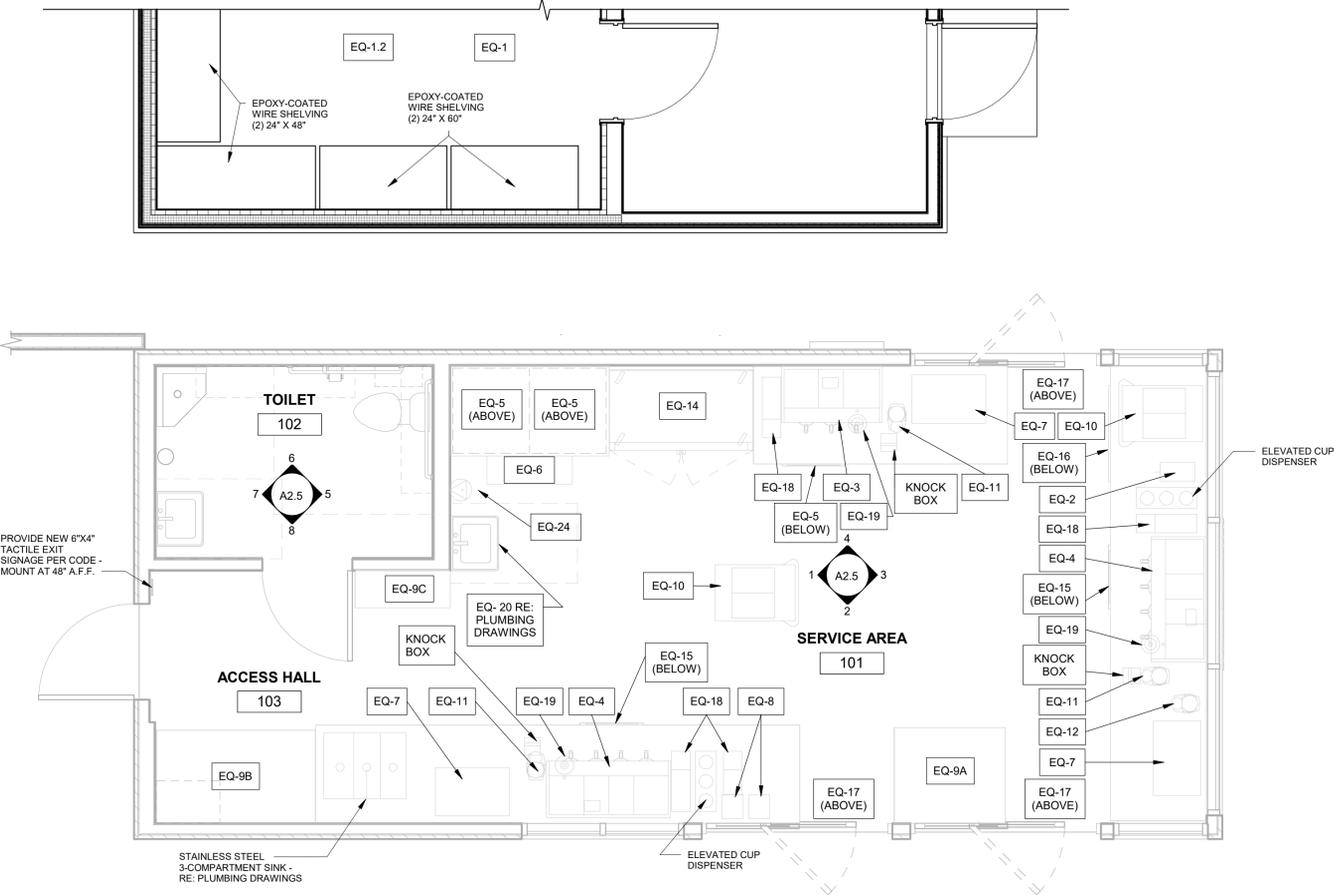
- A. REMOTE CONDENSOR - IF 1800C
- B. EQUIPMENT MANUFACTURER IS OPTIONAL BUT MUST BE EQUAL APPROVED BY 7BREW - U.N.O.
- C. PROVIDED BY SMALLWARES PROVIDER
- D. PROVIDED BY BUILDING MANUFACTURER

FINISH MATERIALS SCHEDULE

CODE	ITEM	DESCRIPTION	REMARKS
BRK-1	FIBER-CEMENT PANEL SIDING	BRAND: NICHIIHA COLOR: MIDNIGHT STYLE: MODERN BRICK	EXTERIOR WAINSCOT AND REAR WALL a., d.
BRK-2	FIBER-CEMENT PANEL SIDING	BRAND: NICHIIHA COLOR: SHALE BROWN STYLE: CANYON BRICK	EXTERIOR WALLS ABOVE WAINSCOT & ATTIC REAR b.
FRP-1	FRP WALL COVERING	BRAND: NUDD FIBERLITE COLOR: WHITE SIZE: 4'x FULL HEIGHT x .090"	SERVICE AREA & TOILET a.
MP-1	BRAKE METAL	BRAND: BERRIDGE COLOR: ZINC GREY FINISH: LOW SHEEN SMOOTH	SCREENING GUARDRAIL a.
MP-2	BRAKE METAL	BRAND: BERRIDGE COLOR: ROYAL BLUE FINISH: LOW SHEEN SMOOTH	METAL ROOF AND CANOPTIES a.
MP-3	BRAKE METAL	BRAND: BERRIDGE COLOR: ZINC GREY FINISH: LOW SHEEN SMOOTH	METAL COPING AT REAR WALL a.
MP-4	BRAKE METAL	BRAND: BERRIDGE COLOR: ZINC GREY FINISH: LOW SHEEN SMOOTH	METAL COPING AT SIDE WALLS a.
PT-1	PAINT	BRAND: SHERWIN WILLIAMS COLOR: "INDIGO" SW 6531 FINISH: EGGSHELL	CEILING TRIMS AND MISC TRIMS a., c.
PT-2	PAINT	BRAND: SHERWIN WILLIAMS COLOR: "FIRST STAR" SW 7646 FINISH: SEMI-GLOSS	CEILING, INTERIOR TOILET ROOM WALLS, DOORS, AND FRAMES a., c.
VB-1	RISILIENT VINYL BASE	BRAND: AMARCO COLOR: LIGHT GRAY STYLE: PROTECT-ALL BASE	SERVICE AREA AND TOILET a.
VT-1	RESILIENT VINYL FLOORING	BRAND: AMARCO COLOR: LIGHT GRAY STYLE: PROTECT-ALL FLOORING	SERVICE AREA AND TOILET a.
WC-1	DECORATIVE WALL COVERING	CUSTOM VINYL WALL COVERING	COOLER WALLS a.

FINISH MATERIALS SCHEUDLE NOTES:

- a. SITE CONTRACTOR TO COORDINATE WITH PREFABRICATOR DIRECTLY TO DETERMINE SCOPE SPLIT OF ITEMS PROVIDED/INSTALLED/FINISHED WITHIN FABRICATION FACILITY VERSUS ON-SITE.
- b. PROVIDE COMPLETE ARCHITECTURAL SIDING SYSTEM AND ACCESSORIES, INCLUDING MATCHING MANUF FABRICATED CORNERS, FLASHINGS, AND TRIMS. SIDING INSTALLATION PER MANUF INSTALLATION INSTRUCTIONS.
- c. PROVIDE A MINIMUM OF TWO (2) COATS PAINT OVER ONE (1) COAT PRIMER ON ALL EXPOSED GYP BD IN SERVICE AREA AND TOILET.
- d. PROVIDE COMPLETE NICHIIHA SYSTEM AND ACCESSORIES INCLUDING MATCHING MANUF. FABRICATED CORNERS, FLASHINGS, AND TRIMS. INSTALL PER MANUF. INSTALLATION INSTRUCTIONS.



2 FIXTURE PLAN

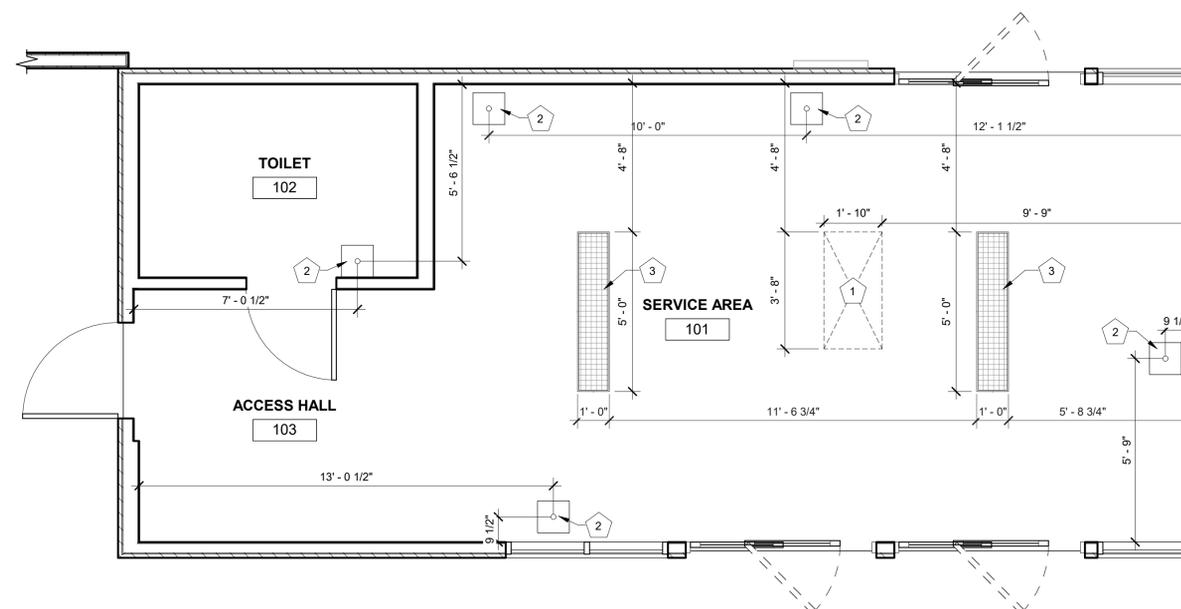
3/8" = 1'-0"

FLOOR FINISH GENERAL NOTES

- 1. PROTECT-ALL VINYL FLOORING AND COVE BASE THROUGHOUT SERVICE AREA AND TOILET; TYP.

FLOOR FINISH KEYNOTES

NOTE NO.	NOTE TEXT
1	ACCESS DOOR FOR CRAWLSPACE ACCESS
2	12"x12" FLOOR SINK WITH 3/4 GRATE
3	12"x60" FLOOR DRAIN AND GRID GRATE



1 FLOOR FINISH PLAN

3/8" = 1'-0"



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REVISIONS
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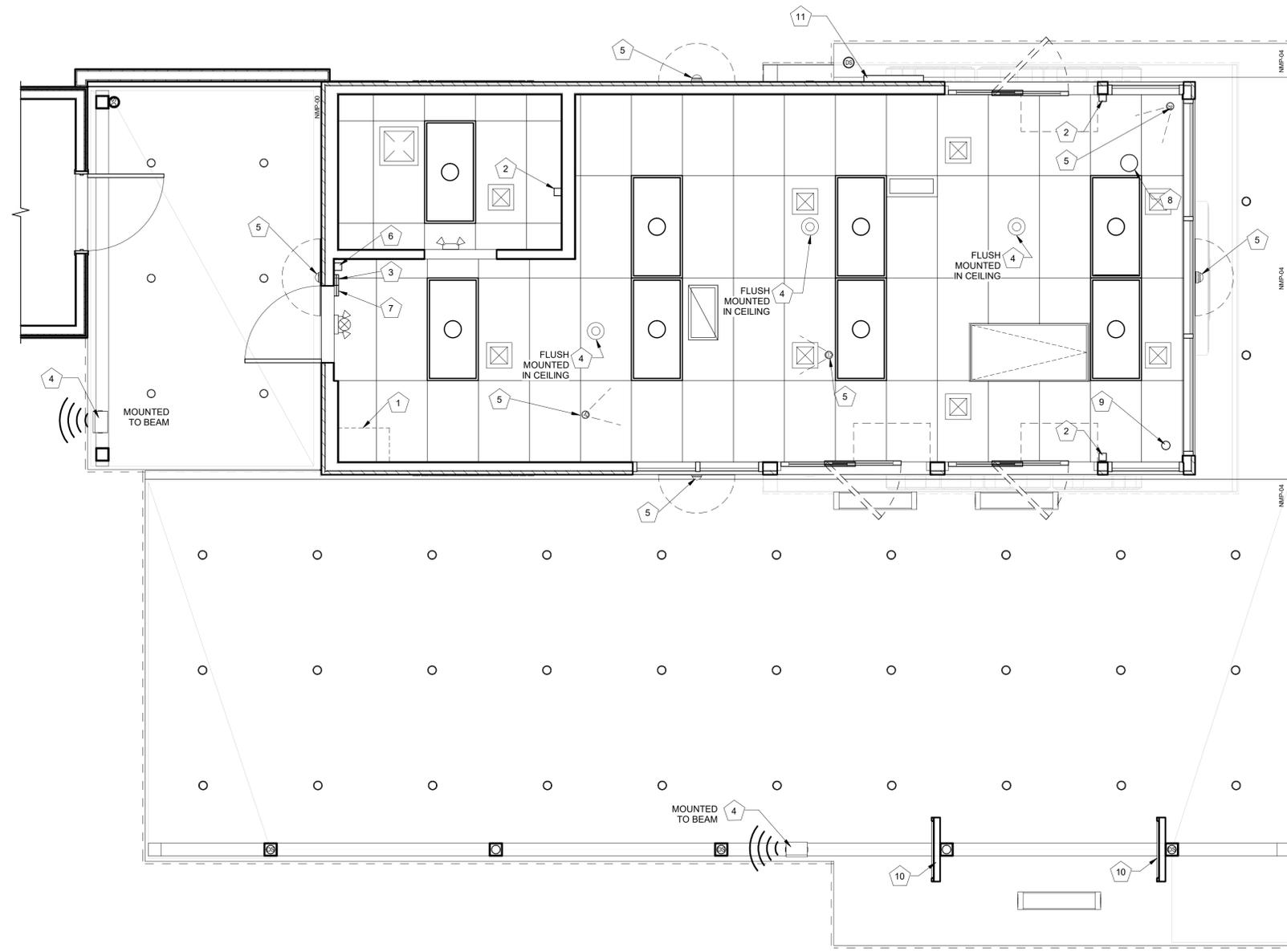
project no.:
22.34.73

sheet contents:
SYSTEMS PLAN

sheet no.:

A1.4

NOTE NO.	NOTE TEXT
1	DATA RACK - INSTALLED IN FACTORY - REF DETAIL FOR EQUIPMENT LAYOUT
2	PANIC BUTTON, TYP OF (3) MOUNTED 44" A.F.F. - INSTALLED IN FIELD BY IT PROVIDER
3	THERMOSTAT - INSTALLED IN FACTORY
4	SPEAKERS - INSTALLED IN FIELD BY IT PROVIDER
5	SECURITY CAMERA - INSTALLED IN FIELD BY SECURITY PROVIDER
6	VOLUME CONTROLLER, MOUNTED UNDER ALARM PANEL - INSTALLED IN FIELD BY IT PROVIDER
7	SECURITY KEY PAD ALARM PANEL - INSTALLED IN FIELD BY SECURITY PROVIDER
8	WIRELESS ACCESS POINT, CEILING MOUNTED - INSTALLED IN FIELD BY IT PROVIDER
9	TV DROP MOUNT FOR SECURITY MONITOR - INSTALLED IN FIELD BY IT PROVIDER
10	SAMSUNG DIGITAL DISPLAYS - INSTALLED IN FIELD BY IT PROVIDER - CHASE FOR DATA CABLE INSTALLED AT BUILDING MANUFACTURING FACILITY
11	FLUSH MOUNTED LIGHTED SIGN BOX



1 AUDIO VISUAL FLOOR PLAN
3/8" = 1'-0"

GENERAL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF THE LANDLORDS CRITERIA PRIOR TO CONSTRUCTION. FAILURE TO ACCOUNT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE HIM FROM ANY RESPONSIBILITY.
- CONTRACTOR SHALL THOROUGHLY VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION. ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT.

CEILING FINISH LEGEND

- C1 2x4 LAY-IN ACOUSTIC CEILING TILE.
- C2 OPEN TO STRUCTURE ABOVE

NOTE: LADDER TO COMPLY WITH 2021 IMC SEC. 306.5

- LADDER RUNG SPACING NOT TO EXCEED 14". THE UPPERMOST RUNG SHALL NOT BE GREATER THAN 24" BELOW THE UPPER EDGE OF MECHANICAL ROOM FLOOR.
- LADDER TOE SPACING MIN. 6" DEEP.
- MIN. 18" BETWEEN RAILS.
- RUNGS MIN. DIA. 3/4" AND SHALL BE CAPABLE OF WITHSTANDING A 300 LB LOAD.
- LADDER TO BE PROVIDED WITH MIN. 30"x30" CLEAR LANDING.

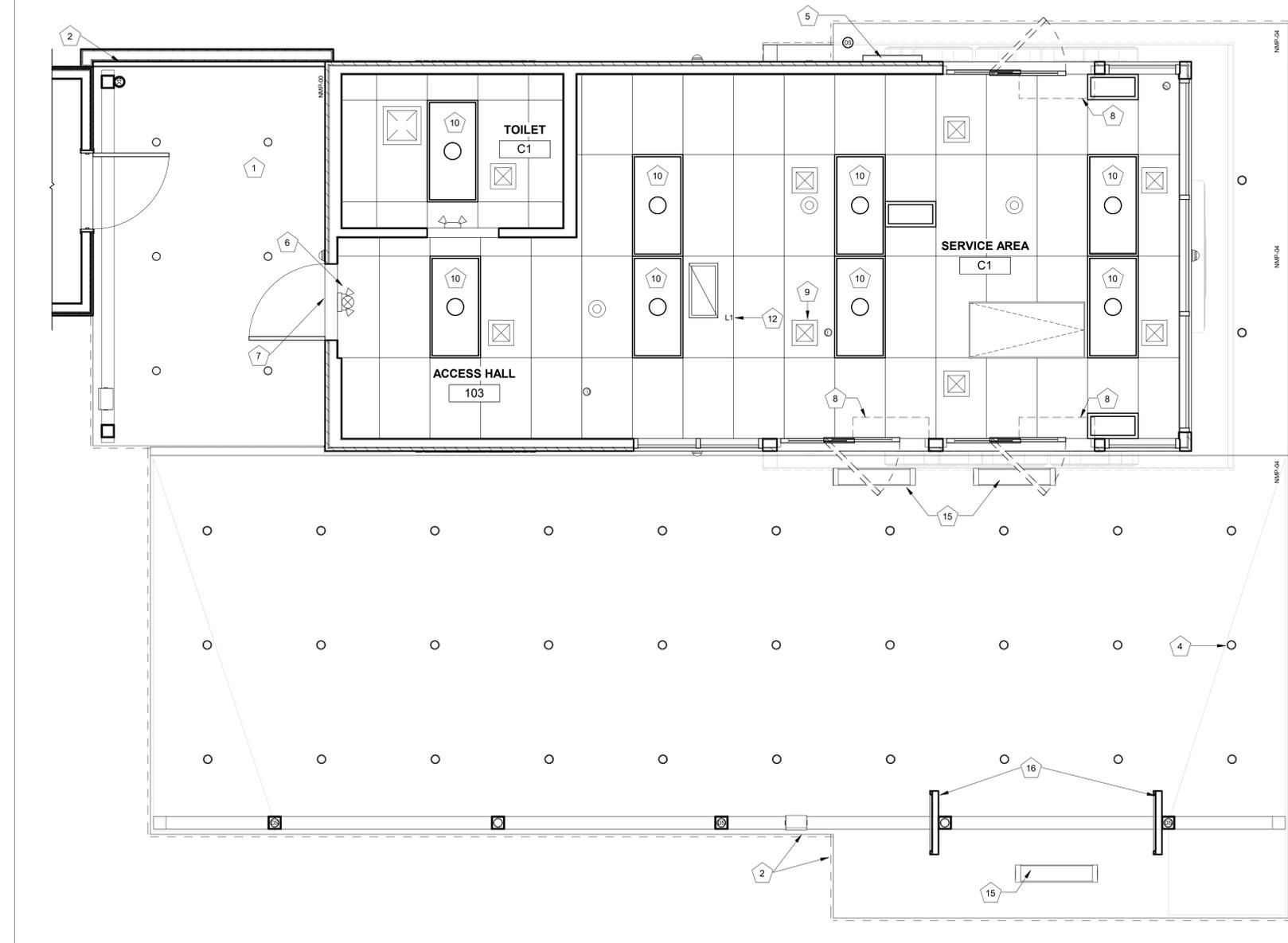
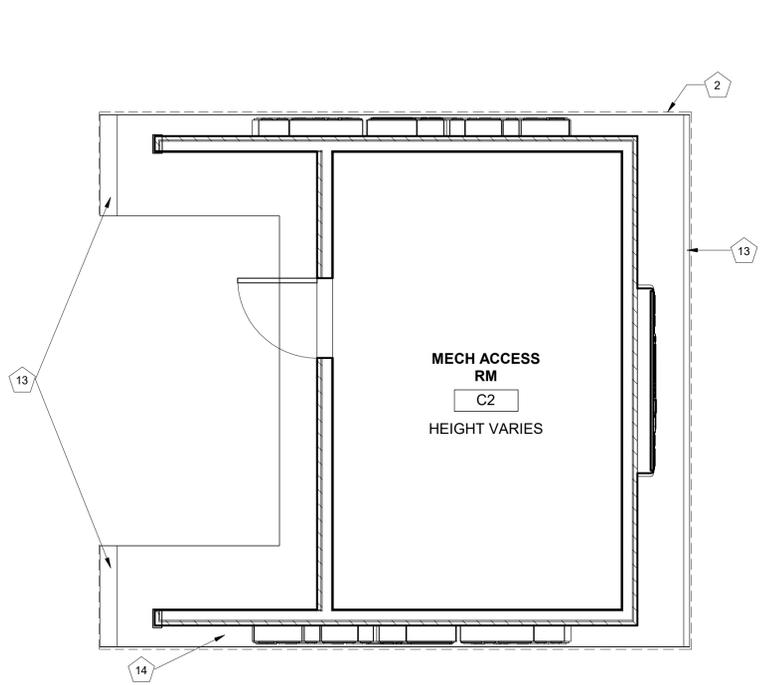
SPECIFICATION OF PROVIDED LADDER

- MODEL: #AL2511R5
- LOAD CAPACITY: 375 LBS.
- CEILING HEIGHTS: 7'-8" TO 10'-3"
- ROUGH OPENING: 25.5" X 54"
- APPROXIMATE LANDING SPACE AT 10'-3" CEILING HEIGHT: 66"
- APPROXIMATE PROJECT WIDTH: 74"
- APPROXIMATE WEIGHT: 58.5 LBS.

THE LADDER AND ROOF HATCH ARE PROVIDED ATTACHED TOGETHER AND SCREWED TO THE OPENING WITH SELF TAPPING SCREWS.

REFLECTED CEILING PLAN KEYNOTES

NOTE NO.	NOTE TEXT
1	PRE-ENGINEERED CANOPY AND FRAMING - RE: CANOPY SHOP DRAWINGS
2	SURFACE-MOUNTED LED NEON FLEX LIGHTING AS INDICATED (SHOWN DASHED) - TYP. - RE: ELECTRICAL DRAWINGS
3	MECH. ACCESS DOOR AND LADDER (REF LADDER NOTES & SPECS THIS SHEET)
4	4" LED CAN LIGHTS TYP. - RE: ELECTRICAL DRAWINGS
5	SURFACE MOUNTED EXTERIOR SIGN BOX
6	EXIT SIGNAGE - TYP. - RE: ELECTRICAL DRAWINGS
7	SECURITY LIGHT - TYP. - RE: ELECTRICAL DRAWINGS
8	AIR CURTAIN ABOVE SLIDING WINDOW TYP. EACH SIDE - RE: ELECTRICAL DRAWINGS
9	SUPPLY AND RETURN CONCENTRIC DIFFUSERS - RE: MECHANICAL DRAWINGS
10	2x4 LIGHT RECESSED INTO ACOUSTIC CEILING GRID
12	LIGHT FIXTURE IN CRAWL SPACE BELOW
13	REGAL BLUE BRAKE METAL FASCIA (MP-2)
14	REGAL BLUE SOFFIT PANEL (MP-2)
15	OVERHEAD ELECTRIC HEATER - RE: MECHANICAL DRAWINGS; FINAL INSTALLED LOCATION TO BE DETERMINED IN FIELD - VERIFY W/ OWNER & INSTALL W/ CLEARANCES ACCORDING TO MANUFACTURER'S RECOMMENDATIONS
16	SAMSUNG DIGITAL DISPLAYS - INSTALLED IN FIELD BY IT PROVIDER - CHASE FOR DATA CABLE INSTALLED AT BUILDING MANUFACTURING FACILITY



2 RCP - MECH ACCESS ROOM
3/8" = 1'-0"

1 RCP - LEVEL 1
3/8" = 1'-0"



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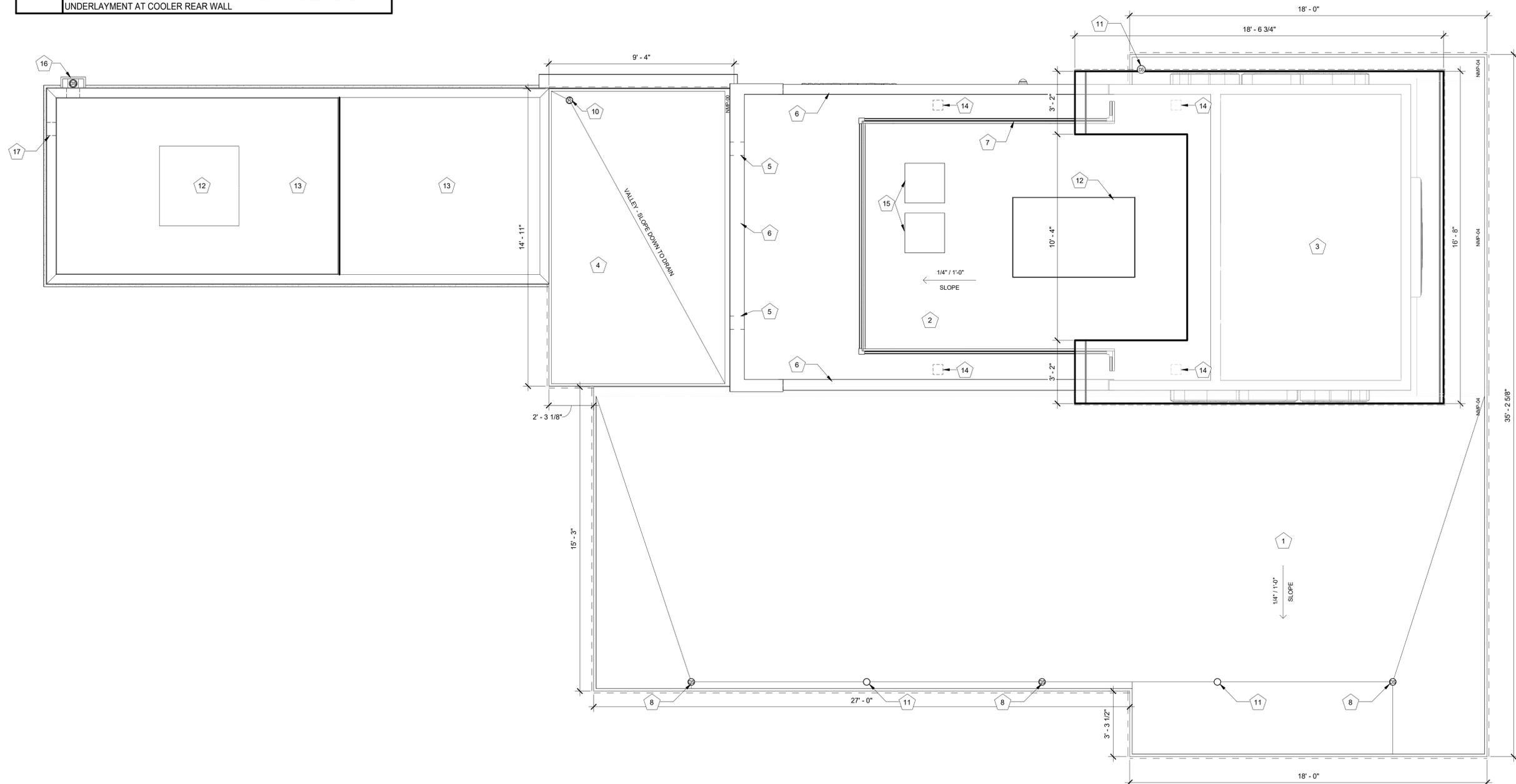
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22.34.73

sheet contents:
ROOF PLAN

sheet no.:

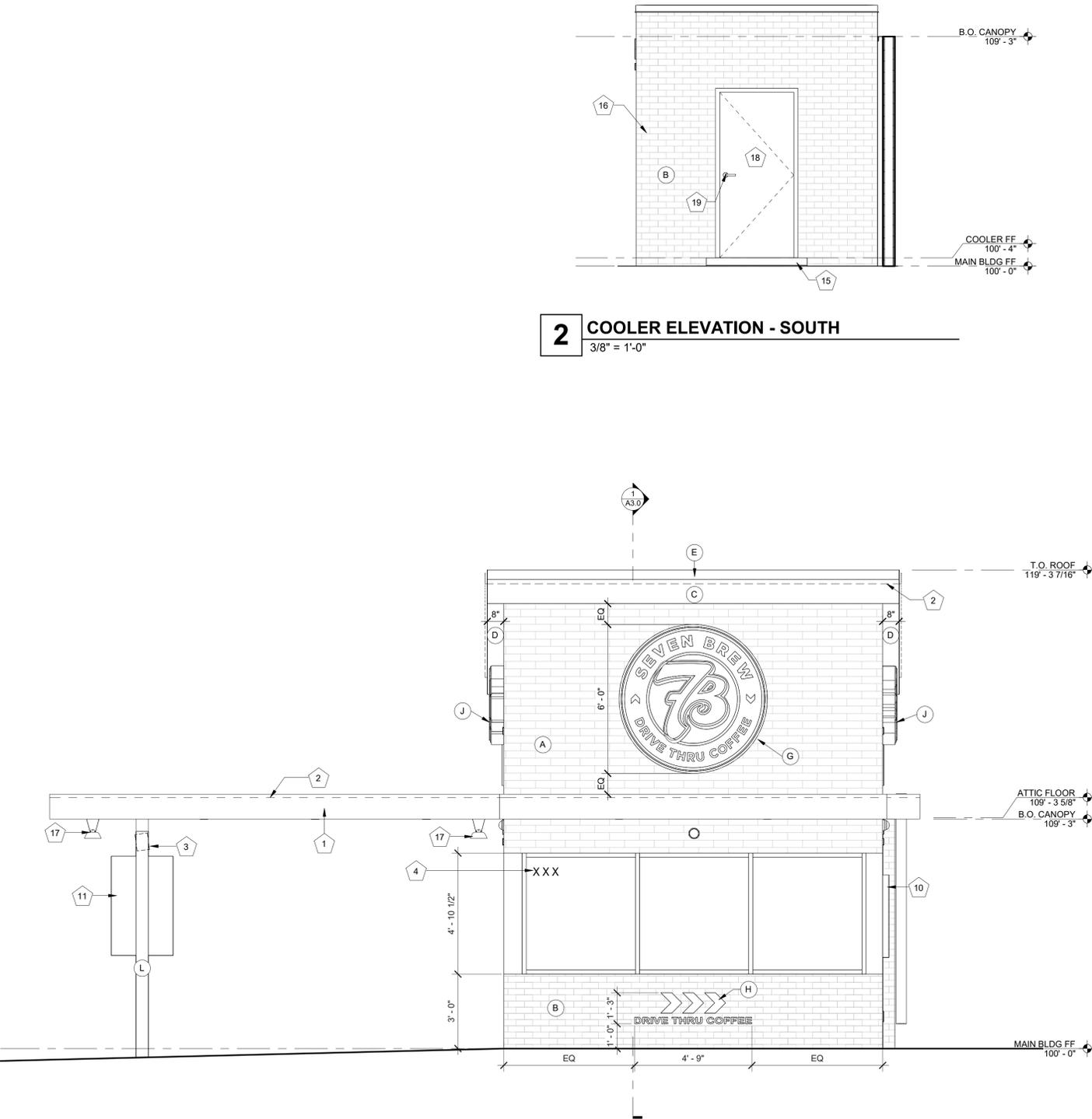
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NOTE NO.	NOTE TEXT
1	PRE-ENGINEERED CANOPY AND FRAMING; RE: CANOPY SHOP DRAWINGS
2	TPO ROOFING ON ROOF SHEATHING PER STRUCT
3	CORRUGATED ARC METAL ROOF ON #15 FELT ON PLYWOOD ROOF SHEATHING
4	TPO ROOFING ON ROOF SHEATHING PER STRUCT ON BUILT-UP 2x CRICKET FRAMING
5	8" WIDE X 4" HIGH TPO ROOF SCUPPER WITH SHEET METAL UNDERLAYMENT AT REAR WALL
6	BRAKE METAL CAP; RE: ELEVATIONS
7	3' - 6" GUARDRAIL
8	ROOF DRAIN WITHIN STRUCTURAL COLUMN; CONNECT TO STORMWATER COLLECTION SYSTEM; RE: CIVIL
9	ROOF DRAIN WITHIN STRUCTURAL COLUMN; DOWNSPOUT SCUPPER TO STORMWATER COLLECTION SYSTEM; RE: CIVIL
10	ROOF DRAIN; DOWNSPOUT TO BE GALVANIZED, PAINTED, STEEL PIPE. CONNECT TO SUB-GRADE STORMWATER COLLECTION SYSTEM; RE: CIVIL
11	OVERFLOW ROOF DRAIN
12	HVAC EQUIPMENT
13	ROOFING PER COOLER MANUF; COORDINATE WITH OWNER
14	MODULAR BUILDING PICK POINTS WITH ROOFING COLLAR; RE: STRUCT
15	ICE MACHINE CONDENSERS; SITE CONTRACTOR TO DETERMINE FINAL LOCATION
16	CONDUCTOR HEAD; DOWNSPOUT TO BE GALVANIZED, PAINTED, STEEL PIPE. CONNECT TO SUB-GRADE STORMWATER COLLECTION SYSTEM; RE: CIVIL
17	OVERFLOW 8" WIDE X 4" HIGH TPO ROOF SCUPPER WITH SHEET METAL UNDERLAYMENT AT COOLER REAR WALL



1 ROOF PLAN
3/8" = 1'-0"





1 EXTERIOR ELEVATION - SOUTH
3/8" = 1'-0"

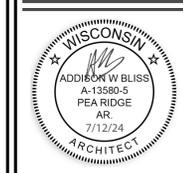
2 COOLER ELEVATION - SOUTH
3/8" = 1'-0"

EXTERIOR ELEVATION KEYNOTES	
NOTE NO.	NOTE TEXT
1	PRE-ENGINEERED ALUMINUM CANOPY BY OTHERS; REF STRUCTURAL
2	SURFACE-MOUNTED LED NEON FLEX LIGHTING AS INDICATED (SHOWN DASHED), TYP; REF ELECTRICAL
3	MOUNTED SPEAKER SYSTEM; SEE SYSTEMS PLAN
4	ADDRESS NUMBERS TO BE 8" TALL x 2" BRUSH STROKE
5	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; REF ELECTRICAL
6	FROST-PROOF FLUSH HOSE BIB
7	EXTERIOR WEATHER-PROOF OUTLET; REF ELECTRICAL
8	THROUGH WALL ROOF SCUPPER DRAIN BEYOND
9	THROUGH WALL ROOF SCUPPER DRAIN - OVERFLOW
10	SURFACE-MOUNTED LIGHTED SIGN BOX
11	SAMSUNG DIGITAL DISPLAYS; INSTALLED IN FIELD BY IT PROVIDER; CHASE FOR DATA CABLE INSTALLED AT BUILDING MANUFACTURING FACILITY
12	GUARDRAIL CLAD W/MP-1; 3' - 6' ABOVE ATTIC FLOOR
13	HVAC EQUIPMENT
14	OUTLINE OF MECHANICAL UNIT BEYOND
15	RUBBERIZED RAMP TO COOLER DOOR; LESS THAN 36" RUN LENGTH
16	PREFABRICATED WALK-IN COOLER BY NATIONAL MODULAR MANUF.; COORDINATE LOCATION & SPECS W/ CIVIL & STRUCT
17	CANOPY HEATER
18	36" COOLER DOOR
19	COOLER LOCK & CONTROLS
20	SITE SCREEN WALL

EXTERIOR ELEVATION MATERIALS LEGEND	
NOTE NO.	NOTE TEXT
A	VERTICAL METAL SIDING (MP-1)
B	ARCHITECTURAL CEMENT BOARD SIDING (BRK-1)
C	BRAKE METAL FASCIA (MP-2)
D	SOFFIT PANELS (MP-2)
E	STANDING SEAM ROOF PANELS (MP-2)
F	METAL BRAKE CAP (MP-3)
G	ROUND STOREFRONT SIGN; SUPPLIED AND INSTALLED BY SIGN CONTRACTOR
H	1/4" THICK ACRYLIC SIGNAGE APPLIED TO SIDING WITH VH DOUBLE SIDE TAPE
J	ILLUMINATED STOREFRONT SIGNAGE BY SIGN CONTRACTOR
K	VINYL WRAP, SUPPLIED AND INSTALLED BY OWNER
L	PAINTED STRUCTURAL CANOPY COLUMN; RAINWATER DOWNSPOUT WITHIN; CONNECT BASE OF CANOPY COLUMN DOWNSPOUT TO STORMWATER MANAGEMENT SYSTEM; REF CIVIL
M	PAINTED STRUCTURAL CANOPY COLUMN; REF CIVIL
N	EXPOSED DOWNSPOUT, GALVANIZED, PAINTED; CONNECT TO SUB-GRADE STORM WATER COLLECTION SYSTEM; REF CIVIL
P	EXPOSED DOWNSPOUT, GALVANIZED, PAINTED; DRAIN TO GRADE; REF CIVIL



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EXTERIOR ELEVATIONS

sheet no.:
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22.34.73

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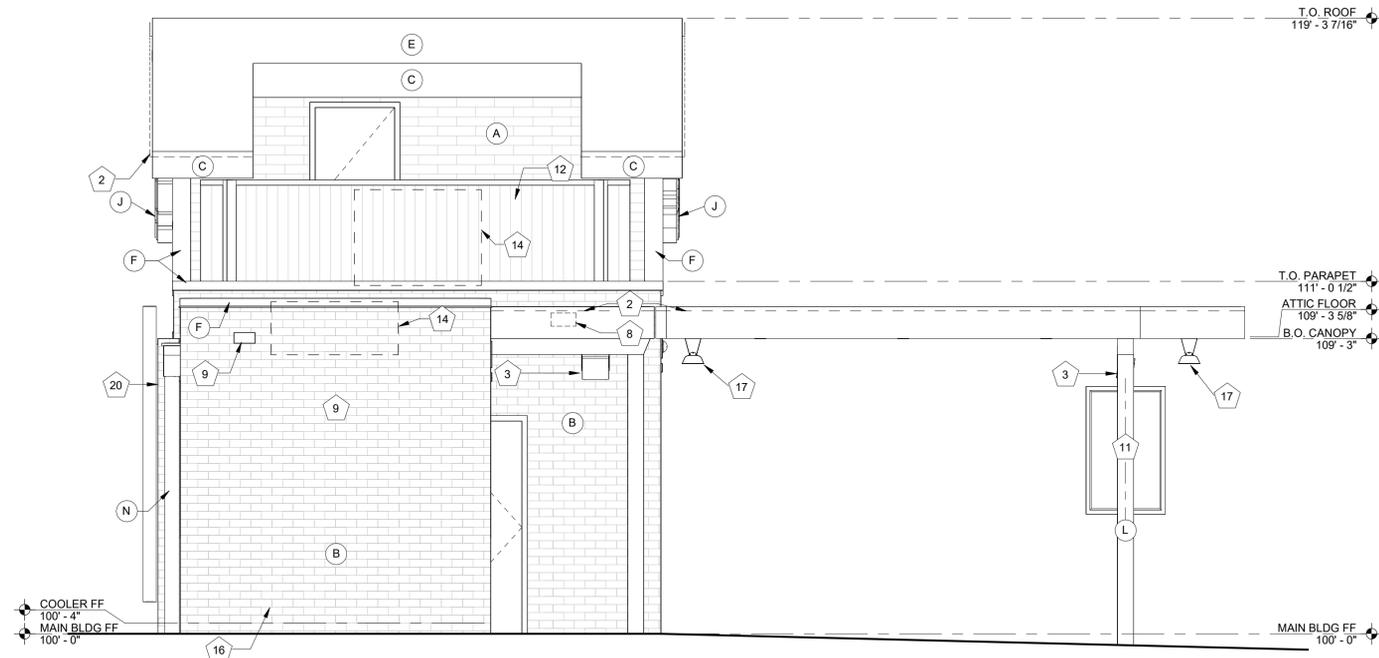
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EXTERIOR ELEVATION KEYNOTES

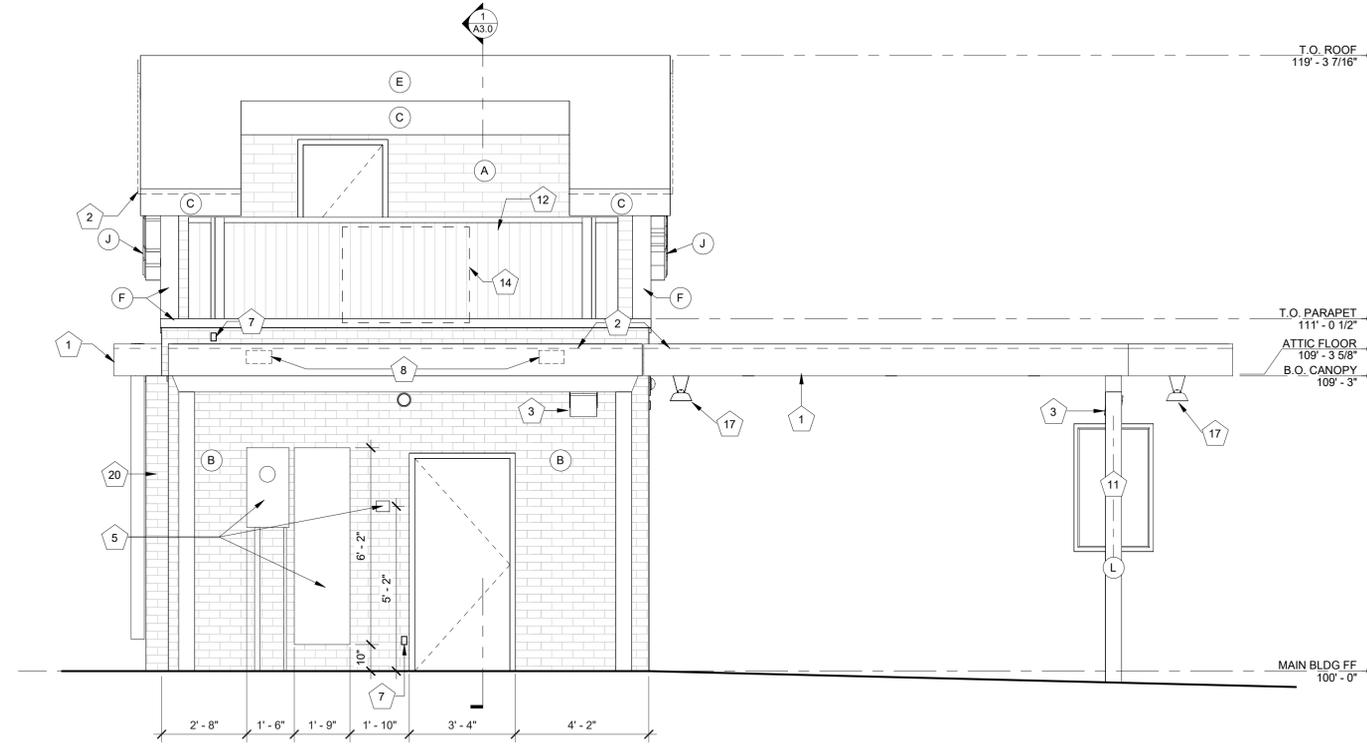
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EXTERIOR ELEVATION MATERIALS LEGEND

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P	EXPOSED DOWNSPOUT, GALVANIZED, PAINTED; DRAIN TO GRADE; REF CIVIL



2 EXTERIOR ELEVATION - NORTH W/COOLER
3/8" = 1'-0"



1 EXTERIOR ELEVATION - NORTH
3/8" = 1'-0"



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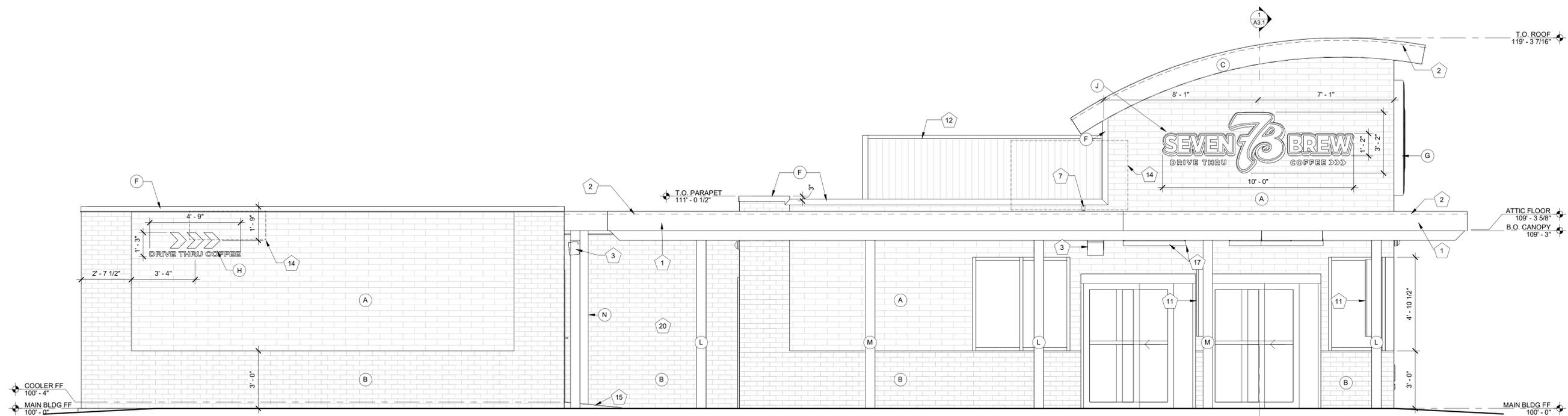
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EXTERIOR ELEVATION MATERIALS LEGEND

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A	VERTICAL METAL SIDING (MP-1)
B	ARCHITECTURAL CEMENT BOARD SIDING (BRK-1)
C	BRAKE METAL FASCIA (MP-2)
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E	STANDING SEAM ROOF PANELS (MP-2)
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EXTERIOR ELEVATION KEYNOTES

NOTE NO.	NOTE TEXT
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20	SITE SCREEN WALL



1 EXTERIOR ELEVATION - WEST
3/8" = 1'-0"



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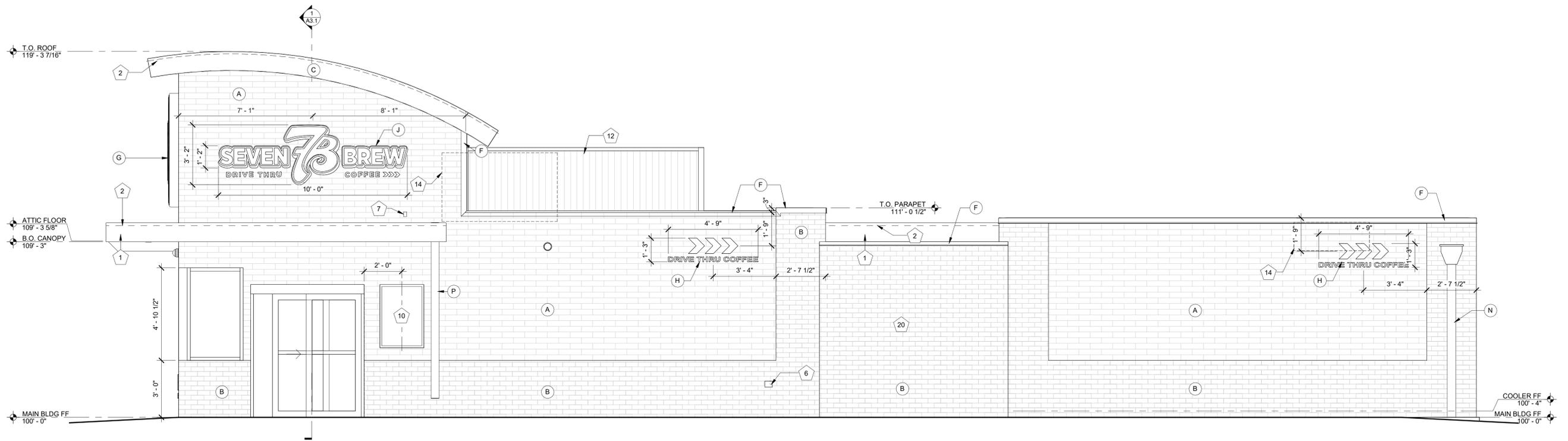
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EXTERIOR ELEVATION MATERIALS LEGEND

NOTE NO.	NOTE TEXT
A	VERTICAL METAL SIDING (MP-1)
B	ARCHITECTURAL CEMENT BOARD SIDING (BRK-1)
C	BRAKE METAL FASCIA (MP-2)
D	SOFFIT PANELS (MP-2)
E	STANDING SEAM ROOF PANELS (MP-2)
F	METAL BRAKE CAP (MP-3)
G	ROUND STOREFRONT SIGN; SUPPLIED AND INSTALLED BY SIGN CONTRACTOR
H	1/4" THICK ACRYLIC SIGNAGE APPLIED TO SIDING WITH VH DOUBLE SIDE TAPE
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20	SITE SCREEN WALL



1 EXTERIOR ELEVATION - EAST
3/8" = 1'-0"

TOILET ELEVATION GENERAL NOTES

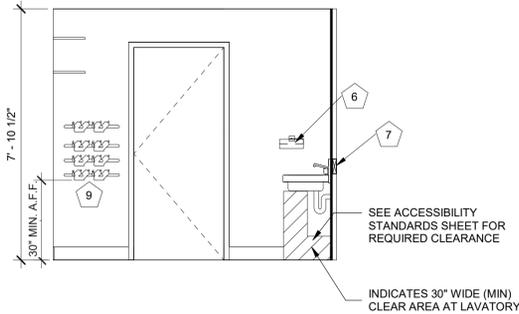
- ALL WALLS TO BE NUDO FIBERLITE CLASS C .090" FRP PANELS, FULL HEIGHT, ADHERED TO MIN 1/2" FIBERBOARD PANELS.
- GRAB BAR AND ANY OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE MIN. RADIUS OF 1/8" - 1 1/2" DIA. GRAB BAR.
- TOILET PAPER HOLDER MUST BE WITHIN HATCHED AREA INDICATED IN 6/A3.2.
- PROVIDE PROTECTIVE COVER TO EXPOSED PIPES - RE: PLUMBING DRAWINGS.

TOILET ELEVATION KEYNOTES

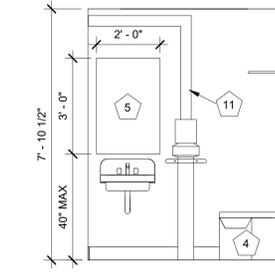
NOTE NO.	NOTE TEXT
1	ROLL-OUT TYPE WATERPROOF MEMBRANE AT TOILET - RETURN MEMBRANE UP WALL MIN 6"
2	(T-1) TOILET PAPER HOLDER
3	STAINLESS STEEL SHELVING
4	MOP SINK
5	1/4" CLEAR MIRROR
6	(T-2) PAPER TOWEL HOLDER MOUNTED AT 42" A.F.F.
7	PROVIDE 2x WOOD BLOCKING BEHIND LAVATORY AS INDICATED FOR ADDITIONAL SUPPORT
8	BROOM AND MOP HOLDER
9	RPZ VALVES
10	WATER FILTERS
11	EXHAUST PIPE & INLINE FAN

INTERIOR ELEVATION KEYNOTES

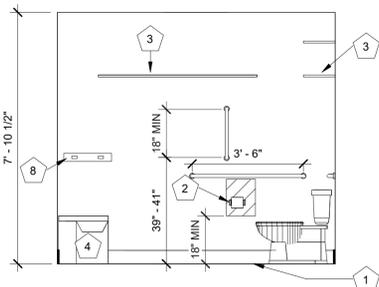
NOTE NO.	NOTE TEXT
1	FRP WALL PANELS (FRP-1) ON MIN 1/2" FIBERBOARD SUBSTRATE
2	STAINLESS STEEL STORAGE SHELVING
3	PROTECT-ALL RUBBER BASE (VB-1); TYP
4	NEW MULTIPURPOSE DRY CHEMICAL (2A:10BC) FIRE EXTINGUISHER (PER NFPA 10)
5	REACH-IN MERCHANDISER
6	MANITOWOC ICE BIN
7	DATA RACK
8	EPOXY-COATED WIRE SHELVING, 48" X 12"; TYP OF (2)
9	32" SECURITY DISPLAY



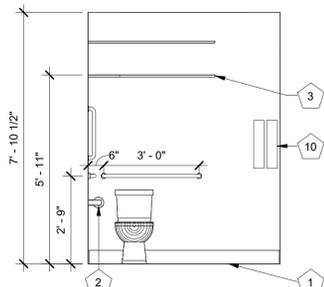
8 SIDE ELEVATION AT LAVATORY
3/8" = 1'-0"



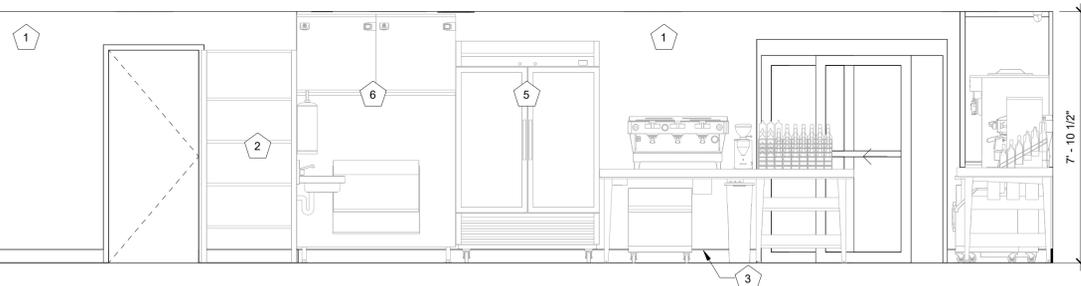
7 FRONT ELEVATION AT LAVATORY
3/8" = 1'-0"



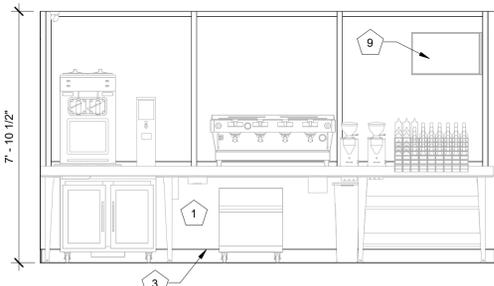
6 SIDE ELEVATION AT TOILET
3/8" = 1'-0"



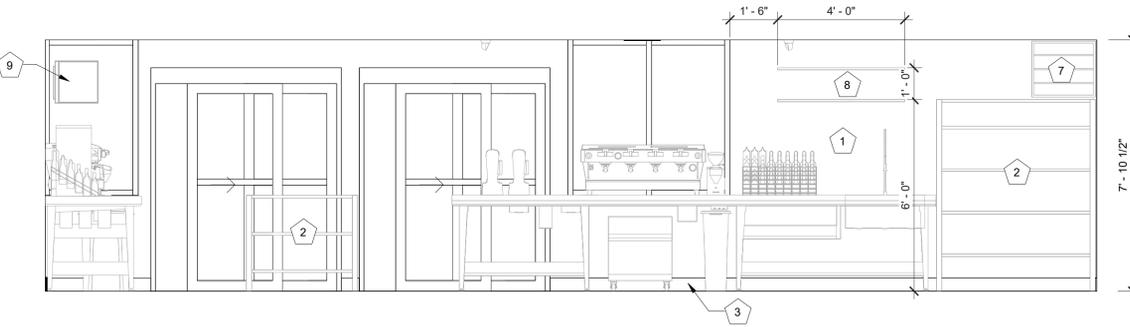
5 FRONT ELEVATION AT TOILET
3/8" = 1'-0"



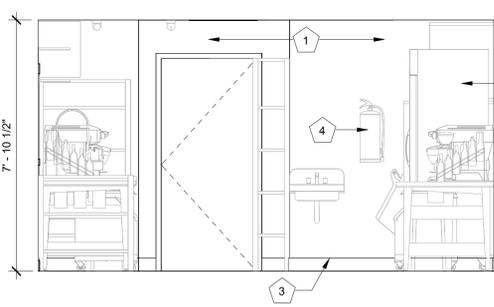
4 INTERIOR ELEVATION
3/8" = 1'-0" LOOKING AT RESTROOM DOOR



3 INTERIOR ELEVATION
3/8" = 1'-0" LOOKING AT MAIN COUNTER



2 INTERIOR ELEVATION
3/8" = 1'-0" LOOKING AT STORAGE RACKS



1 INTERIOR ELEVATION
3/8" = 1'-0" LOOKING AT BACK DOOR



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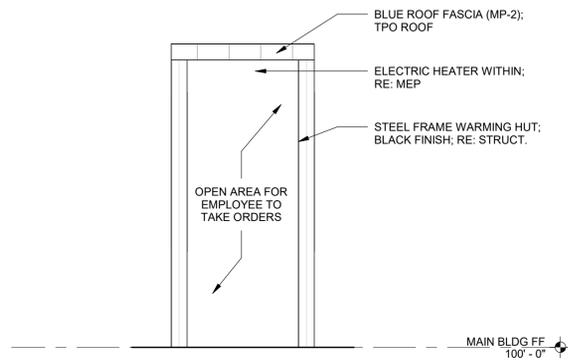
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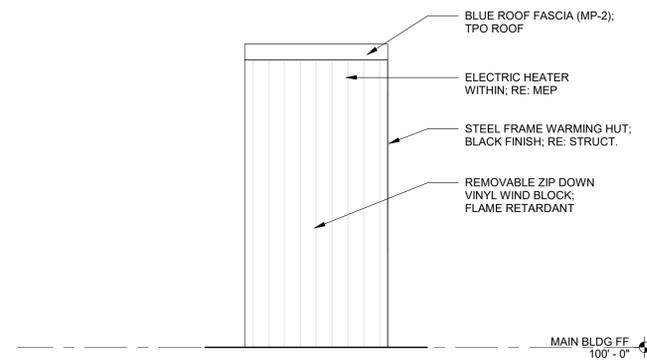
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EXTERIOR ELEVATIONS

sheet no.:

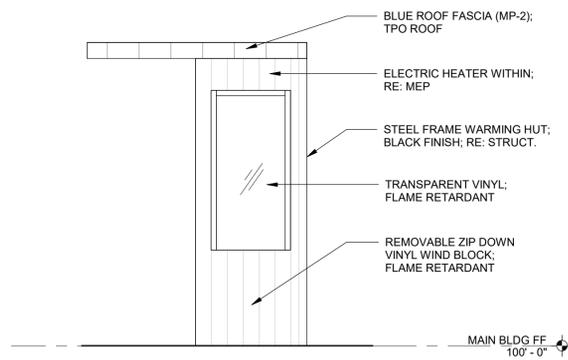
A2.9



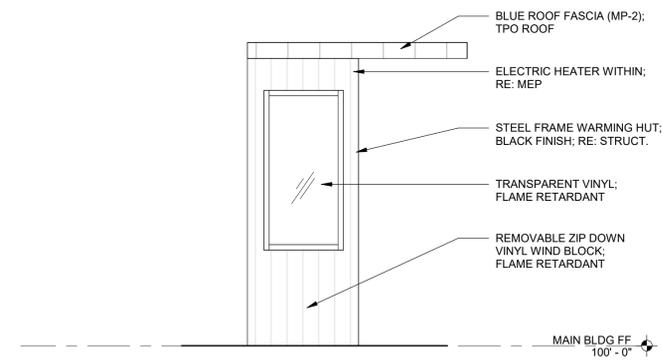
4 WARMING HUT ELEVATION - FRONT
3/8" = 1'-0"



3 WARMING HUT ELEVATION - BACK
3/8" = 1'-0"



2 WARMING HUT ELEVATION - LEFT
3/8" = 1'-0"



1 WARMING HUT ELEVATION - RIGHT
3/8" = 1'-0"

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7 BREW DRIVE THRU - LA CROSSE WI - MORMON COULE

PLAZA STREET PARTNERS, LLC

XXXX MORMON COULEE RD, LA CROSSE WISCONSIN, 54601

REVISIONS

No.	Description	Date

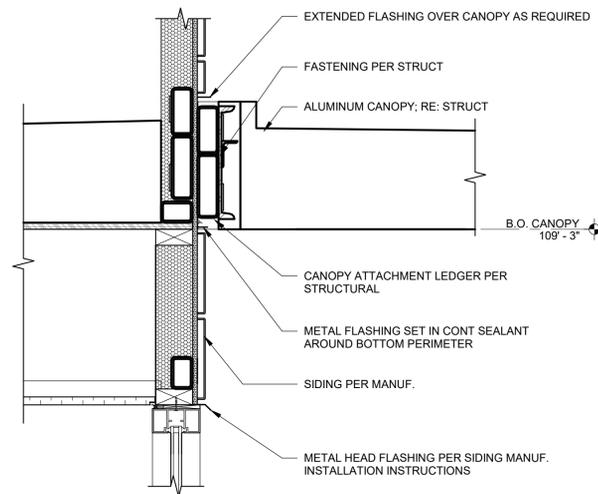
sheet issue date:
07/12/2024

project no.:
22.34.73

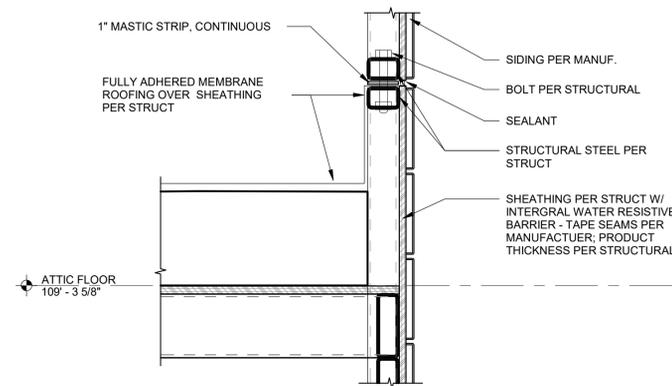
sheet contents:
BUILDING SECTION

sheet no.:

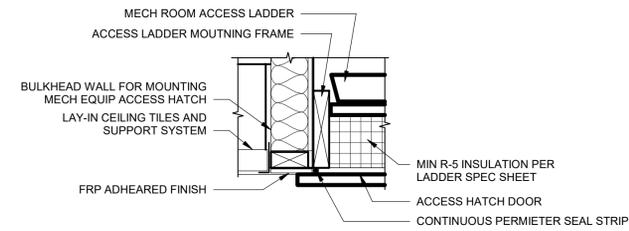
A3.0



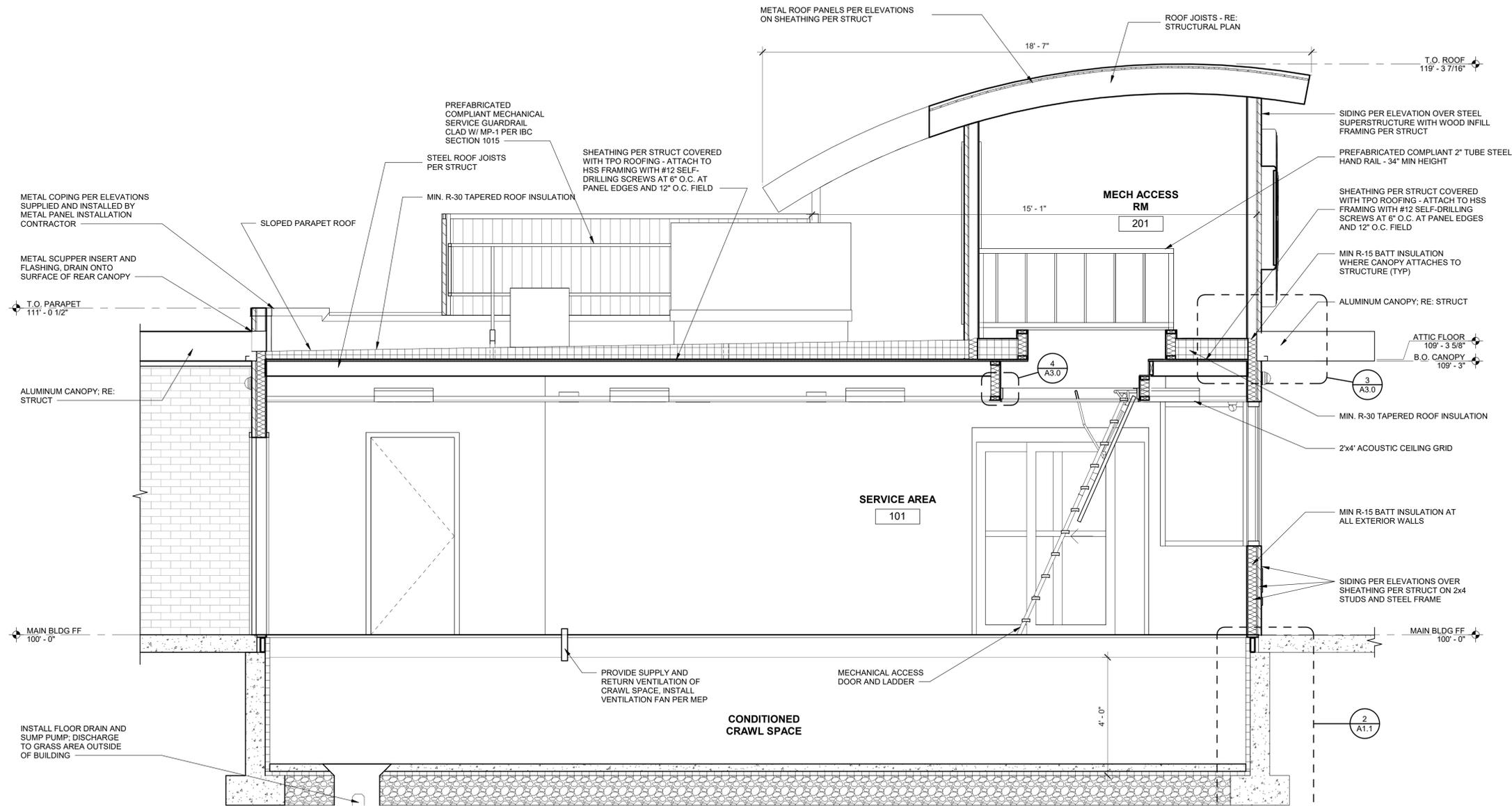
2 CANOPY CONNECTION
1 1/2" = 1'-0"



3 CONNECTION AT BASE/TOP
1 1/2" = 1'-0"



4 MECH ACCESS HATCH CONNECTION
1 1/2" = 1'-0"



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

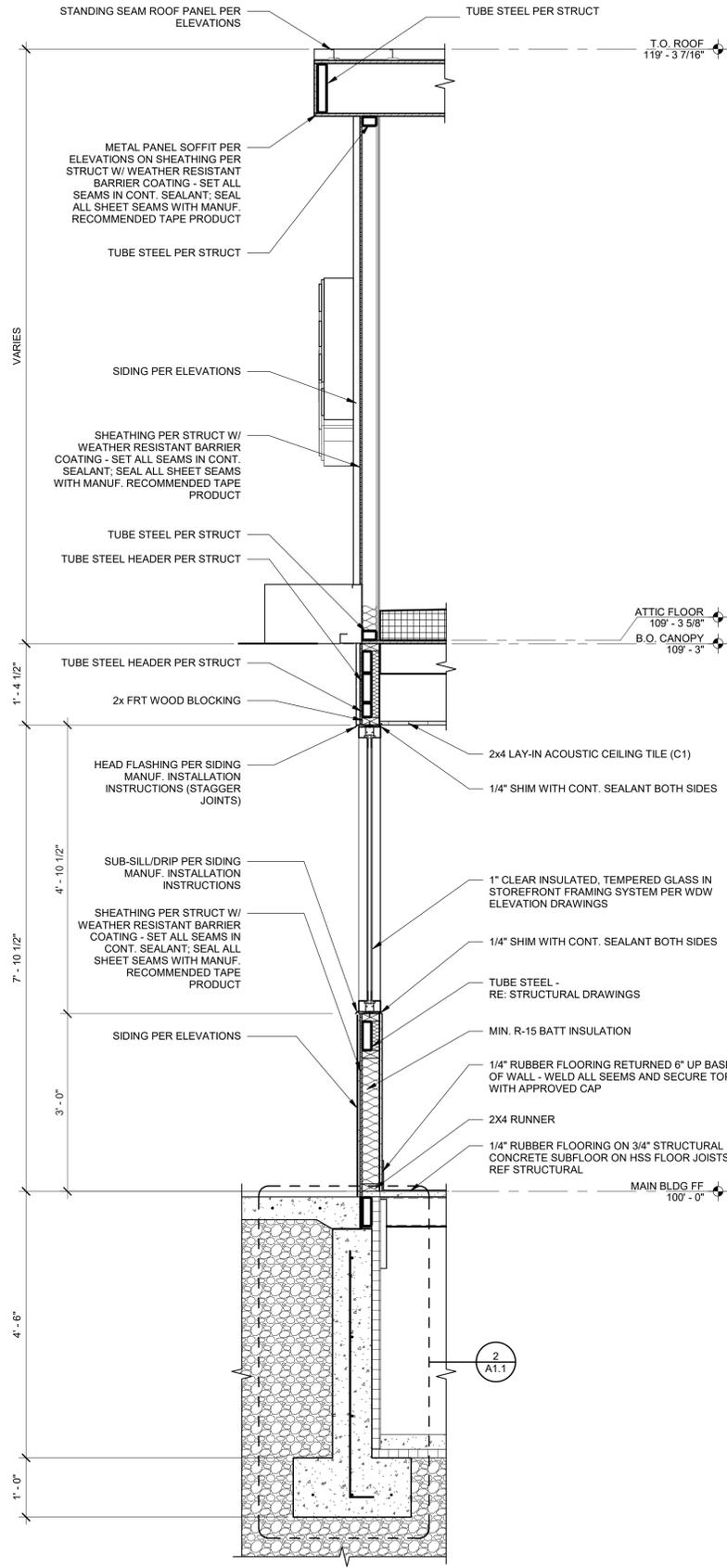
REVISIONS		
No.	Description	Date

sheet issue date:
07/12/2024

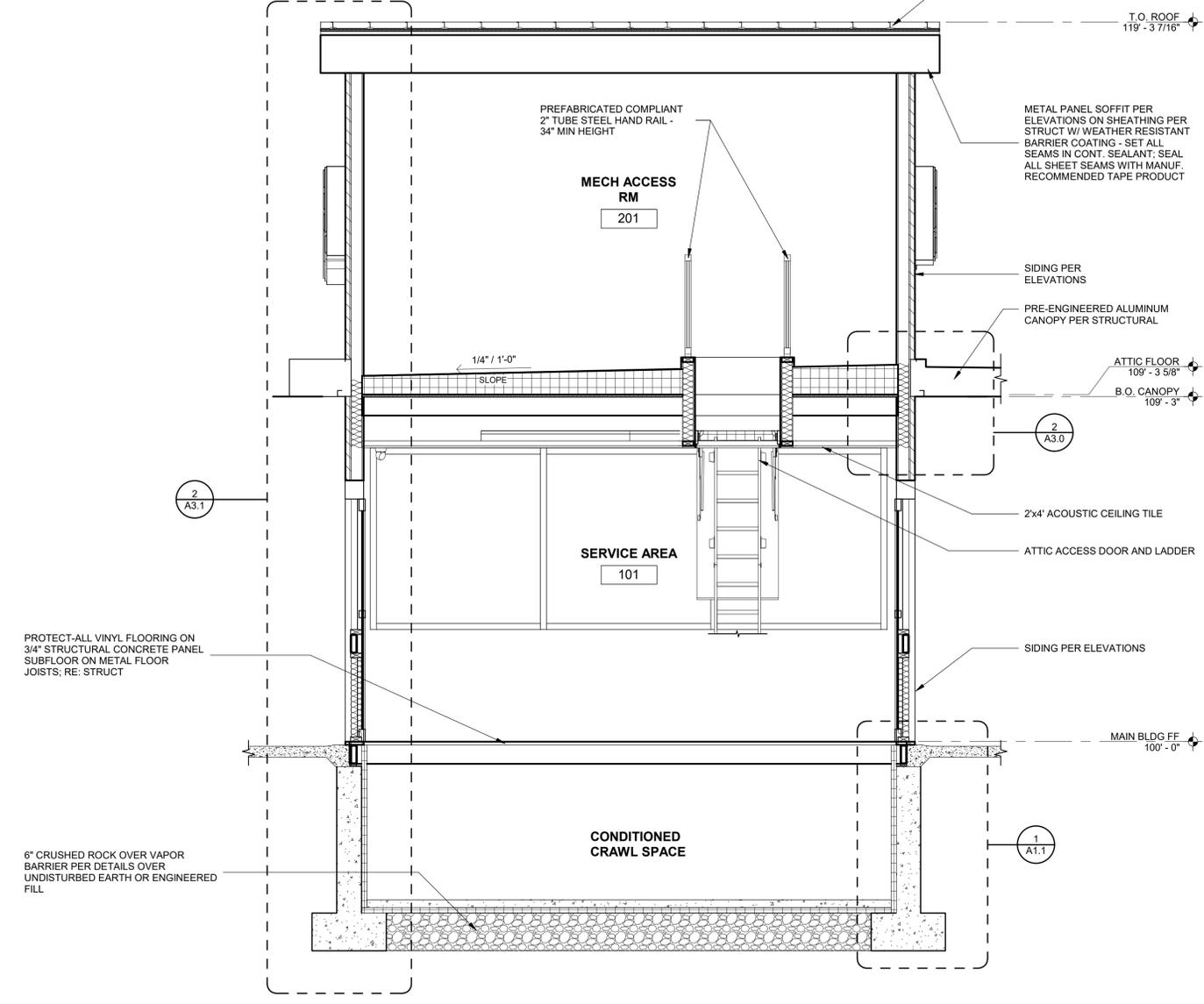
project no.:
22.34.73

sheet contents:
BUILDING SECTION

sheet no.:
A3.1



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



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

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7 Brew Template V3.0
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7 BREW DRIVE THRU - LA CROSSE WI - MORMON COULE

PLAZA STREET PARTNERS, LLC

XXXX MORMON COULEE RD, LA CROSSE WISCONSIN, 54601

REVISIONS		
No.	Description	Date

sheet issue date:
07/12/2024

project no.:
22.34.73

sheet contents:
SCHEDULES & WDW
ELEV's

sheet no.:

A4.0

DOOR SCHEDULE											
MARK	DOOR					FRAME		DETAILS			NOTES
	WIDTH	HEIGHT	THKNS	ELEV	MAT'L/FIN	ELEV	MAT'L/FIN	HEAD	JAMB	THRES'D	
01	3'-0"	6'-8"	1 3/4"	A	HM/F1	A	HM/PT	4/A4.0	4/A4.0 SIM	2/A4.0	a,b,c.
02	2'-10"	6'-8"	1 3/4"	B	HM/F1	B	HM/PT	3/A4.0	N.A.	N.A.	a,b,c.
03	6'-0"	6'-8"	2"	C	AL/F2	C	AL/F2	4/A4.0	2/A4.0	2/A4.0	a, d.
04	6'-0"	6'-8"	2"	C	AL/F2	C	AL/F2	4/A4.0	2/A4.0	2/A4.0	a, d.
05	6'-0"	6'-8"	2"	C	AL/F2	C	AL/F2	4/A4.0	N.A.	2/A4.0	a, d.

DOOR HARDWARE SCHEDULE			
MARK	TYPE	DESCRIPTION	FINISH
01	EXTERIOR PASSAGE	1 1/2" Pr 4 1/2" BB Hinges - NRP; Wallstop and Weatherstripping / Rain Drip at Exterior Doors; Self Closer; Detex ECL - 600 Panic Hardware	BRUSHED SS
02	INTERIOR PASSAGE	1 1/2" Pr 4 1/2" BB Hinges - NRP	BRUSHED SS
03	SLIDING DOOR	Manufacturer's Standard Operating Hardware	PRE FIN
04	SLIDING DOOR	Manufacturer's Standard Operating Hardware	PRE FIN
05	SLIDING DOOR	Manufacturer's Standard Operating Hardware	PRE FIN

HARDWARE TYPES		
DESCRIPTION	MANUFACTURER	APPROVED
HINGES	Stanley #CB0700	YES
LOCKSET	Schlage	YES
WEATHERSTRIP	Pencco Zero or Approved Equal	YES

DOOR HARDWARE SCHEDULE GENERAL NOTES:

- THRESHOLD HEIGHTS SHALL BE NO GREATER THAN 1/2".
- RAISED THRESHOLD AND LEVEL CHANGES SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
- DOOR HARDWARE SHALL BE APPROVED LEVERS OR PUSH/PULL HANDLES.
- NO ELECTRONIC LOCKING SYSTEM SHALL BE INSTALLED OR OPERATED WITHOUT THE PRIOR APPROVAL OF THE FIRE PREVENTION BUREAU.

DOOR SCHEDULE NOTES:

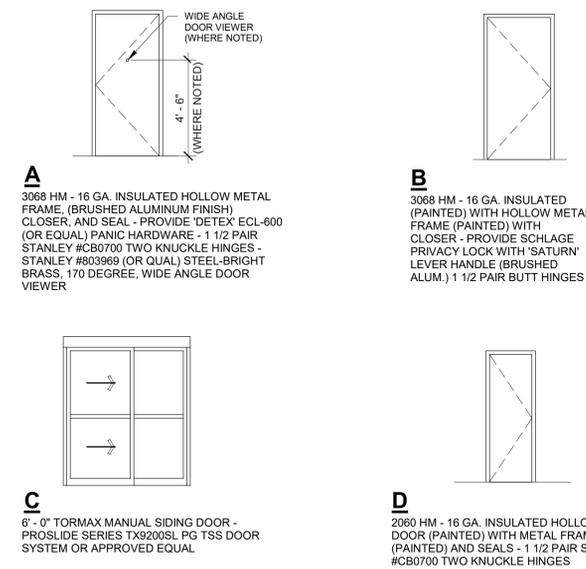
- REFER TO DOOR ELEVATIONS FOR SPECIFICATIONS.
- PAINT TO MATCH ADJACENT FINISHES
- REFER TO CODE COMPLIANCE DOOR NOTES (THIS SHEET) FOR ADDITIONAL REQUIREMENTS.
- 6'-0" TORMAX MANUAL SLIDING DOOR

CODE COMPLIANCE DOOR NOTES:

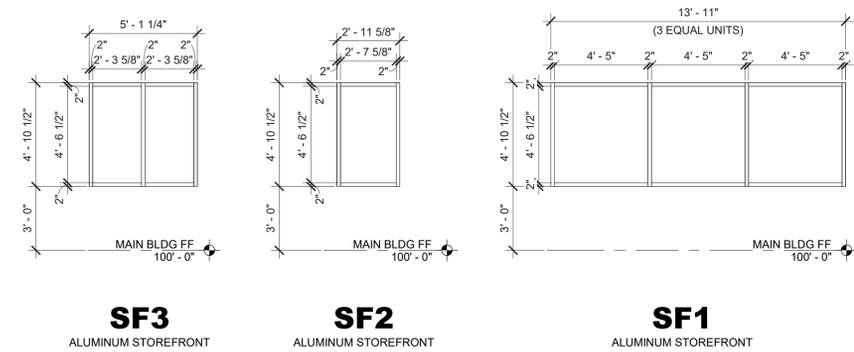
ALL EXIT DOORS SHALL CONFORM TO THE FOLLOWING PROVISIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AND ADA STANDARDS:

- THE EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF ANY SPECIAL KNOWLEDGE OR EFFORT WHEN THE BUILDING IS OCCUPIED.
- ALL HAND-ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 34" TO 48" A.F.F. AND SHALL BE OPERATED WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE.
- DOOR LEADING TO UNISEX TOILET ROOM SHALL BE IDENTIFIED WITH A 12" DIAMETER CIRCLE WITH A TRIANGLE SUPERIMPOSED ON THE CIRCLE AND WITHIN THE 12" DIAMETER. SIGN/SYMBOL SHALL BE MOUNTED ON THE WALL, ON THE LATCH SIDE OF THE DOOR AND 60" A.F.F. AND NO MORE THAN 8" FROM THE EDGE OF THE DOOR TO THE EDGE OF THE SIGN.

DOOR ELEVATIONS

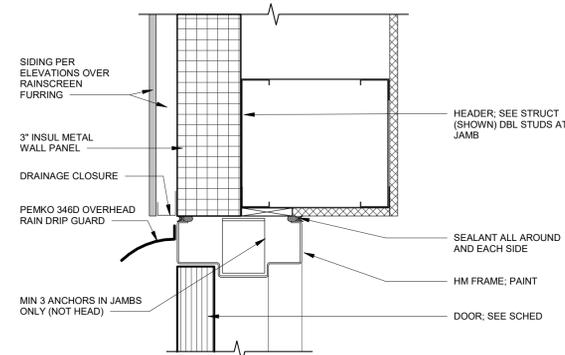


WINDOW ELEVATIONS

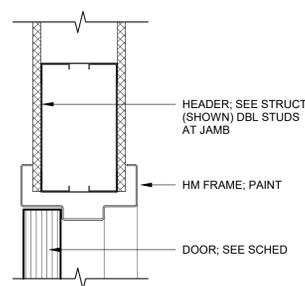


WINDOW ELEVATION GENERAL NOTES

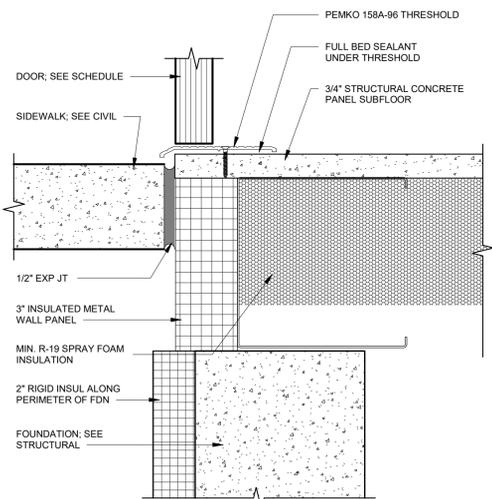
- VERIFY ALL ROUGH OPENING PRIOR TO ORDERING WINDOWS.
 - PROVIDE BACKER ROD & SEALANT AROUND ALL OPENINGS.
 - FOLLOW MANUFACTURER SPECIFICATIONS FOR PROPER STOREFRONT INSULATION.
 - NOTIFY ARCHITECT OF ANY DISCREPANCIES CONTAINED WITHIN WINDOW ELEVATIONS.
- *ALL WINDOWS ARE 1" CLEAR INSULATED, TEMPERED GLASS (LOW ES - ARGON) IN 2" x 4 1/2" ALUMINUM KAWNEER TRIFAB VERSAGLAZE 451 FRAMING SYSTEM



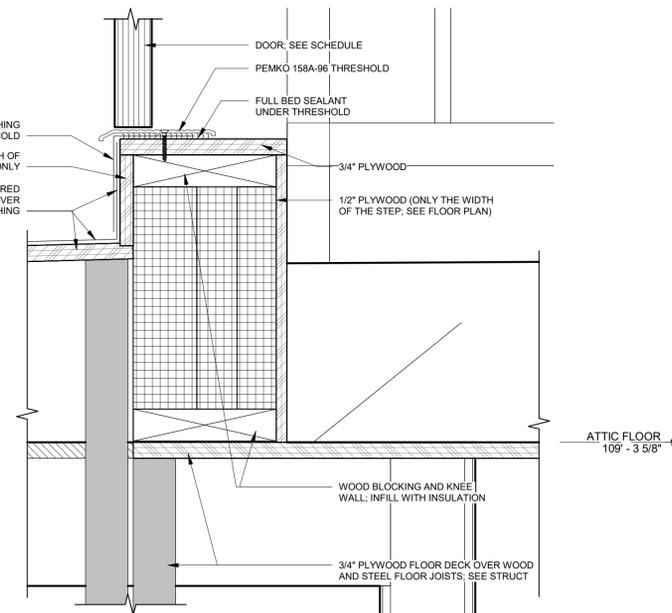
4 DR HEAD @ 3" INSUL PANEL
3" = 1'-0" @ EXTERIOR DOORS



3 DR HEAD @ HM FRAME
3" = 1'-0" @ INTERIOR DOOR



2 DOOR THRESHOLD
3" = 1'-0" @ MAIN FLR EXTERIOR DOOR



1 DOOR THRESHOLD
3" = 1'-0" @ MECH ACCESS RM DOOR

No.	Description	Date

TRASH ENCLOSURE GENERAL NOTES

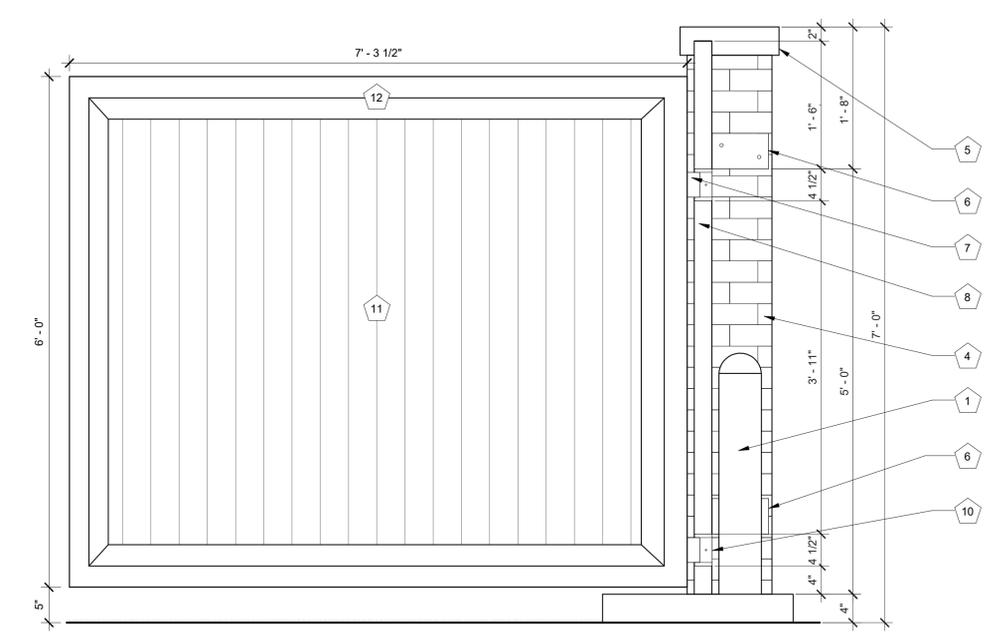
- PRE-PAINT ALL BARE METAL WITH POR-15 PRIMER PRIOR TO INSTALLATION.
- PAINT DOOR FRAMES, HINGES, AND BOLLARDS TO MATCH THE CANOPY OF THE PREFABRICATED BUILDING - MORIN REGAL BLUE.

TRASH ENCLOSURE KEYNOTES

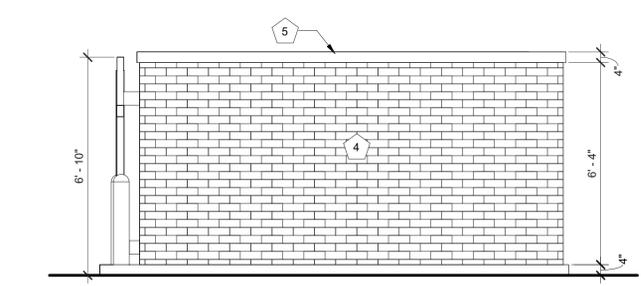
NOTE NO.	NOTE TEXT
1	Ø6" CONCRETE FILLED BOLLARD - TYP. OF (7)
2	CUSTOM GATES: SEE 6/A1.2
3	MECH. ACCESS DOOR AND LADDER - SUPPLIED BY OWNER
4	BRICK OVER 8" CMU BLOCK
5	4" MASONRY CAP ON TOP OF CMU WALL
6	5" PLATE STEEL BRACE WELDED TO CENTER OF 2" POST, REF DTL. THIS SHEET FOR HEIGHT
7	3" STEEL BRACE AT EACH HINGE
8	Ø2" STEEL POST
9	2 1/2" BOLT
10	HINGE WITH GREASE FITTING - TYP. OF 2 PER DOOR
11	1x8 STAINED CEDAR PLANKS
12	3" x 3" TUBE STEEL FRAME ROTATED 45 DEGREES

MODULAR BRICK

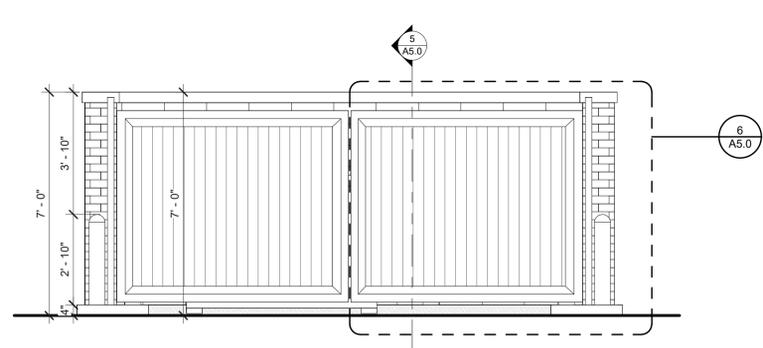
BRAND: SIOUX CITY BRICK
COLOR: GRANITE RED
FINISH: VELOUR



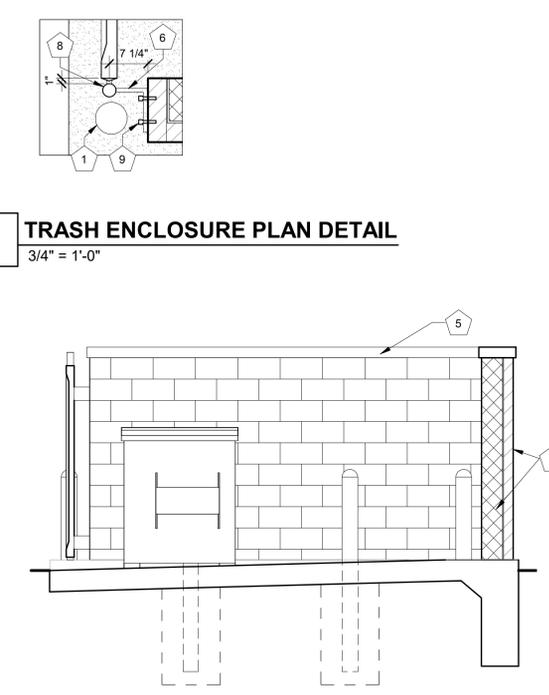
6 DOOR / HINGE DETAIL
1" = 1'-0"



4 TRASH ENCLOSURE - SIDE ELEVATION
3/8" = 1'-0"

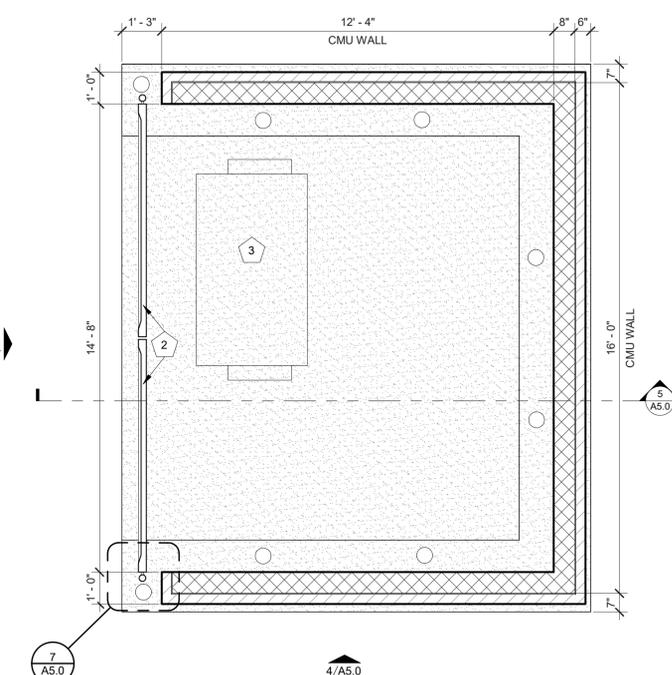


3 TRASH ENCLOSURE - FRONT ELEVATION
3/8" = 1'-0"

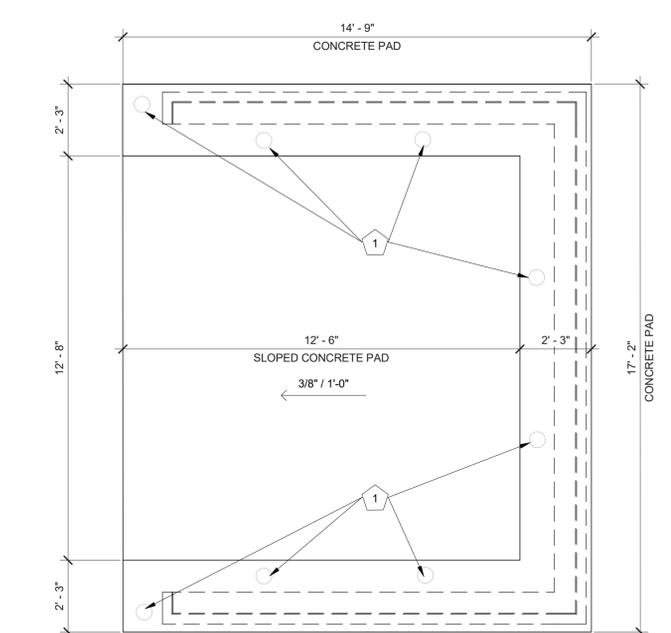


7 TRASH ENCLOSURE PLAN DETAIL
3/4" = 1'-0"

5 SECTION THRU TRASH ENCLOSURE
3/8" = 1'-0"



2 TRASH ENCLOSURE PLAN
3/8" = 1'-0"



1 TRASH ENCLOSURE - CONCRETE PLAN
3/8" = 1'-0"

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ELECTRICAL NOTES

- WIRING SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), AND / OR APPLICABLE LOCAL, STATE, AND UTILITY COMPANY RULES, LAWS, AND ORDINANCES.
- SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR INSTALLATION OF ELECTRICAL WORK, VERIFY ALL OUTLET LOCATIONS ON JOB PRIOR TO ROUGH-IN. COORDINATE ALL OUTLET BOX LOCATIONS WITH MASONRY, IF ANY, TO MINIMIZE CUTTING AND PATCHING OF BOTH BRICK AND BLOCK.
- THE ELECTRICAL CONTRACTOR SHALL COOPERATE WITH OTHER CONTRACTORS, INSTALL EQUIPMENT IN PROPER SEQUENCE AS NOT TO INTERFERE WITH THE PROGRESS OF OTHER CONTRACTORS, AND GIVE GENERAL CONTRACTOR ALL NECESSARY INFORMATION FOR MAKING PROPER PROVISION FOR INSTALLATION OF HIS EQUIPMENT.
- ALL MATERIALS SHALL BE NEW, UNLESS OTHERWISE NOTED ON DRAWINGS, CARRY UNDERWRITERS LABEL, OR BE "LISTED" BY THAT GROUP AND BE FULLY EQUAL TO MAKES SPECIFIED.
- ON RATED WALLS AND SEPARATION WALLS, ALL ELECTRICAL OUTLETS AND SWITCH BOXES ARE REQUIRED TO MEET I.B.C. 711 THRU 714.
- INDIVIDUAL HOME-RUNS ARE SHOWN FOR CLARITY ONLY. E.C. CAN COMBINE THEN TOGETHER PER LATEST "NEC". ALL WIRE IS NO. 12 THIN COPPER UNLESS OTHERWISE NOTED. ANY 120 VOLT OR 240 VOLT HOME-RUN WITH A DISTANCE LONGER THAN 80' FROM THE PANEL TO THE FIRST DEVICE SHALL BE UPSIZED TO ALLOW FOR VOLTAGE DROP. SEE DRAWINGS AND SCHEDULES.
- USE ONLY INSULATED COPPER CONDUCTORS IN CONDUIT WITH A MINIMUM SIZE TO BE 1/2" TRADE SIZE, OR "MC" CABLE IF APPROVED BY LOCAL CODE. USE FLEXIBLE CONDUIT FOR CONNECTIONS TO MOTORS, TRANSFORMERS, AND SIMILAR EQUIPMENT. ALL WIRING SHALL BE CONCEALED, FLUSH OUTLETS, EXCEPT AS NOTED ON DRAWINGS. WIRE INSULATION SHALL BE COLOR COATED AS FOLLOWS OR PER LOCAL ORDINANCES: 120/208V, 3Ø - A-BLACK, B-RED, C-BLUE, NEUTRAL-WHITE, G-GREEN.
- BRANCH CIRCUIT PANELBOARDS SHALL BE AS NOTED ON DRAWINGS WITH THERMAL MAGNETIC BREAKERS. BREAKERS SHALL HAVE INDIVIDUAL PLASTIC CASES, SIZED AS SCHEDULED. TWO AND THREE POLE BREAKERS SHALL BE COMMON TRIP (SINGLE POLE UNITS WITH COMMON TRIP ARE NOT ACCEPTED). ALL BREAKERS ARE TO BE BOLT-IN. FURNISH AND INSTALL A NEATLY TYPED DIRECTORY CARD, LOCATED ON THE INSIDE OF THE HINGED DOOR. REASSIGN CIRCUITS TO PROPERLY BALANCE THE LOADS ON THE PHASE IF THE FINAL CONNECTIONS AND TEST SHOW IT TO BE ADVISABLE.
- ALL PENETRATIONS IN THE RATED WALLS, FLOOR / CEILING ASSEMBLY, AND THE ROOF / CEILING ASSEMBLY SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAME AND HOT GASES. THE SEALER SHALL HAVE A T-RATING AND F-RATING OF NOT LESS THAN THAT OF THE WALL, FLOOR, OR CEILING BEING PENETRATED. THE ABOVE REQUIREMENTS SHALL MEET I.B.C. 711 THRU 714. A MAXIMUM OF TWO OUTLET BOXES PER STUD SPACE IN THE RATED WALLS. THE MAXIMUM SIZE FOR STEEL OUTLET BOXES ON 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL AREA. BOXES ON OPPOSITE SIDES OF FIRE WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24 INCHES, I.B.C. 711 & 714.
- ALL CONDUIT AND OUTLET BOXES (ELECTRICAL, TELEPHONE, COMPUTER, DATA, ECT.) LOCATED IN THE RATED WALLS, FLOOR, CEILING, OR ROOF SHALL BE CONSTRUCTED OF A NON-COMBUSTIBLE MATERIAL TO MEET I.B.C.
- ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN A NEAT WORKMANLIKE MANNER. UNSIGHTLY INSTALLATIONS SHALL BE REMOVED AND REWORKED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- WIRING OF MECHANICAL EQUIPMENT FURNISHED BY OTHERS: FURNISH AND INSTALL ALL POWER WIRING, AND ALL CONTROL WIRING AND INTERLOCK WIRING OF ALL UNITS, PUMPS, FANS, WATER HEATERS, ETC. CONNECT PER MANUFACTURERS WIRING DIAGRAMS. FURNISH AND INSTALL ALL NECESSARY DISCONNECT DEVICES AS REQUIRED. CONTRACTOR TO VERIFY THE ACTUAL WIRING SIZING AMPS FOR ALL EQUIPMENT FROM THE EQUIPMENT NAMEPLATE, ELECTRICAL INSTALLATION SHALL BE BASED ON ACTUAL REQUIRED AMPERAGES, WHICH MAY VARY SOMEWHAT FROM THE WIRE AND EQUIPMENT SIZES SHOWN ON THE DRAWINGS. PROPERLY SIZED ELECTRICAL WIRING AND EQUIPMENT SHALL BE FURNISHED WITHOUT ANY ADDITIONAL COST TO THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL CHANGES TO BE MADE IN THE ELECTRICAL INSTALLATION DUE TO EQUIPMENT VARIANCES SO THAT THE IMPACT ON FEEDERS, PANELS, FUSE AND BREAKER SIZES CAN BE CHECKED PRIOR TO INSTALLATION.
- WIRING OF THERMOSTATS AND TEMPERATURE CONTROLS: FURNISH AND INSTALL ALL POWER WIRING, AND ALL CONTROL AND INTERLOCK WIRING OF ALL THERMOSTATS AND TEMPERATURE CONTROL DEVICES INCLUDING NIGHTSTATS, TIME SWITCHES, OVERRIDE TIMERS, ETC. SEE MECHANICAL DRAWINGS FOR LOCATIONS AND TEMPERATURE CONTROL DIAGRAMS.
- THE DRAWINGS SHOWING THE LAYOUT OF THE WORK INDICATE THE APPROXIMATE LOCATIONS OF OUTLETS, APPARATUS, AND EQUIPMENT. THE DRAWINGS ARE SCHEMATIC ONLY, AND ARE NOT INTENDED TO SHOW EXACT ROUTING OF CONDUIT, ETC. THE FINAL DETERMINATION AS TO THE ROUTING SHALL BE GOVERNED BY THE STRUCTURAL CONDITIONS AND OTHER OBSTRUCTIONS; THEY SHALL NOT BE CONSTRUED TO MEAN THE DESIGN OF THE SYSTEM MAY BE CHANGED, IT MERELY REFERS TO THE EXACT RUN OF A RACEWAY BETWEEN GIVEN POINTS. THE CONTRACTOR SHALL CONSULT ALL CONTRACT DRAWINGS WHICH MAY AFFECT THE LOCATION OF ANY OUTLET, APPARATUS, OR EQUIPMENT TO AVOID POSSIBLE INTERFERENCE AND PERMIT FULL COORDINATION OF ALL WORK. THE RIGHT TO MAKE ANY REASONABLE CHANGE IN THE LOCATION OF OUTLETS, APPARATUS, AND EQUIPMENT UP TO THE TIME OF ROUGH-IN IS RESERVED BY THE ARCHITECT WITHOUT INVOLVING ANY ADDITIONAL EXPENSE TO THE OWNER.
- THE TELEPHONE / DATA SYSTEM SHALL CONSIST OF A CONDUIT SYSTEM ONLY, 1" MINIMUM, IN WALLS FROM THE OUTLET BOX STUBBED INTO THE CEILING CAVITY. ALL COVER PLATES, CONNECTORS, TELEPHONE / DATA WIRES, AND FINAL TERMINATIONS ARE BY OTHERS. COORDINATE ACTUAL AMOUNT OF OUTLET AND LOCATIONS WITH THE OWNER PRIOR TO ROUGH-IN.
- IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR PROVIDE THE UTILITY CO. WITH THE ELECTRICAL LOADS AND FILL OUT ALL APPROPRIATE PAPERWORK AND FORMS.

FEEDER SCHEDULE

FEEDER IDENT.	COPPER CONDUCTORS			GROUND SIZE	ISOLATED PER SET	CONDUIT SIZE
	SETS	QUANT. PER SET	SIZE			
201	1	2	#12 CU	#12 CU	-----	1/2"
202	1	2	#12 CU	#12 CU	-----	1/2"
302	1	2	#10 CU	#10 CU	-----	1/2"
502	1	2	#6 CU	#10 CU	-----	1 1/4"
50N	1	3	#6 CU	#10 CU	-----	1 1/4"
60N	1	3	#4 CU	#8 CU	-----	1 1/4"
702	1	3	#4 CU	#8 CU	-----	1 1/4"
400S	1	3	#500 MCM CU	-----	-----	4"
FEEDER IDENT.	ALUMINUM CONDUCTORS			GROUND SIZE	ISOLATED PER SET	CONDUIT SIZE
	SETS	QUANT. PER SET	SIZE			
400S	1	3	#750 MCM AL	-----	-----	4"

- IF APPROVED BY LOCAL CODE AUTHORITY, E.C. HAS THE OPTION TO USE ALUMINUM CONDUCTORS FOR ANY BRANCH FEEDER. 100 AMPERES OR MORE.
- ALUMINUM CONDUCTORS SHALL BE XHHW-2 (90°) COMPACT STRANDED CONDUCTORS.

ELECTRICAL DEVICE SCHEDULE

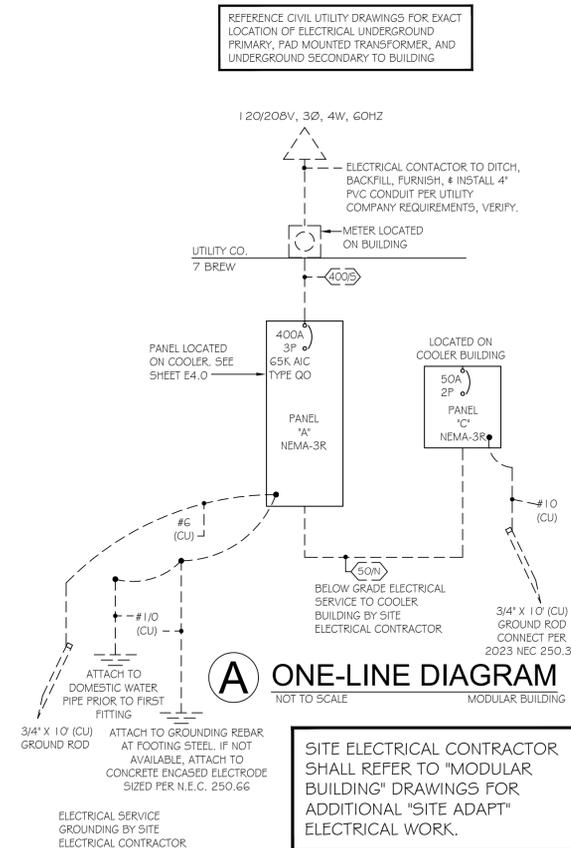
SYM	DESCRIPTION	MFGR. & CAT No.	RATING	MOUNTING	REMARKS
\$	SINGLE POLE SWITCH	PASS # SEYMOUR P520AC1-I	20A 125V	48" A.F.F. TO TOP	
\$oc	SWITCH W OCCUPANCY SENSOR	WS-250-W	- 125V	48" A.F.F. TO TOP	
D	DUPLEX RECEPT.	PASS # SEYMOUR TR5362-I	20A 125V	16" A.F.F. TO BOTTOM	
D	DUPLEX RECEPT.	PASS # SEYMOUR TR5362-I	20A 125V	AS NOTED	
D	G.F.I. DUPLEX RECEPT.	PASS # SEYMOUR 2094-TRJ	20A 125V	AS NOTED	
D	G.F.I. DUPLEX RECEPT.	PASS # SEYMOUR 2094-TRJ	20A 125V	16" A.F.F. TO BOTTOM	W/ TAYMAC # ML500G COVER PLATE
D	DOUBLE DUPLEX RECEPT.	PASS # SEYMOUR (2) TR5362-I	20A 125V	16" A.F.F. TO BOTTOM	
E	EQUIPMENT RECEPTACLE	PASS # SEYMOUR 3864	20A 250V	AS NOTED	
E	EQUIPMENT RECEPTACLE	PASS # SEYMOUR 3894	50A 250V	AS NOTED	
J	NEMA-3R JUNCTION BOX	STEELCITY 4 1/4" BOX		AS REQUIRED	
J	NEMA-1 JUNCTION BOX	STEELCITY 4 1/4" BOX		AS REQUIRED	
V	TELEPHONE OUTLET	STEELCITY 2 1/4" BOX		16" A.F.F. TO BOTTOM	WITH 1" C. TO ABOVE CLG.
T	THERMOSTAT	FURN. BY M.C.; INST. # CONN. BY E.C.		48" A.F.F. TO TOP	
M	MOTOR	FURN. # INST. BY M.C.; CONN. BY E.C.		AS REQUIRED	
P	PHOTOCELL	INTERMATIC K4121C	1800W 125V	ON ROOF FACING NORTH	
T	TIMELOCK	INTERMATIC T101	40A 125V	NEXT TO PANEL	
M	MANUAL STARTER	SQ-D 2510 FG-1	1/2 H.P. 125V	AS REQUIRED	
D	DISCONNECT SWITCH	NEMA 1 2 POLE	AS SCHEDULED	AS REQUIRED	WITH 125% FLA FRN-R FUSES
D	DISCONNECT SWITCH	NEMA 3R 2 POLE	AS SCHEDULED	AS REQUIRED	WITH 125% FLA FRN-R FUSES
C.T.	DENOTES COUNTER TOP MTG.	MINIMUM 1" ABOVE BLACK SPLASH		FIELD VERIFY	
W.P.	DENOTES WEATHER PROOF				
1, 3, 5	DENOTES CIRCUIT NUMBERS				
~	BRANCH CIRCUIT	WITH NUMBER OF WIRES		UNDER FLOOR	
~	BRANCH CIRCUIT	WITH NUMBER OF WIRES		ABOVE FLOOR	
~	HOME RUN CONTINUED	WITH NUMBER OF WIRES		ABOVE FLOOR	
~	HOME RUN	WITH NUMBER OF WIRES		ABOVE FLOOR	

NOTES:

- APPROVED MANUFACTURERS OTHERS THAN SPECIFIED, PASS # SEYMOUR, G.E., LEVITON, SQUARE-D, CUTLER HAMMER, SIEMENS.
- ALL 125V NON-LOCKING RECEPTACLES MOUNTED BELOW 5'-6" A.F.F. SHALL BE TAMPER RESISTANT TYPE PER N.E.C. 406-12.
- REGARDLESS OF CONTROL REQUIREMENTS - ALL FEEDERS FROM SWITCH TO FIRST LIGHT FIXTURE SHALL INCLUDE LOW-VOLTAGE CONTROL WIRES.

ON-SITE ELECTRICAL CONTRACTOR RESPONSIBILITIES:

- FIELD VERIFY WITH THE LOCAL UTILITY COMPANY FOR THE EXACT REQUIREMENTS AND RESPONSIBILITIES TO BRING THE UNDERGROUND ELECTRICAL PRIMARY TO THE PAD MOUNTED TRANSFORMER LOCATION. VERIFY WHO PROVIDES THE TRANSFORMER AND PAD.
- FURNISH & INSTALL THE UNDERGROUND ELECTRICAL SECONDARY FROM PAD MOUNTED TRANSFORMER, BELOW GRADE TO NATMDO BUILDING, THEN UP TO MAIN CIRCUIT BREAKER IN PANEL "A", PROVIDED ON THE BUILDING.
- PROVIDE THE GROUNDING FOR MAIN ELECTRICAL SERVICE AS NOTED ON PLANS.
- CONNECTION OF MUFFIN TOP: MUFFIN TOP IS FURNISHED AND INSTALLED BY OTHERS. SITE ELECTRICAL CONTRACTOR TO RECONNECT OF THE TWO HALVES OF THE MUFFIN TOP AFTER IT IS SET IN PLACE VIA FEEDERS PROVIDED. CONNECT THE MUFFIN TOP TO THE MAIN BASE BUILDING VIA COLOR CODED ELECTRICAL FEEDER STUB-UPS, RED FOR THE POWER CIRCUITS AND BLUE FOR THE TIMER CIRCUITS, TO THE COLOR CODED CORRESPONDING JUNCTION BOXES IN THE MUFFIN TOP. RED BOX FOR THE POWER CIRCUITS AND BLUE BOX FOR THE TIMER CIRCUITS.
- CONNECTION OF THE CANOPY ELECTRICAL CIRCUITS: CANOPY IS FURNISHED AND INSTALLED BY NATMOD. CONNECT THE CANOPY ELECTRICAL CIRCUITS TO THE MAIN BUILDING VIA COLOR CODED JUNCTION BOXES AND STUB-OUTS IN MAIN BUILDING TO CORRESPONDING CONNECTIONS AT THE CANOPY, RED FOR POWER AND BLUE FOR TIMER.
- ROOF TOP UNIT (FURNISHED AND INSTALLED BY OTHERS): EXTEND PROVIDED ELECTRICAL FEEDER CABLE, LOCATED ABOVE CEILING IN MAIN BUILDING, UP THROUGH ROOF CURB, TO ROOF TOP UNIT. FURNISH AND INSTALL THE REQUIRED DISCONNECT SWITCH AS NOTED ON DRAWINGS.
- ROOF MOUNTED ICE MACHINE CONDENSER (FURNISHED AND INSTALLED BY OTHERS): CONNECT ELECTRICAL STUB-UP FROM MAIN BUILDING, THROUGH ROOF, TO TWO ROOF MOUNTED ICE MACHINE CONDENSERS ON ROOF. FURNISH AND INSTALL THE REQUIRED DISCONNECT SWITCH AS NOTED ON DRAWINGS.
- SUMP PUMP IN THE CRAWL SPACE: FURNISH AND INSTALL (1) GFCI RECEPTACLE AND JUNCTION BOX IN THE CRAWL SPACE FOR THE SUMP PUMP. FURNISH & INSTALL CONDUCTORS, UN-SWITCHED FROM EXISTING CIRCUIT LOCATED AT THE LIGHT SWITCH IN THE RESTROOM THROUGH CONDUIT STUB OUT PROVIDED. CONNECT RECEPTACLE TO THE CIRCUIT.
- HEAT TRACE IN THE CRAWL SPACE: FURNISH AND INSTALL (1) GFCI RECEPTACLE AND JUNCTION BOX IN THE CRAWL SPACE FOR THE HEAT TRACE. CONNECT TO THE SAME UN-SWITCHED CIRCUIT AS THE SUMP PUMP.
- LIGHT IN THE CRAWL SPACE: FURNISH AND INSTALL (1) LIGHT FIXTURE TYPE "C" AND JUNCTION BOX IN THE CRAWL SPACE. CONNECT TO THE EXISTING SINGLE POLE SWITCH AND CIRCUIT LOCATED IN RESTROOM VIA STUB OUT. FURNISH AND INSTALL SWITCH LEG FROM THE LIGHT SWITCH TO THE LIGHT FIXTURE.
- EXTERIOR COOLER: FURNISH & INSTALL ELECTRICAL FEEDER, CONDUIT, AND WIRE, BELOW GRADE FROM PANEL "A" TO NATMDO PROVIDE COOLER. VERIFY LOCATION, THEN UP TO PANEL "C", FURNISHED ON COOLER. CONNECT TO THE CIRCUIT BREAKER PROVIDED IN PANEL "A".
- SITE LIGHTING: FURNISH AND INSTALL THE ELECTRICAL BRANCH FEEDER FROM PANEL "A" TO SITE LIGHTING AS DESCRIBED ON SHEET E4.0.



ONE-LINE DIAGRAM

NOT TO SCALE

SITE ELECTRICAL CONTRACTOR SHALL REFER TO "MODULAR BUILDING" DRAWINGS FOR ADDITIONAL "SITE ADAPT" ELECTRICAL WORK.

BREAKERS TO HAVE MIN. 10,000 AIC SERIES RATED			PANEL "A"			SURFACE MOUNTED NEMA-3R ENCLOSURE 400 AMP MAIN BREAKER RATED AT 400 AMPS				
WIRE REQ'TS	CRK No.	DESCRIPTION	KW	A	B	C	KW	DESCRIPTION	CRK No.	WIRE REQ'TS
201	1	LIGHTS	0.5	20	20	20	0.35	CANOPY LIGHTS	2	201
201	3	SIGN	1.2	20	20	20	0.5	LED TAPE LIGHT	4	201
-	5	STORE SIGN	1.2	20	20	20	1.5	SIGN BOXES	6	201
201	7	SPARE	--	20	20	20	--	SPARE	8	-
201	9	GENERAL RECEPTS.	0.4	20	20	20	6.1	EQUIP. [EQ-3]	10	50/2
201	11	AUDIO SECURITY	0.72	20	20	20	8.0	EQUIP. [EQ-4]	12	-
201	13	EQUIP. [EQ-4] ICE BIN	0.15	20	20	20	8.0	EQUIP. [EQ-4]	14	50/2
202	15	EQUIP. [EQ-3] C.U.	3.19	20	20	20	3.19	EQUIP. [EQ-3] C.U.	16	30/2
201	19	RECEPT.	0.3	20	20	20	1.2	RECEPT.	20	201
201	21	CRAWL SPACE RECEPT.	1.2	20	20	20	0.6	EQUIP. [EQ-11]	22	201
-	23	SPACE	--	20	20	20	1.2	RECEPT.	24	201
201	25	EQUIP. [EQ-11]	0.6	20	20	20	1.3	EQUIP. [EQ-7]	26	201
201	27	RECEPT.	1.2	20	20	20	0.4	RECEPTS.	28	201
201	29	EQUIP. [EQ-7]	1.38	20	20	20	0.4	RECEPTS.	30	201
201	31	EQUIP. [EQ-8]	1.38	20	20	20	0.6	SHOW WINDOW RECEPTS	32	201
201	33	RECEPTS.	0.4	20	20	20	1.2	EQUIP. [EQ-14]	34	201
201	35	RECEPTS.	0.4	20	20	20	1.0	FRONT BAR RECEPTS.	36	201
201	37	EQUIP. [EQ-14]	1.2	20	20	20	1.0	FRONT BAR RECEPTS.	38	201
201	39	POS RECEPTS.	0.6	20	20	20	0.6	EQUIP. [EQ-2]	40	201
201	41	RECEPT.	1.2	20	20	20	0.3	GAS WATER HEATER	42	201
30/2	43	EQUIP. [EQ-10]	2.4	20	20	20	0.8	EQUIP. [EQ-11]	44	201
30/2	45	EQUIP. [EQ-10] FUTURE	2.4	20	20	20	0.8	EQUIP. [EQ-12]	46	201
30/2	47	EQUIP. [EQ-10] FUTURE	2.4	20	20	20	0.8	EQUIP. [EQ-4]	48	50/2
-	49	SPACE	--	20	20	20	7.0	PANEL "C" (STORAGE)	50	-
30/2	51	EQUIP. [AC-1]	6.0	20	20	20	0.4	BUILDING RECEPTS.	52	201
-	53	SPACE	--	20	20	20	0.6	MUFFIN TOP / ATTIC	58	201
30/2	55	EQUIP. [AC-2]	6.0	20	20	20	4.99	CANOPY HEATER "1R, 1"	60	30/2
-	57	SPACE	--	20	20	20	0.6	MUFFIN TOP / ATTIC	58	201
30/2	59	EQUIP. [AC-3]	6.0	20	20	20	4.99	CANOPY HEATER "1R, 1"	60	30/2
-	61	SPACE	--	20	20	20	4.99	CANOPY HEATER "1R, 2"	62	30/2
125/2	63	EQUIP. [AC-4] FUTURE	0.6	20	20	20	4.99	CANOPY HEATER "1R, 3"	64	30/2
125/2	65	ROOF TOP UNIT (RTU-1)	18.8	20	20	20	4.99	CANOPY HEATER "1R, 3"	68	30/2
-	67	SPACE	--	20	20	20	5.5	WH-1 (CKT # 1)	72	30/2
30/2	69	WARMING HUT	3.0	20	20	20	5.5	WH-1 (CKT # 2)	76	30/2
-	71	SPACE	--	20	20	20	--	SPACE	80	-
-	73	SPACE	--	20	20	20	--	SPACE	82	-
-	75	SPACE	--	20	20	20	--	SPACE	84	-
-	77	SPACE	--	20	20	20	--	SPACE	84	-
-	79	SPACE	--	20	20	20	--	SPACE	84	-
-	81	SPACE	--	20	20	20	--	SPACE	84	-
-	83	SPACE	--	20	20	20	--	SPACE	84	-

LOAD SUMMARY

LOAD	CONNECTED KW	FACTOR	DEMAND KW
LIGHTING	6.05	1.25	7.56
RECEPTACLES (1ST 10KVA)	10.0	1.00	10.0
LARGEST MOTOR (REMAINING)	1.62	0.50	0.76
LARGEST MOTOR	1.55	1.25	8.08
MOTORS	2.4	1.00	1.2
EQUIPMENT	44.79	0.65	30.895
PANEL "C"	7.0	1.00	7.0
ELECTRIC HEAT	18.8	1.00	18.8
WATER HEATING	11.0	1.25	13.75
SUP. ELECT HEAT	32.97	0.65	21.43
WARMING HUT	3.0	1.00	3.0
TOTAL:	139.28	1.15	115.93
AMPS @ 120/208 VOLT, 3Ø, 4W, 60 Hz			321.8 AMPS

- ALL 120 VOLT CIRCUITS TO HAVE SEPARATE POWER NEUTRAL AND GROUND WIRES AS CALLED FOR IN FEEDER SCHEDULE.
- DIRECT WIRED IRRIGATION CONTROLLER BY SITE IRRIGATION CONTRACTOR. SITE E.C. TO CONNECT TO CIRCUIT AS REQUIRED.
- BREAKER FOR ON SITE NAT MOD COOLER CONNECTION
- FIELD VERIFY EXACT ELECTRICAL CONNECTION IF RECEPTACLE IS NOT GFCI TYPE PROVIDE GFCI TYPE CIRCUIT BREAKER IN PANEL.
- GFCI TYPE CIRCUIT BREAKER IN PANEL.
- FEEDER UP-SIZED FOR VOLTAGE DROP

BREAKERS TO HAVE MIN. 10,000 AIC SERIES RATED			PANEL "C"			RECESS MOUNTED NEMA-3R ENCLOSURE 50 AMP MAIN BREAKER RATED AT 50 AMPS				
WIRE REQ'TS	CRK No.	DESCRIPTION	KW	A	B	C	KW	DESCRIPTION	CRK No.	WIRE REQ'TS
201	1	WALK-IN EVAPORATOR	0.4	20	20	20	0.7	STORAGE LTS. # RECEPT	2	201
30/2	3	WALK-IN CONDENSER	3.6	20	20	20	1.5	HEAT TAPE	4	201
-	5	SPACE	--	20	20	20	--	SPACE	6	-
-	7	SPACE	--	20	20	20	--	SPACE	8	-

LOAD SUMMARY

LOAD	CONNECTED KW	FACTOR	DEMAND KW
LIGHTING	0.9	1.25	1.875

EQUIPMENT CONNECTION SCHEDULE

No.	DESCRIPTION	QUANTITY	VOLTAGE			LOAD			DISCONNECT DEVICE AT UNIT										NOTES	
			120 / 60 / 1	240 / 60 / 1	120 / 240 / 60 / 1	KW	FLA	MCA	NEMA-1	NEMA-3R	JCT BOX	20A / 1P	20A / 2P	30A / 2P	50A / 2P	100A / 2P	125A / 2P	FUSE SIZE IN AMPS		CIRCUIT BREAKER & FEEDER SIZE AMPS
EQ-1	WALK-IN COOLER - LIGHTS	1	●			1.0	4.2	5.25	●	J	TS							20/1	CONNECT AS REQUIRED	4
	WALK-IN COOLER - COMPRESSOR	1	●			3.6	17.3	21.6	●					5W			30	30/2	CONNECT AS REQUIRED	4
	WALK-IN COOLER - EVAPORATOR	1	●			0.4	3.25	4.0	●			M						20/1	CONNECT AS REQUIRED	4
EQ-2	BUNN WATER HEATER	1	●			1.85	15.4	19.25	●		R							20/1	CONNECT AS REQUIRED	3
EQ-3	ESPRESSO MACHINE	1	●			6.1	25.4	31.78	●					R				50/2	NEMA LG-50 RECEPT.	3
EQ-4	ESPRESSO MACHINE	2	●			9.0	33.3	41.67	●					R				50/2	NEMA LG-50 RECEPT.	3
EQ-5	ICE MAKER (REMOTE COMPRESSOR)	2	●			3.19	13.3	16.6	●				5W				20/2	CONNECT AS REQUIRED	3	
EQ-6	ICE MAKER (UPRIGHT)	1	●			0.144	1.2	1.5	●		R							20/1	NEMA 5-20 RECEPT.	3
EQ-8	VITAMIX BLENDER	3	●			1.38	11.5	14.37	●		R							30/2	NEMA LG-30 RECEPT.	3
EQ-10A	SPACEMAN FREEZE MACHINE	2	●			2.4	10.0	12.5	●		R							20/2	NEMA 6-20 RECEPT.	3
EQ-10B	SPACEMAN FREEZE MACHINE	1	●			2.4	10.0	12.5	●		R							20/2	NEMA 6-20 RECEPT.	3
EQ-11	COFFEE GRINDER	3	●			0.8	6.66	10.0	●		R							20/1	NEMA 5-20 RECEPT.	3
EQ-12	COFFEE GRINDER	1	●			0.8	6.66	10.0	●		R							20/1	NEMA 5-20 RECEPT.	3
EQ-14	48" x 24" STANDING COOLER	1	●			1.2	10.0	12.5	●		R							20/1	NEMA 5-20 RECEPT.	3
EQ-16	UNDERCOUNTER COOLER	1	●			1.2	10.0	12.5	●		R							20/1	NEMA 5-20 RECEPT.	3
AC-12.3	AIR CURTAIN WITH ELECTRIC HEAT	3	●			6.0	25.0	31.25	●				5W			40	40/2	VERIFY DISCONNECT MEANS		
AC-4	AIR CURTAIN WITHOUT ELECTRIC HEAT (FUTURE)	-	●			0.6	5.1	6.25	●		R							20/1	NEMA 5-20 RECEPT.	3
WH-1	ELECT TANK WATER HEATER (2 ELEMENTS)	2	●			5.5	22.9	28.64	●					CB				30/2	5	
RTU-1	AIR CONDITIONER 4 TON (ELECTRIC HEAT)	1	●			18.8	90.8	113	●					CB				125/2	6	
IR-1.2.3	INFRARED HEATERS	3	●			4.99	20.8	26.0	●					R				30/2	NEMA 5-30 RECEPT.	

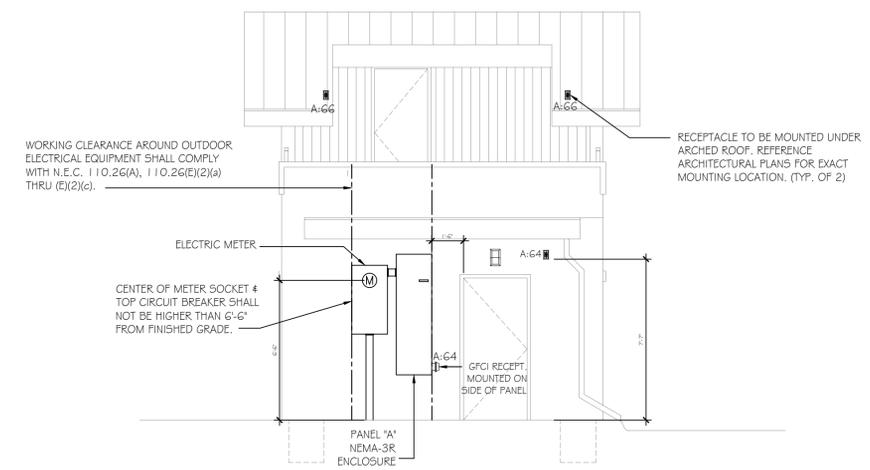
- EQUIPMENT NOTES**
- ALL KITCHEN EQUIPMENT ELECTRICAL REQUIREMENTS AND CONNECTIONS ARE DESIGNED ACCORDING TO INFORMATION PROVIDED AT TIME OF DESIGN. THE ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL ELEC. LOADS, LOCATIONS, CONNECTION, AND PLUG CONFIGURATION REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. IN THE EVENT THAT THE EQUIPMENT PROVIDED DIFFER FROM THE FINAL DRAWINGS IT IS THE RESPONSIBILITY OF THE EQUIP. SUPPLIER / INSTALLER TO PROVIDE THE ELECTRICAL CONTRACTOR WITH THESE CHANGES.
 - ALL SWITCHES, TIMECLOCKS, RELAYS, TRANSFORMERS, ETC., SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR, UNLESS SUPPLIED WITH THE EQUIPMENT. FIELD VERIFY WITH EQUIPMENT SUPPLIER FOR ADDITIONAL INFORMATION.
 - PER N.E.C. 210.8 (B) (2) ALL 120V/1Ø, 208V/1Ø RECEPTACLES RATED 50 AMPS OR LESS, AND 208V, 3Ø RECEPTACLES RATED 100 AMPS OR LESS LOCATED IN THE KITCHEN AREAS SHALL BE PROTECTED BY A GFCI TYPE RECEPTACLE OR GFCI TYPE CIRCUIT BREAKER IN THE PANEL, UNLESS OTHERWISE NOTED.
 - WALK-IN COOLER IS OWNER PROVIDED. SITE ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND CONNECTION REQUIREMENTS. PROVIDE ALL DISCONNECT SWITCHES NOT PROVIDED WITH EQUIPMENT AND CONNECT TO PANEL 'A' AS REQUIRED.
 - ELECTRIC TANK WATER HEATER HAS (2) 5.5 KW ELEMENTS AND REQUIRED (2) 30A, 2P, 208 VOLT CIRCUIT BREAKER DISCONNECT SWITCHES.
 - ROOF TOP UNIT IS FURNISH WITH NEMA-3R CIRCUIT BREAKER DISCONNECT SWITCH. E.C. TO FIELD VERIFY EXACT CONNECTION REQUIREMENTS WITH EQUIPMENT PROVIDED PRIOR TO ROUGH-IN.

SYMBOL KEY
 TS - TOGGLE SWITCH
 SW - FUSIBLE DISCONNECT SWITCH
 R - STANDARD RECEPTACLE
 G - GFCI RECEPTACLE
 M - MOTOR STARTER SWITCH
 J - JUNCTION BOX, VERIFY DISCONNECT MEANS
 NF - NON-FUSED DISCONNECT SWITCH

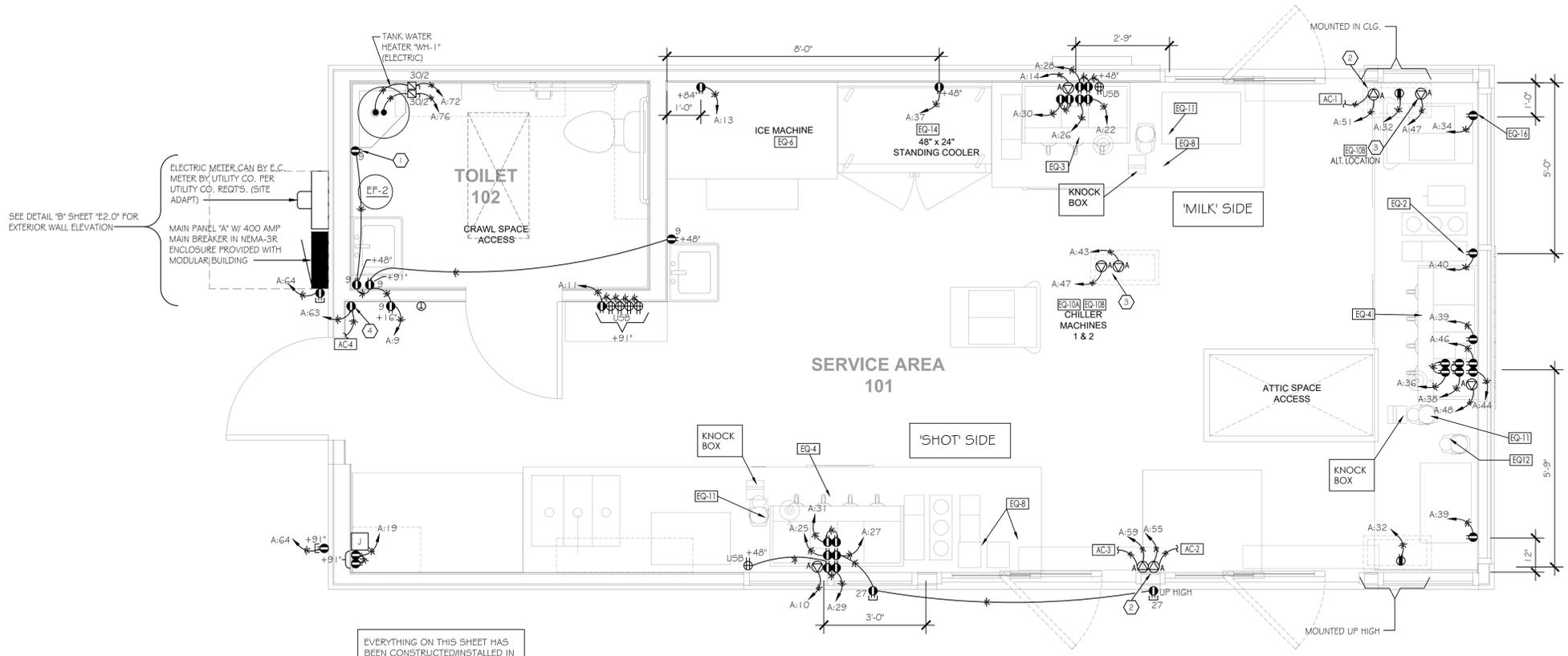
SPECIAL OUTLET SCHEDULE

SYMBOL	DESCRIPTION
⊕A	LG-50R RECEPTACLE FOR POWER CONNECTION TO OWNER FURNISHED EQUIPMENT. FIELD VERIFY & CONTRACTOR TO COORDINATE EXACT PLUG AND CONNECTION REQUIREMENTS WITH EQUIPMENT PROVIDED PRIOR TO ROUGH-IN.
⊕B	LG-50R RECEPTACLE FOR POWER CONNECTION TO NAT. MOD. PROVIDED WARMING HUT. RECEPTACLE TO BE RECESSED IN CANOPY AND PROVIDED WITH CANOPY. FIELD VERIFY & CONTRACTOR TO COORDINATE EXACT PLUG AND CONNECTION REQUIREMENTS WITH EQUIPMENT PROVIDED PRIOR TO ROUGH-IN.

- KEY NOTES:**
- RECEPTACLE MOUNTED ON WALL FOR 'EF-2', VERTICAL INCLINE EXHAUST FAN, FOR CRAWL SPACE. FIELD VERIFY EXACT LOCATION. EF TO BE CONTROLLED BY THERMOSTAT & HUMIDISTAT LOCATED IN CRAWL SPACE - REFER TO PLANS, EC TO PROVIDE ALL CONDUIT, JUNCTION BOX, WIRING & RELAYS AS REQUIRED.
 - HEATED AIR CURTAIN TO BE MOUNTED ABOVE SERVICE WINDOW / DOOR. RECEPTACLE FOR DISCONNECTING MEANS TO BE ADJACENT TO AIR CURTAIN AT SAME HEIGHT. AIR CURTAIN PROVIDED WITH CORD AND PLUG.
 - PROVIDE RECEPTACLES IN CEILING FOR CHILLER MACHINES. FIELD VERIFY EXACT LOCATION & CONNECTION REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN.
 - RECEPTACLE MOUNTED UP HIGH FOR FUTURE NON HEATER AIR CURTAIN. FIELD VERIFY EXACT HEIGHT PRIOR TO ROUGH-IN.



B REAR BUILDING ELEVATION
 SCALE: 1/4" = 1'-0"
 0 1 2 4 8

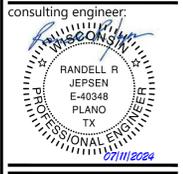


EVERYTHING ON THIS SHEET HAS BEEN CONSTRUCTED/INSTALLED IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE JOB SITE FOR 'SITE ADAPT' CONSTRUCTION. REFER TO 'SITE ADAPT' DRAWINGS FOR ADDITIONAL INFORMATION.

A ELECTRICAL FLOOR PLAN - POWER
 SCALE: 1/2" = 1'-0"
 0 1 2 4



707 n. 6th street
 Kansas city, ks 66101
 www.veritas-ad.com
 913.624.1610



MD ENGINEERING
 1225 West 14th Street, Suite 300
 Plano, Texas 75075 469.467.0000
 Email: mrdengco@md-eng.com

7 BREW DRIVE-THRU, La Crosse, WI - Mormon Coulee

REVISIONS

No.	Description	Date
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sheet issue date:
07-11-2024

project no.:
23.26.04

sheet contents:
Electrical Floor Plan - Power (Modular Building)

sheet no.:
E2.0

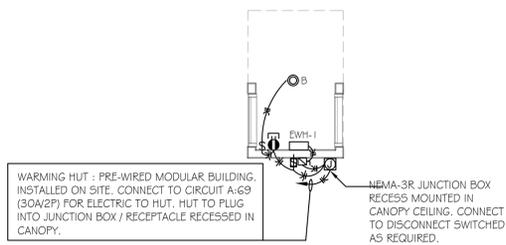
LIGHTING FIXTURE SCHEDULE

SYM	DESCRIPTION	MFG.	CAT No.	LAMP TYPE	CODE	MOUNTING	NOTES
A	2' x 4' LED FLAT PANEL	ATLAS LIGHTING	FAELP24LEDU	LED	4543lm (36.9W)	RECESS / CEILING	-
B	EXTERIOR CANOPY LIGHT	JUNO	GRLD G4 10LM 27K 90CRI 1 20 FRFC WWH MG-LED-IC-AT	LED	INCLUDED	RECESS / CANOPY	-
C	UTILITY LIGHT	LEVITON	9850-LED	LED	800 lm (10W)	SURFACE TO STRUCTURE	-
D	EXTERIOR LED FLEX LIGHT	GLLS	NLI 1 D 1 O 1 2 VEBLU 1 2 OJ S270 BLUE NEON 1 20V	LED	INCLUDED	SURFACE	4
F	ENCLOSED CEILING LIGHT	ATLAS LIGHTING	ILW 4-BLED 4 D 4K	LED	7093lm (48W)	SURFACE / CEILING	-
E	EMERGENCY LIGHT	DUAL-LITE	EV4D (WITH BATTERY BACK-UP)	LED	INCLUDED	7'-6" A.F.F.	2
G	EXIT / EMERGENCY LT. COMBO	DUAL-LITE	EVCURWD4 (WITH BATTERY BACK-UP)	LED	INCLUDED	7'-6" A.F.F.	2
H	EXTERIOR EMERGENCY LIGHT	DUAL-LITE	PG 2-HTR. (WITH BATTERY BACK-UP)	LED	INCLUDED	SURFACE OVER DOOR	2

NOTES:

- GENERAL CONTRACTOR SHALL PROVIDE FIREPROOFING AROUND ANY RECESSED LIGHT FIXTURE INSTALLED IN A FIRE RATED CEILING PER U.L. REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL COORDINATE.
- EXIT AND EMERGENCY LIGHTS TO BE CONNECTED TO THE CIRCUIT AS NOTED, UN-SWITCHED.
- FIXTURES SHALL BE PROVIDED BY OWNER AND INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR.
- PROVIDE ALL NECESSARY LED-NEON-FLEX CONNECTORS AS REQUIRED FOR SURFACES AND APPLICATION. PROVIDE DMX RGB CONTROLLER. RUNS OVER 1.8M SHALL BE FED FROM BOTH ENDS PER MANUFACTURERS INSTRUCTIONS. TOTAL WATTAGE 3.66 WATTS PER FOOT.

Occupancy / Daylight Harvesting Sensor:
 CEILING MOUNT SENSOR EQUAL TO SENSORWORK # SWX-211-2-D. LIGHTS WILL GRADUALLY DIM IN ORDER TO MAXIMIZE ENERGY SAVINGS WHILE MAINTAINING DESIRED OVERALL LIGHTING LEVEL. LIGHTS ARE SWITCHED OFF IF AMBIENT LIGHT LEVEL SURPASSES THRESHOLD AND BACK ON IF LEVEL DROPS. LIGHTING IS HELD OFF IF SUFFICIENT AMBIENT LIGHT LEVEL IS PRESENT UPON INITIAL OCCUPANCY. LIGHTING WILL TURN ON IF LIGHT LEVEL DROPS BELOW SETPOINT. ONCE ON, LIGHTING WILL ONLY TURN OFF FROM VACANCY OR A MANUAL SWITCH, NEVER FROM DAYLIGHT. FORM MANUAL OVERRIDE SWITCH, CONNECT BETWEEN THE SENSOR AND THE LOAD.



D ELECTRICAL WARMING HUT
 SCALE: 1/4" = 1'-0"
 REFERENCE ARCHITECTURAL OR CIVIL SITE PLAN FOR ACTUAL LOCATION

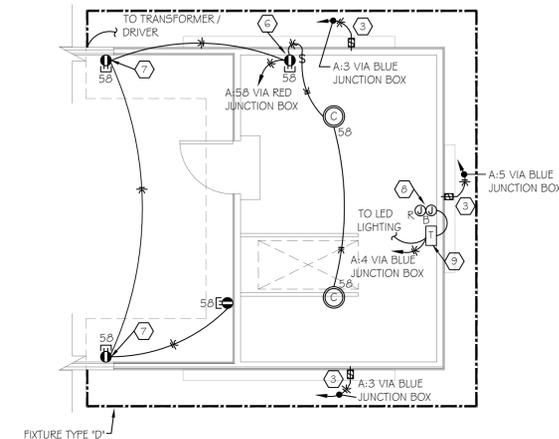


CALCULATION SUMMARY

LABEL	UNITS	AVG.	MAX.	MIN.
DINING	FC	53.8	71.3	32.9
CANOPY	FC	23.7	34.9	0.0

B ELECTRICAL FLOOR PLAN - PHOTOMETRIC
 SCALE: 1/4" = 1'-0"

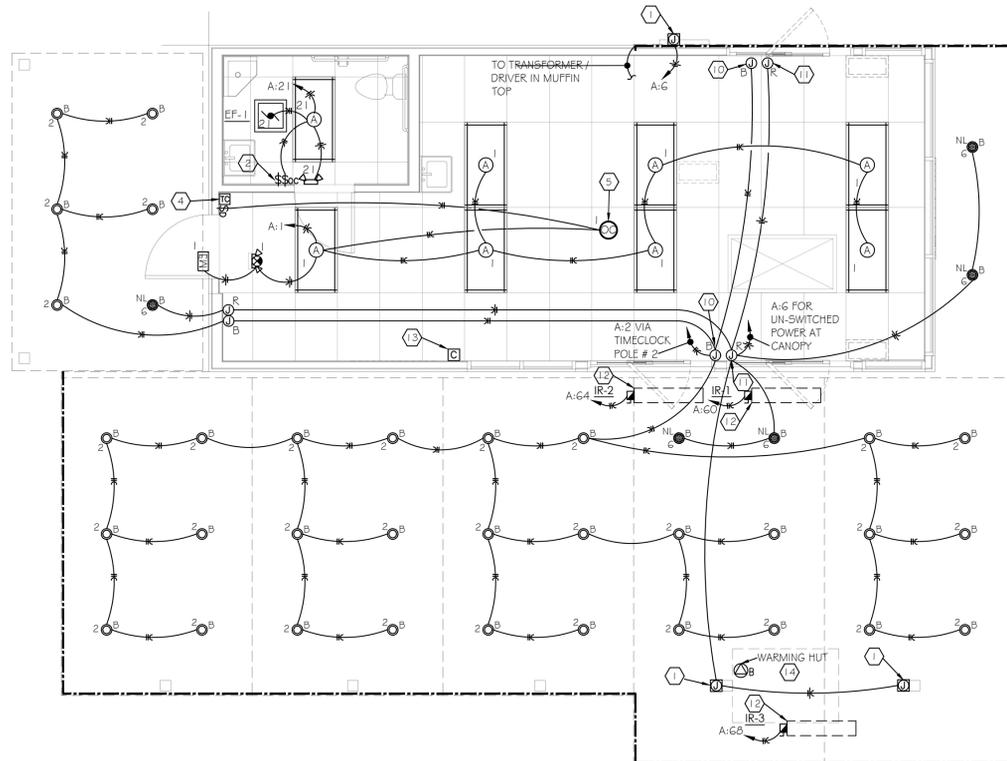
- KEY NOTES:**
- EXTERIOR SIGN BOX / MENU BOARD. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATION PRIOR TO ROUGH-IN. TYP OF 3. FIELD VERIFY CONTROL REQUIREMENTS
 - LIGHT SWITCH FOR CRAWL SPACE LIGHT WITH CONDUIT STUBBED DOWN THRU FLOOR. CONNECT TO CIRCUIT AS NOTED FOR SLUMP PUMP, HEAT TRACE, AND LIGHT IN CRAWL SPACE.
 - STORE SIGNAGE: SEE ARCH. DRAWINGS FOR ELEVATION. PROVIDE DISCONNECTING MEANS AS REQUIRED. CONTROLLED BY TIMECLOCK.
 - 2 POLE TIMECLOCK. CONNECT ALL MODULAR EXTERIOR LIGHTING TO POLE ONE, AND SITE ADAPT CANOPY LIGHTING TO POLE 2.
 - OCCUPANCY / DAYLIGHT HARVESTING SENSOR MOUNTED CEILING. SEE NOTE.
 - SWITCH FOR ATTIC LIGHTS AND GFCI RECEPTACLE TO BE MOUNTED 48" A.F.F. TO TOP ABOVE ATTIC FLOOR.
 - ROOFTOP RECEPTABLES TO BE MOUNTED ABOVE CANOPY. REFERENCE ARCHITECTURAL SHEET A4.2 FOR SPECIFIC MOUNTING LOCATIONS.
 - TWO 4' x 4' JUNCTION BOXES, PAINTED BLUE FOR LED DRIVERS AND RED OR POWER, MOUNTED ON BACK WALL OF MUFFIN TOP FOR CONNECTION OF ALL ATTIC ELECTRICAL CIRCUITS. SITE ELECTRICAL CONTRACTOR TO CONNECT PROVIDED FEEDER IN BASE BUILDING, STUBBED THRU ROOF TO THE BOXES AS REQUIRED.
 - TRANSFORMERS / DRIVERS FOR LED NEON-FLEX LIGHTING. COORDINATE FINAL MOUNTING LOCATION IN ATTIC IN FIELD.
 - JUNCTION BOX ABOVE CEILING, PAINTED BLUE AND MARKED 'TIMER', FOR CANOPY LIGHTING CONTROLLED BY TIMECLOCK. CONNECTION TO CANOPY LIGHTS BY SITE ELECTRICAL CONTRACTOR.
 - JUNCTION BOX ABOVE CEILING, PAINTED RED AND MARKED 'POWER', FOR CANOPY LIGHTING NOT CONTROLLED BY TIMECLOCK. SIGN / MENU BOXES CONNECTION TO CANOPY LIGHTS BY SITE ELECTRICAL CONTRACTOR.
 - CANOPY HEATER: 208V/1Ø, 20.8 AMPS, 4.53KW. CONNECT TO CIRCUIT AS NOTED. INFRARED HEATERS ARE FURNISHED AND INSTALLED BY OTHERS ON SITE. SITE E.C. TO FIELD VERIFY EXACT LOCATION AND ELECTRICAL CONNECTION PRIOR TO ROUGH-IN.
 - INFRARED CONTROLLER FURNISHED BY OTHERS, INSTALLED AND CONNECTED BY E.C. FIELD VERIFY EXACT LOCATION & CONNECTION REQUIREMENTS WITH EQUIPMENT SUPPLIED PRIOR TO ROUGH-IN.
 - WARMING HUT OUTLET - SEE DETAIL 'D' THIS SHEET.



C ELECTRICAL MUFFIN TOP PLAN
 SCALE: 1/4" = 1'-0"
 0 1 2 4 8

CANOPY LIGHTING NOTE:
 CANOPY LIGHTING IS SHIPPED TO THE SITE INSTALLED IN THE CANOPY. SITE ELECTRICAL CONTRACTOR TO CONNECT THE INSTALLED COLOR CODED ELECTRICAL FEEDERS FROM THE CANOPY LIGHTING TO THE COLOR CODED JUNCTION BOXES INSTALLED ABOVE THE CEILING OF THE MAIN BUILDING. VERIFY LOCATION AND CONNECTION REQUIREMENTS ON SITE PRIOR TO ROUGH-IN.

EVERYTHING ON THIS SHEET HAS BEEN CONSTRUCTED/INSTALLED IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE JOB SITE, EXCEPT FOR THE CANOPY LIGHTING SAND INFRARED HEATERS FOR SITE ADAPT CONSTRUCTION. REFER TO 'SITE ADAPT' DRAWINGS FOR ADDITIONAL INFORMATION.



A ELECTRICAL FLOOR PLAN - LIGHTING
 SCALE: 1/4" = 1'-0"

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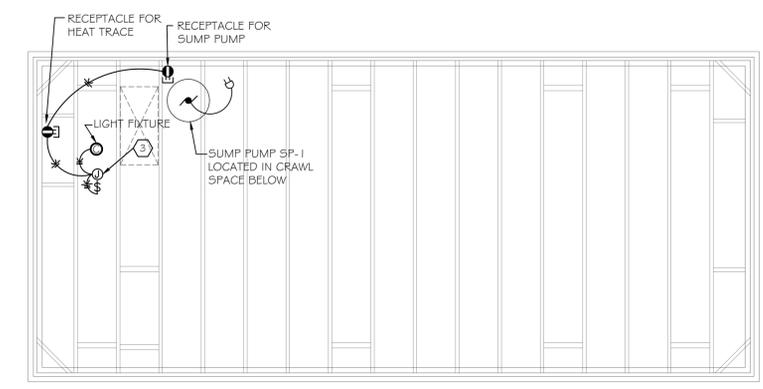
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 07-11-2024

project no.:
 23.26.04

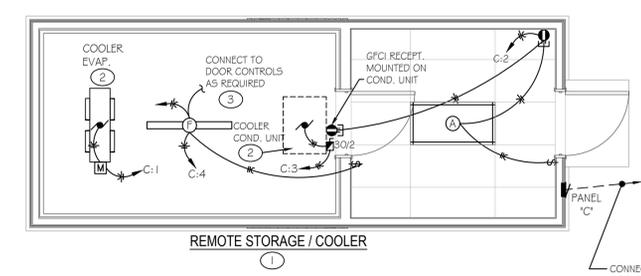
sheet contents:
 Electrical Floor Plan -
 Lighting
 (Modular Building)

Ⓐ ELECTRICAL KEY NOTES:

1. ROOF TOP UNIT "RTU-1" IS FURNISH AS PART OF THE MODULAR BUILDING ASSEMBLY PACKAGE AND INSTALLED ON-SITE. ELECTRICAL IS ROUGH-IN ONLY. FEEDER FROM CIRCUIT BREAKER IN PANEL, CONDUIT AND WIRE, IS INSTALLED UP TO ROOF AREA AND CAPPED ABOVE CEILING FOR SHIPPING. SITE ELECTRICAL CONTRACTOR TO EXTEND FEEDER THRU ROOF, FURNISH & INSTALL DISCONNECT SWITCH AND PROVIDE FINAL CONNECTIONS. REFERENCE SHEET "E2.0" FOR MORE INFORMATION.
2. ROOF MOUNTED ICE MACHINE CONDENSER IS FURNISHED AND INSTALLED ON-SITE BY OTHERS. ELECTRICAL IS ROUGH-IN ONLY. FEEDER FROM CIRCUIT BREAKER IN PANEL, CONDUIT AND WIRE, AND CAPPED FOR SHIPPING. SITE ELECTRICAL CONTRACTOR TO PROVIDE DISCONNECT SWITCH AND MAKE FINAL CONNECTIONS AS NOTED.
3. PROVIDE JUNCTION BOX IN CRAWL SPACE ON UNDERSIDE OF FLOOR AND CONNECT TO EXISTING CONDUIT STUB-OUT FROM SWITCH IN RESTROOM. FURNISH AND INSTALL CRAWL SPACE LIGHT AND CONNECT TO EXISTING SWITCH LEG OF CIRCUIT. FURNISH AND INSTALL (2) GFCI RECEPTACLES WITH IN-USE WEATHERPROOF COVERS MOUNTED IN CRAWL SPACE ON UNDERSIDE OF FLOOR. (1) FOR SUMP PUMP CONNECTION AND (1) FOR HEAT TRACE CONNECTION. CONNECT UNSWITCHED TO EXISTING CRAWL SPACE CIRCUIT.
4. TWO 4" X 4" JUNCTION BOXES, PAINTED BLUE FOR LED DRIVERS AND RED OR POWER, FURNISHED WITH MODULAR BUILDING ASSEMBLY AND MOUNTED ON BACK WALL OF MUFFIN TOP FOR CONNECTION OF ALL ATTIC ELECTRICAL CIRCUITS. SITE ELECTRICAL CONTRACTOR TO CONNECT PROVIDED FEEDER IN BASE BUILDING, STUBBED THRU ROOF TO THE BOXES AS REQUIRED.



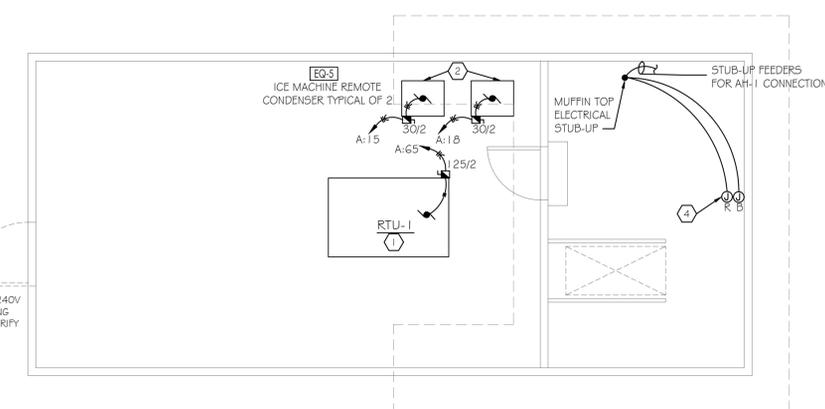
Ⓑ ELECTRICAL FOUNDATION PLAN
 SCALE: 1/4" = 1'-0" (SITE ADAPT)
 0 1 2 4 8



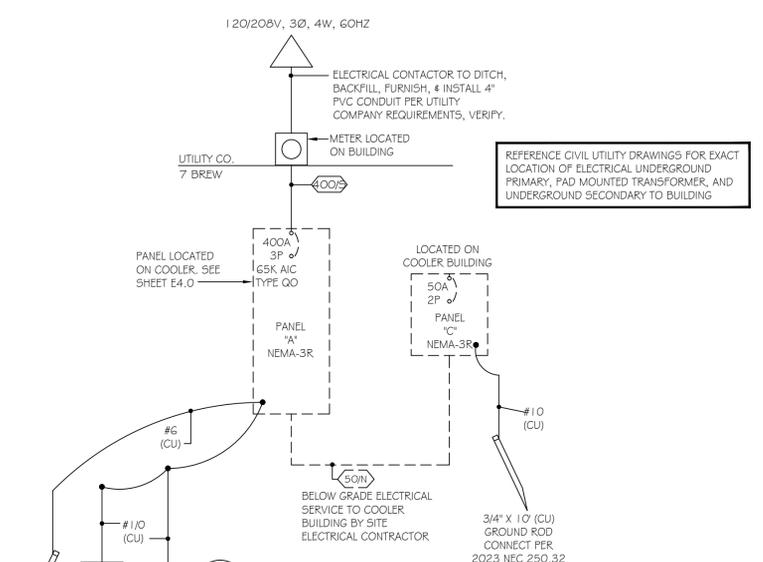
Ⓓ ELECTRICAL - STORAGE / COOLER
 SCALE: 1/4" = 1'-0"
 0 1 2 4 8

Ⓔ ELECTRICAL KEYED NOTES:

1. REMOTE COOLER IS FURNISHED BY NATIONAL MODULAR AND DELIVERED TO SITE. SITE ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND ELECTRICAL CONNECTION REQUIREMENTS WITH COOLER PROVIDED AND CONNECT PANEL "C" TO CIRCUIT AS NOTED ON DRAWINGS.
2. COOLER COND. UNIT (ON ROOF) AND COOLER EVAP (INSIDE) IS PROVIDED & SHIPPED TO THE SITE BY NATIONAL MODULAR MFGS. - INSTALLED BY "ON-SITE" MECHANICAL CONTRACTOR AND CONNECTED TO PANEL "C" BY "ON-SITE" ELECTRICAL CONTRACTOR. COORDINATE ACTUAL INSTALLATION LOCATION WITH "ON-SITE" GENERAL CONTRACTOR. CONNECT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
3. "ON-SITE" ELECTRICAL CONTRACTOR TO PROVIDE HEAT TRACE! ON ALL CONDENSATE PIPING. COORDINATE ALL ROUTING & TERMINATION WITH "ON-SITE" GENERAL CONTRACTOR. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS. CONNECT TO CIRCUIT #4 IN PANEL "C".



Ⓐ ELECTRICAL ROOF PLAN
 SCALE: 1/4" = 1'-0" (SITE ADAPT)
 0 1 2 4 8



Ⓒ ONE-LINE DIAGRAM
 NOT TO SCALE

SITE ELECTRICAL CONTRACTOR SHALL REFER TO "MODULAR BUILDING" DRAWINGS FOR ADDITIONAL "SITE ADAPT" ELECTRICAL WORK.

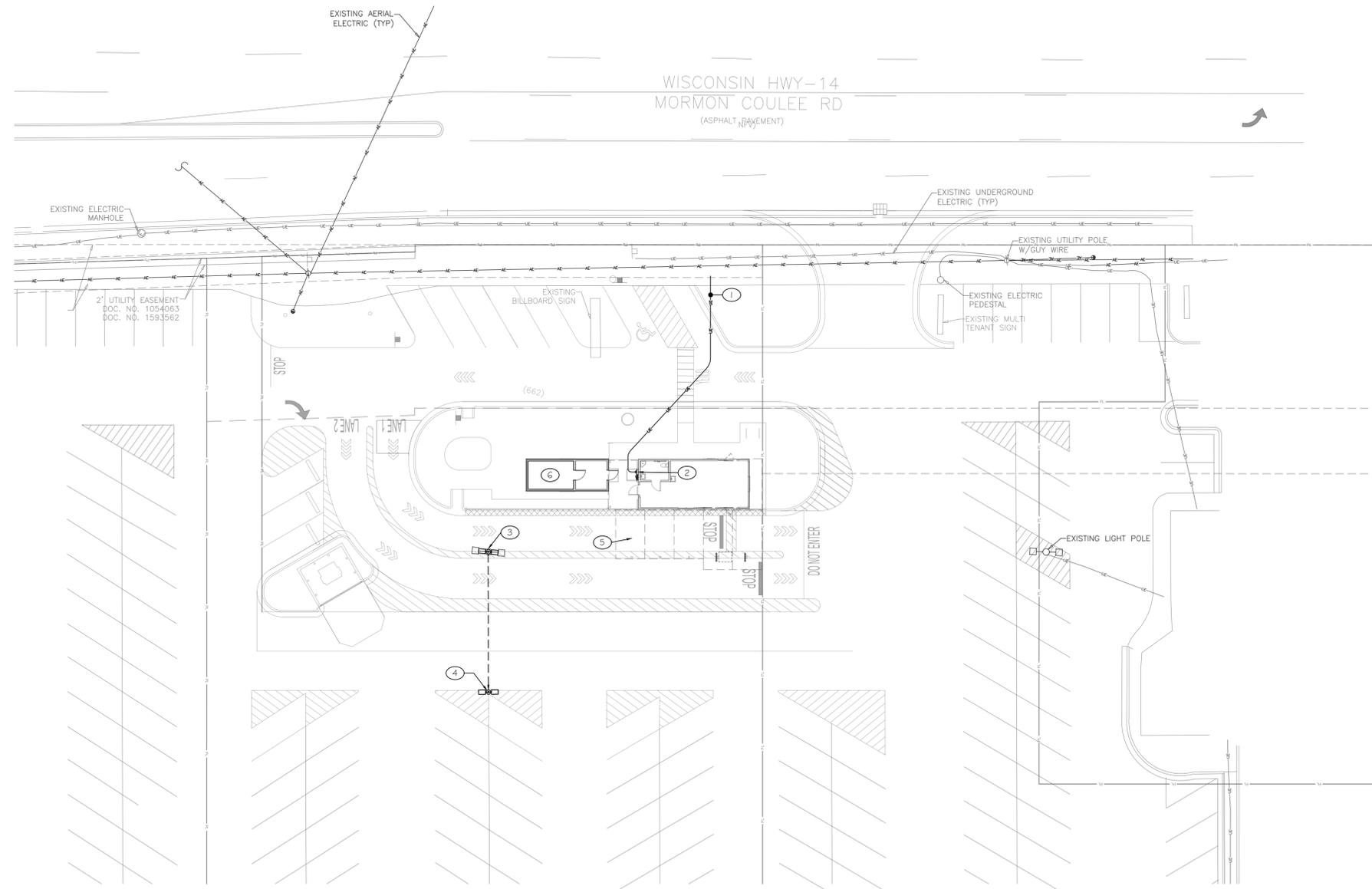
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07-11-2024

project no.:
23.26.04

sheet contents:
Electrical Roof / Attic & Foundation Plan - Power (Site Adapt)

sheet no.:
E4.0



- # ELECTRICAL KEY NOTES: SITE**
1. UNDERGROUND ELECTRICAL SECONDARY FROM UTILITY CO. TRANSFORMER BY SITE ELECTRICAL CONTRACTOR. FIELD VERIFY EXACT REQUIREMENTS & ROUTING WITH LOCAL UTILITY CO. PRIOR TO ROUGH-IN.
 2. ELECTRIC METER & ELECTRICAL SERVICE PANEL. METER PROVIDED BY SITE ELECTRICAL CONTRACTOR. PANELS PROVIDED WITH BUILDING.
 3. EXISTING LIGHT POLE TO BE REMOVED AND RELOCATED AS NOTED. REMOVE CONCRETE POLE BASE AS REQUIRED.
 4. NEW LOCATION FOR EXISTING SITE LIGHTING FIXTURE. RECONNECT TO EXISTING CIRCUIT, RELOCATE AND EXTEND ALL CONDUIT AND CONDUCTORS AS NEEDED TO COMPLETE THE CIRCUIT. G.E. TO PROVIDE POLE BASE THE MATCHED EXISTING POLE BASES ON SITE. FIELD VERIFY PRIOR TO CONSTRUCTION.
 5. CANOPY LIGHT FIXTURES, TYPE 'B', ARE FURNISHED WITH THE CANOPY AND IS PART OF THE MODULAR BUILDING. THE CANOPY IS SHIPPED SEPARATELY TO BE INSTALLED ON SITE. TOTAL NUMBER OF FIXTURES, 32. REFERENCE SHEET E3.0 FOR ADDITIONAL INFORMATION.
 6. REMOTE COOLER IS FURNISHED AS PART OF THE MODULAR PACKAGE AND DELIVERED TO BE INSTALLED ON SITE. ELECTRICAL CONTRACTOR TO CONNECT COOLER PANEL TO MODULAR PANEL CIRCUIT BREAKER PER ONE-LINE DIAGRAM. REFERENCE SHEETS E1.0 & E4.0.

A ELECTRICAL SITE PLAN
 SCALE: 1" = 20'-0"
 0 2 4 8 16 32
 NORTH

REVISIONS

No.	Description	Date

sheet issue date:
07-11-2024

project no.:
23.26.04

sheet contents:
Electrical Roof / Attic & Foundation Plan - Power (Site Adapt)

sheet no.:
E4.1

16010 - BASIC ELECTRICAL REQUIREMENTS

16010.01 - DRAWINGS AND SPECIFICATIONS
THE CONTRACT DRAWINGS FOR DIVISION 16 WORK ARE IN PART SCHEMATIC, INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE THE GENERAL LAYOUT, DESIGN AND ARRANGEMENT. THE CONTRACTOR SHALL FOLLOW THESE DRAWINGS IN THE LAYOUT OF HIS WORK AND SHALL CONSULT GENERAL INTENT CONSTRUCTION DRAWINGS, STRUCTURAL DRAWINGS, MECHANICAL DRAWINGS AND ALL OTHER DRAWINGS FOR THIS PROJECT TO DETERMINE ALL CONDITIONS AFFECTING THE DIVISION 16 WORK.
WHERE SPECIFIC DETAILS AND DIMENSIONS FOR DIVISION 16 WORK ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL TAKE MEASUREMENTS AND MAKE NOTATIONS AS REQUIRED FOR THE PROPER INSTALLATION OF THE WORK AND COORDINATION WITH ALL OTHER WORK ON THE PROJECT. IN CASE OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE SPECIFICATIONS THAT HAVE NOT BEEN CLARIFIED BY ADDENDUM PRIOR TO BIDDING, IT SHALL BE ASSUMED BY THE SIGNING OF THE CONTRACT THAT THE HIGHER COST IS INCLUDED IN THE CONTRACT PRICE.

16010.02 - WORK INCLUDED
THIS WORK SHALL INCLUDE ALL PLANT, LABOR, MATERIAL, EQUIPMENT AND EQUIPMENT AS REQUIRED TO FURNISH AND INSTALL DIVISION 16 WORK INCLUDING DEMOLITION AS SHOWN ON THE DRAWINGS AND AS HEREINAFTER SPECIFIED. FURNISH AND INSTALL ALL MATERIALS, EQUIPMENT, DEVICES AND ACCESSORIES NOT SPECIFICALLY CALLED FOR BY ITEM BUT THAT ARE NECESSARY TO PROVIDE THE REQUIREMENTS IN OPERATION AND FUNCTION THAT IS ESTABLISHED BY THE DESIGN AND BY THE EQUIPMENT SPECIFIED.

WORK TO INCLUDE THE PROCUREMENT OF AND PAYMENT OF ALL PERMITS AND LICENSES REQUIRED FOR THE PERFORMANCE OF THE WORK. WORK TO INCLUDE ALL FEES AND DIRECT EXPENSES INVOLVED IN ALL INSPECTIONS REQUIRED FOR THE PROJECT. ALL SCAFFOLDS, STAGING, RUNWAYS AND EQUIPMENT REQUIRED FOR THE PERFORMANCE OF THE WORK. THE REMOVAL FROM THE PREMISES, AS IT ACCUMULATES OF ALL DIRT AND DEBRIS RESULTING IN THE PERFORMANCE OF THE WORK.

16010.03 - PROTECTION AND DUST CONTROL
THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION TO PREVENT DAMAGE TO ADJACENT AREAS, EQUIPMENT, OR FURNISHINGS, TO PREVENT ACCIDENTAL INJURY TO THE BUILDING OCCUPANTS AND THE PUBLIC; TO PREVENT THE SPREADING OF DUST, DIRT, DEBRIS, AND MOISTURE FROM GETTING ON OR IN THE BUILDING OCCUPANTS FURNISHINGS OR EQUIPMENT.

16010.04 - EXISTING CONDITIONS
EACH BIDDER SHALL INSPECT THE SITE AS REQUIRED FOR KNOWLEDGE OF EXISTING CONDITIONS AND FAILURE TO OBTAIN SUCH KNOWLEDGE SHALL NOT RELIEVE THE SUCCESSFUL BIDDER OF THE RESPONSIBILITY TO MEET THE EXISTING CONDITIONS IN PERFORMING THE WORK UNDER THE CONTRACT.

WHERE EXISTING POWER, LIGHTING OR CONTROL CIRCUITRY IS BROKEN BY REMOVAL OF EXISTING DEVICES, EQUIPMENT OR FIXTURES, OR BY DEMOLITION WORK, CUTTING OR REMOVAL OF EXISTING BUILDING CONSTRUCTION, AND WHERE THE EXISTING CIRCUITRY IS REQUIRED BY REMAINING DEVICES OR EQUIPMENT TO STAY IN SERVICE, THEN THE CIRCUITRY SHALL BE COMPLETED AS REQUIRED BY JOB CONDITIONS.

16010.05 - MATERIAL AND MANUFACTURE
ALL MATERIAL AND EQUIPMENT SHALL BE NEW EXCEPT AS STATED OTHERWISE. SHALL BE OF THE BEST QUALITY AND DESIGN. SHALL BE FREE FROM DEFECTS AND IMPERFECTIONS AND SHALL HAVE MARKINGS OR A NAMEPLATE IDENTIFYING THE MANUFACTURER AND PROVIDING SUFFICIENT REFERENCE TO ESTABLISH QUALITY, SIZE AND CAPACITY.

16010.06 - SUBSTITUTIONS
ALL PRODUCTS PROPOSED FOR USE, INCLUDING THOSE SPECIFIED BY REQUIRED ATTRIBUTES AND PERFORMANCE, SHALL REQUIRE APPROVAL BY THE ENGINEER BEFORE BEING INCORPORATED INTO THE WORK.

WHERE THE PHRASE "OR EQUAL" OR "APPROVED EQUAL" OCCURS IN THE CONTRACT DOCUMENTS, DO NOT ASSUME THAT MATERIALS, EQUIPMENT OR METHODS WILL BE APPROVED AS EQUAL UNLESS THE ITEM HAS BEEN SPECIFICALLY APPROVED FOR THIS WORK BY THE ENGINEER/ARCHITECT.

16010.07 - SAFETY REGULATIONS
ALL DIVISION 16 WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE AND GOVERNING SAFETY REGULATIONS OF THE OCCUPATIONAL AND SAFETY HEALTH ACT.

16010.08 - CODES, ORDINANCES, REGULATIONS AND U.L. APPROVAL
ALL DIVISION 16 WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS INCLUDING THE CURRENT RULES AND REGULATIONS OF THE NATIONAL ELECTRICAL CODE, THE NATIONAL FIRE PROTECTION ASSOCIATION, AND ALL STATE AND LOCAL LAWS, CODES AND ORDINANCES.

FIXTURES, APPLIANCES, EQUIPMENT AND MATERIALS WHICH ARE SUBJECT TO UNDERWRITERS LABORATORY TESTS SHALL BEAR SUCH APPROVAL.

16010.09 - OPENINGS IN FIRE RATED ASSEMBLIES
WHERE OPENINGS ARE MADE, OR LEFT DUE TO CONSTRUCTION THROUGH FIRE RATED ASSEMBLIES FOR CONDUIT OR NIPPLES, FOR SLEEVES CONTAINING CABLE OR WIRE, AND OPEN CONDUITS THROUGH FIRE RATED ASSEMBLIES THE AREA AROUND THE OPENINGS, SLEEVES AND CONDUITS SHALL BE FILLED WITH GASKET TECHNOLOGY CORP. ACP-700-800 OR DOW CORNING 93-4548 RTV SILICONE OR APPROVED EQUAL, FIRE RESISTANT FOAM SEALANT AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

16010.10 - ROOF PENETRATIONS
ALL OPENINGS IN THE ROOF FOR ELECTRICAL CONDUITS SHALL BE MADE WEATHER AND WATER TIGHT USING "STONEHAM" MULTI-FLASH OR VERSA-FLASH SEAMLESS FLASHING ASSEMBLY FOR CONDUIT THROUGH 2" DIAMETER. CONDUIT SIZES OVER 2" DIAMETER SHALL HAVE FITCH POCKETS FILLED WITH FITCH AND GALVANIZED DRIP SHIELD INSTALLED AROUND CONDUITS. THE DRIP SHIELD SHALL COMPLETELY COVER THE FITCH POCKET.

16010.11 - EXCAVATION AND BACK FILLING
PERFORM ALL EXCAVATING AND BACK FILLING FOR THE CONSTRUCTION AND INSTALLATION OF THE WORK INCLUDED UNDER THIS DIVISION. LINES SHALL BE USED TO LAYOUT THE TRENCHES FOR ALL UNDERGROUND WORK. TRENCHES CLOSE TO WALLS, FOUNDATIONS, AND CURBS SHALL NOT BE EXCAVATED WITHOUT PRIOR CONSULTATION WITH THE ENGINEER/ARCHITECT.

ALL EXCAVATIONS SHALL BE PROPERLY PROTECTED BY THE NECESSARY BRACINGS AND TIMBERS TO PREVENT ANY CAVING-IN OR INJURY TO ADJACENT PROPERTIES.

CUT AND REPLACE ALL EXISTING WALKS, ROADS, STREET PAVEMENT, CURBS, STEPS, RETAINING WALLS AND MISCELLANEOUS WORKS REQUIRED FOR INSTALLATION OR WORK UNDER THIS DIVISION.

THE BACK FILLING OF TRENCHES SHALL BE CARRIED OUT AS RAPIDLY AS THE FINISHED WORK IS APPROVED AND WILL PERMIT THE TRENCH SHALL BE BACK FILLED IN LAYERS NOT TO EXCEED 6" WITH 6000 SELECTED DRY EARTH THOROUGHLY TAMPED WITH A PNEUMATIC TAMPER. AFTER BACK FILLING, ALL SURPLUS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.

16010.12 - SHOP DRAWINGS AND SAMPLES
SUBMIT FOR APPROVAL A PDF SET OF MANUFACTURERS SHOP DRAWINGS OF ALL MAJOR ITEMS OF EQUIPMENT AND ALL ITEMS REQUIRING COORDINATION BETWEEN CONTRACTORS. ACCEPTANCE OF THE WORK SHALL BE SUBJECT TO THE ENGINEER/ARCHITECT'S APPROVAL OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES. SHOP DRAWINGS SHALL INCLUDE MANUFACTURERS DETAIL DRAWINGS OF EQUIPMENT AND MATERIAL, AND CONTRACTORS SHOP DETAILS FOR INSTALLATION OF MATERIAL AND EQUIPMENT. DESCRIPTIVE LITERATURE SHALL INCLUDE CATALOG DATA, DESIGN SIZE AND CAPACITY OF MATERIAL AND EQUIPMENT. SUBMITTALS SHALL INCLUDE THE MANUFACTURERS MODEL NUMBER, CAPACITY, PERFORMANCE DATA, ELECTRICAL CHARACTERISTICS, ETC., ALL CLEARLY SHOWN AND MARKED FOR THE SPECIFIC ITEM OF EQUIPMENT BEING FURNISHED ON THIS PROJECT.

16010.13 - RECORD DRAWINGS
THE CONTRACTOR SHALL KEEP DAY-TO-DAY RECORD OF ALL CHANGES OR VARIATIONS MADE FROM THE CONTRACT DOCUMENTS AND AT THE END OF THE PROJECT SHALL PROVIDE THE OWNER/ARCHITECT/ENGINEER WITH REPRODUCIBLE SETS AS REQUESTED.

16010.14 - WIRING OF MECHANICAL EQUIPMENT
FURNISH AND INSTALL ALL POWER WIRING AND ALL CONTROL AND INTERLOCK WIRING OF ALL UNITS, RIMS, FANS, WATER HEATERS, ETC. CONNECT PER MANUFACTURERS WIRING DIAGRAMS. FURNISH AND INSTALL ALL NECESSARY DISCONNECT SWITCHES REQUIRED. AFTER INSTALLATION OF THE CONTROL INTERLOCK WIRING, THE CONTRACTOR SHALL VERIFY THAT EACH MOTOR LOAD HAS THE CORRECT PHASE ROTATION. THIS CONTRACTOR SHALL VERIFY THE ACTUAL WIRE SIZES AMPS FOR MECHANICAL EQUIPMENT FROM THE EQUIPMENT NAMEPLATE. ELECTRICAL INSTALLATION SHALL BE BASED ON ACTUAL REQUIRED AMPERAGES WHICH MAY VARY SOMEWHAT FROM THE WIRE AND EQUIPMENT SIZES SHOWN ON THE DRAWINGS. PROPERLY SIZED ELECTRICAL WIRING AND EQUIPMENT SHALL BE FURNISHED WITHOUT EXTRA COST TO THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL CHANGES TO BE MADE IN THE ELECTRICAL INSTALLATION DUE TO EQUIPMENT VARIANCES THAT THE IMPACT ON FEEDERS, PANELS, FUSE AND BREAKER SIZES CAN BE CHECKED PRIOR TO THE INSTALLATION.

16010.15 - WIRING OF THERMOSTATS AND TEMPERATURE CONTROLS
FURNISH AND INSTALL ALL POWER WIRING AND ALL CONTROL AND INTERLOCK WIRING OF ALL THERMOSTATS AND TEMPERATURE CONTROL DEVICES INCLUDING NIGHTSTAYS, TIME SWITCHES, OVERSIZE TIMERS, ETC. SEE MECHANICAL DRAWINGS FOR LOCATIONS AND TEMPERATURE CONTROL DIAGRAMS.

16010.16 - TELEPHONE SYSTEM PROVISIONS
ELECTRICAL CONTRACTOR TO FIELD VERIFY WITH LOCAL SERVICE PROVIDER FOR THE EXACT REQUIREMENTS TO BRING SERVICE TO THIS PROJECT. PROVIDE AND INSTALL FLUSH MOUNTED TELEPHONE OUTLET BOXES WITH 1" CONDUIT STUB UP CONCEALED TO ACCESSIBLE CEILING SPACE AT LOCATIONS AS SHOWN ON THE DRAWINGS.

16010.17 - DATA SYSTEM PROVISIONS
PROVIDE AND INSTALL FLUSH MOUNTED DATA OUTLET BOXES WITH 1" CONDUIT STUB UP CONCEALED TO ACCESSIBLE CEILING SPACE AT LOCATIONS AS SHOWN ON THE DRAWINGS.

16010.18 - ADJUSTING ALIGNING AND TESTING
ALL ELECTRICAL EQUIPMENT ON THIS PROJECT FURNISHED UNDER THIS DIVISION AND ALL ELECTRICAL EQUIPMENT FURNISHED BY OTHERS SHALL BE ADJUSTED, ALIGNED AND TESTED FOR PROPER OPERATION BY THE ELECTRICAL CONTRACTOR. COMPLETE WIRING CIRCUITS SHALL BE FREE FROM SHORT CIRCUITS. ALL MOTORS SHALL BE VERIFIED FOR PROPER PHASE ROTATION. THE CONTRACTOR SHALL PROVIDE TEST DATA READINGS AS REQUESTED OR AS NOTED. THE CONTRACTOR SHALL HAVE THE FOLLOWING READINGS ACCESSIBLE AT ALL TIMES DURING THIS PROJECT. A TRUE RMS READING VOLTMETER, A TRUE RMS READING AMPMETER, AND A MEGGER INSULATION RESISTANCE METER.

16010.19 - OPERATION AND MAINTENANCE INSTRUCTIONS
SUBMIT TO THE ARCHITECT THREE COPIES EACH OF MATERIAL FOR MAINTENANCE AND OPERATION INSTRUCTION MANUALS. APPROPRIATELY BOUND INSTRUCTION MANUALS INCLUDING APPROVED COPIES OF THE FOLLOWING, REVIEW IF NECESSARY TO SHOW SYSTEM AND EQUIPMENT AS ACTUALLY INSTALLED. MANUFACTURERS CATALOG SHEETS, MAINTENANCE INSTRUCTIONS, OPERATING INSTRUCTIONS, PARTS LIST. CONTRACTOR SHALL ALSO PROVIDE ADEQUATE VERBAL INSTRUCTIONS OF SYSTEM OPERATION TO OWNERS REPRESENTATIVE AT THE TERMINATION OF THE WORK.

16010.20 - STARTUP OF SYSTEMS
PRIOR TO STARTUP OF THE ELECTRICAL SYSTEMS, THE CONTRACTOR SHALL CHECK ALL COMPONENTS AND DEVICES, LUBRICATE ITEMS ACCORDINGLY, AND TIGHTEN ALL SCREWED AND BOLTED CONNECTIONS. ADJUST TAPS ON EACH TRANSFORMER FOR RATED SECONDARY VOLTAGE. CHECK SERVICE ENTRANCE VOLTAGE, GROUNDING CONDITIONS, GROUNDING RESISTANCE AND PROPER PHASING. BALANCE SINGLE PHASE LOADS AT EACH PANELBOARD, REDISTRIBUTING BRANCH CIRCUIT CONNECTIONS UNTIL BALANCE IS ACHIEVED. AFTER ALL SYSTEMS HAVE BEEN INSPECTED AND ADJUSTED, CONFIRM ALL OPERATING FEATURES REQUIRED BY THE DRAWINGS AND SPECIFICATIONS AND MAKE FINAL ADJUSTMENTS AS NECESSARY.

16010.21 - GUARANTEE
GUARANTEE AGAINST WORKMANSHIP AND MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL PAYMENT. GUARANTEE SHALL INCLUDE MATERIAL TO BE REPLACED AND ALL LABOR REQUIRED.

16014 - ELECTRICAL IDENTIFICATION

16014.01 - DESCRIPTION OF WORK
PROVIDE AND INSTALL REQUIRED IDENTIFICATION FOR THE SYSTEMS AND EQUIPMENT SHOWN ON THE DRAWINGS AND/OR SPECIFIED.

UNDERGROUND PLASTIC LINE MARKER: MANUFACTURERS STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS-PRINTED PLASTIC TAPE, FOR DIRECT BURIAL SERVICE; MINIMUM 6" WIDE X 4 MILS THICK. PRINTING TO INDICATE TYPE OF SERVICE CABLE, WITH LARGE MINIMUM 5/16" HIGH LETTERS.

CABLE/CONDUCTOR IDENTIFICATION BANDS: MANUFACTURERS STANDARD VINYL, SELF-ADHESIVE SELF LAMINATING CABLE/CONDUCTOR MARKERS WRAP AROUND TYPE, PRE-MEMBERED PLASTIC COATED, OR WRITE-ON TYPE WITH CLEAR PLASTIC SELF-ADHESIVE COVER FLAP, LETTERING TO SHOW CIRCUIT IDENTIFICATION. SIMILAR TO PANDUIT "INSTACOGE" OR ACCEPTED EQUIVALENT BY TAB OR TYTAN.

SELF-ADHESIVE PLASTIC SIGNS: MANUFACTURERS STANDARD, SELF-ADHESIVE, PRE-PRINTED, FLEXIBLE VINYL SIGNS FOR OPERATIONAL INSTRUCTIONS OR WARNINGS.
DANGER SIGNS: MANUFACTURERS STANDARD "DANGER" SIGNS, BAKED ENAMEL FINISH ON 20 GAUGE STEEL, STANDARD RED, BLACK AND WHITE GRAPHICS.

16110 - RACEWAYS

16110.01 - DESCRIPTION OF WORK
INSTALLATION OF RACEWAY SYSTEMS FOR ALL WORK IN DIVISION 16 INCLUDING REQUIRED FITTINGS AND SUPPORTS.
ALL CONDUCTORS SHALL BE INSTALLED IN METALLIC CONDUIT UNLESS SPECIFIED.

16110.02 - PRODUCTS
ALL CONDUIT SHALL BE ELECTRICAL METALLIC TUBING (EMT), EXCEPT CONDUIT LARGER THAN 4" DIAMETER, CONDUIT OUTDOORS OR IN HOT OR DAMP LOCATIONS, OR IN NEC CLASSIFIED HAZARDOUS LOCATIONS, CONDUIT IN EARTH OR BELOW GRADE, AND EXCEPT AS OTHERWISE NOTED ON THE DRAWINGS OR SPECIFIED OTHERWISE.

ELECTRICAL METALLIC TUBING TO BE THREADLESS, STEEL TYPE CONFORMING TO ANSI STANDARD C80.3, NEG 348, AND UL 741, GALVANIZED INSIDE AND OUT.
ALL EMT FITTINGS TO BE COMPRESSION TYPE UNLESS OTHERWISE NOTED.

ALL UNDERGROUND CONDUIT SHALL BE RIGID. ENCASE EACH UNDERGROUND CONDUIT IN CONCRETE AS INDICATED ON THE DRAWINGS.

SHORT SECTIONS OF FLEXIBLE CONDUIT (GREENFIELD) SHALL BE USED FROM JUNCTION OR OUTLET BOXES TO LIGHTING FIXTURES AS PERMITTED BY THE NATIONAL ELECTRICAL CODE. CONNECTIONS FROM OUTLET BOXES ABOVE CEILING TO FLUORESCENT FIXTURES RECESSED IN CEILING SHALL BE MADE WITH FLEXIBLE METALLIC STEEL CONDUIT NOT TO EXCEED 6 FEET IN LENGTH. FINAL CONNECTIONS TO MOTORS, TRANSFORMERS, AND TO ANY PIECE OF EQUIPMENT THAT WILL TRANSMIT MOTION, NOISE OR VIBRATION, SHALL BE FLEXIBLE METAL CONDUIT. FLEXIBLE CONDUIT SHALL NOT BE INSTALLED OUTDOORS OR IN DAMP LOCATIONS. ALL FLEXIBLE CONDUIT IN DENTAL SPACE SHALL BE HCF TYPE.

LIQUID TIGHT FLEXIBLE STEEL CONDUIT SHALL BE USED WHEN MAKING CONNECTIONS IN THE FOLLOWING CONDITIONS: EXPOSED TO LIQUIDS, EXPOSED TO VAPORS, EXPOSED TO SUNLIGHT.

16110.03 - INSTALLATION
CONDUITS SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING LINES AND SHALL BE RUN AGAINST THE STRUCTURE IN A NEAT WORKMANLIKE MANNER.

CONDUIT SHALL BE INSTALLED CONCEALED ABOVE SUSPENDED CEILING OR CONCEALED IN WALLS OR FLOORS WHEREVER POSSIBLE. CONDUIT SHALL BE INSTALLED TO CLEAR ALL CORNERS, DEPRESSIONS, PIPES, DUCTS, REINFORCING STEEL, ETC. ALL CONDUIT SHALL BE RUN OVERHEAD. CONDUIT SHALL BE RUN CONTINUOUS BETWEEN CONNECTIONS TO OUTLET BOXES AND CABINETS WITH MINIMUM POSSIBLE NUMBER OF BENDS. RADIIUS OF BENDS SHALL BE AS LONG AS POSSIBLE AND NEVER SHORTER THAN THE CORRESPONDING TRADE ELBOW. LONG RADIIUS BENDS WHEN NECESSARY. CONDUITS SHALL BE SECURELY FASTENED IN PLACE WITH APPROVED STRAPS, HANGERS AND STEEL SUPPORTS AS REQUIRED. SINGLE CONDUITS FOR FEEDERS SHALL BE HUNG WITH HALLMARKABLE SPLIT RING HANGERS WITH ROD AND TURNBUCKLE SUSPENSION FROM ASSOCIATED GRID AND ALL STATE AND LOCAL LAWS, CODES AND ORDINANCES.
CONDUITS SPACED AND SUPPORTED AS REQUIRED. CONDUITS SHALL BE CLAMPED TO UNFINISHED STEEL CHANNELS AND SPLITTING FROM INSERTS NOT SPACED OVER 1/2 FEET APART IN CONSTRUCTION ABOVE. HORIZONTAL FEEDER CONDUITS SHALL BE CLAMPED TO STRUCTURAL STEEL MEMBERS ATTACHED TO THE STRUCTURE. CABLE CLAMPS SHALL BE INSTALLED FOR SUPPORT OF VERTICAL FEEDERS. CONDUIT SUPPORTS SHALL BE ADDED WITHIN 12" AT ONE END OF ALL BENDS. CONDUIT SHALL NOT BE SUSPENDED FROM SUSPENDED CEILING COMPONENTS.

CONDUIT ENDS SHALL BE CREAMED BEFORE INSTALLATION AND ALL CONDUIT SHALL BE THOROUGHLY CLEANED BEFORE INSTALLATION AND KEPT CLEAN AFTER INSTALLATION. PLUG CONDUIT AND BOXES AS REQUIRED DURING CONSTRUCTION TO KEEP CONDUIT CLEAN.

CONDUIT SHALL BE OF AMPLE SIZE TO FILL CONDUCTORS AND NOT SMALLER THAN THE CODE REQUIRED. MINIMUM SIZE CONDUIT SHALL BE 1/2" FOR THIS PROJECT.

WHERE BUILDING EXPANSION JOINTS ARE SHOWN ON THE DRAWINGS PROVIDE PROPER CONDUIT EXPANSION FITTINGS.

CONDUIT SEALS SHALL BE INSTALLED ON ALL CONDUITS PASSING FROM NON-COOLED TO COOLED SPACES AND IN ALL CONDUIT CONNECTIONS OF FREEZER AND COOLER WALLS. SEALS SHALL CONSIST OF PLIABLE CORPAND RATED FOR -20 DEGREES F. TO 100 DEGREES F. FURNISH AND INSTALL THE NECESSARY JUNCTION BOXES, COUPLINGS, SUPPORTS, ADAPTERS, ETC. TO FORM A COMPLETE ASSEMBLY.

INSTALL A FULL WIRE IN EACH EMPTY CONDUIT WHICH IS LEFT BY THE CONTRACTOR.
ALL CONDUITS AND/OR SURFACE RACEWAYS SHALL BE PAINTED WHERE INSTALLED EXPOSED IN FINISHED SPACES. PAINTING OF SURFACE RACEWAYS SHALL BE AS DIRECTED BY THE ENGINEER/ARCHITECT.

16210 - CONDUCTORS (LOW VOLTAGE, 600 VOLTS)

16210.01 - DESCRIPTION OF WORK
FURNISH AND INSTALL 600 VOLT CONDUCTORS AND ASSOCIATED SPLICES, CONNECTORS AND TERMINATIONS FOR LIGHTING, POWER AND AUXILIARY SYSTEMS AS SHOWN ON THE CONTRACT DOCUMENTS.

16210.02 - MATERIAL
98% CONDUCTIVITY COPPER. NEG TYPE THIN/TWENTY (90 C DRY/T5 C HET) WITH UL LABEL. ALL CONDUCTORS TO BE IN CONDUIT. SINGLE CONDUCTOR, STRANDED (ALL SIZES), SOFT ANNEALED COPPER CONDUCTORS WITH 600 VOLT THERMOPLASTIC INSULATION AND NYLON JACKET.

WIRE SMALLER THAN #12 GAUGE SHALL NOT BE USED UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS OR IN THESE SPECIFICATIONS.
WIRE INSULATION SHALL BE COLOR CODED AS FOLLOWS OR PER LOCAL ORDINANCES:
120/208V, 3Ø - A-BLACK, B-BRED, C-BLUE, NEUTRAL-WHITE, G-GREEN
BLACK INSULATION IS ACCEPTABLE FOR #18 WIRE AND LARGER. CONDUCTOR ENDS SHALL BE WRAPPED WITH COLORED TAPE AS INDICATED ABOVE.

IF NO WIRE SIZE IS INDICATED ON THE DRAWINGS FOR A BRANCH CIRCUIT, PROVIDE #12 AWG WIRE AND A 20A CIRCUIT BREAKER. CONTROL WIRING SHALL HAVE 600V INSULATION AND BE OF THE PROPER TYPE, SIZE AND NUMBER REQUIRED TO ACCOMPLISH SPECIFIED FUNCTION.

16210.03 - INSTALLATION
ALL WIRING SHALL BE INSTALLED IN APPROVED RACEWAYS OR ENCLOSURES. WIRE IN CONDUIT SHALL RUN CONTINUOUS WITHOUT SPLICES OR TAPS. ALL SPLICES OR TAPS SHALL OCCUR IN APPROVED BOXES AND ENCLOSURES AND SHALL BE KEPT TO A MINIMUM AND SHALL BE MADE IN APPROVED SOLDERLESS CONNECTIONS. ALL SPLICES, TAPS AND JOINTS SHALL BE INSULATED PER THE NATIONAL ELECTRICAL CODE. ALL MATERIALS USED TO TERMINATE SPLICE OR TAP CONDUCTORS SHALL BE DESIGNED FOR PROPER SIZE FOR AND UL LISTED FOR THE SPECIFIC APPLICATION AND CONDUCTORS INVOLVED AND SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, USING THE MANUFACTURERS RECOMMENDED TOOLS.

WHERE WIRE IS TO BE INSTALLED, BUT THE CONNECTION IS INDICATED "FUTURE" OR "BY OTHERS", THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 3 FEET OF "FISTAL" AT THE BOX. TAPE ALL CONDUCTOR ENDS AND COVER THE BOX.

VOLTAGE DROP IN BRANCH CIRCUITS SHALL NOT EXCEED 2%. ALL BRANCH CIRCUITS SHALL HAVE EQUIPMENT GROUNDING CONDUCTORS AND SHALL BE SIZED PER NEC TABLE 250-45.

16310 - OUTLET BOXES, JUNCTION BOXES AND WIRING DEVICES/RECEPTS

16310.01 - DESCRIPTION OF WORK
FURNISH AND INSTALL OUTLET BOXES, FLOOR BOXES, RILL BOXES, JUNCTION BOXES AND WIRING GUTTERS AS SHOWN ON THE CONTRACT DOCUMENTS OR AS REQUIRED.

16310.02 - OUTLET/JUNCTION BOXES
PROVIDE WIRING DEVICES, FIXTURES AND SPECIAL SYSTEM DEVICES WITH OUTLET BOX. USE GALVANIZED STEEL BOXES CONFORMING TO UL STANDARD 514A FOR CONCEALED AND EXPOSED DRY LOCATIONS. ALL BOXES SHALL HAVE MATCHING COVER PLATES.

USE 1/8" THICK STEEL BOXES AND COVERS OF FORM AND DIMENSION ADAPTED TO ITS SPECIFIC USE AND LOCATION KING OF FIXTURE OR DEVICE TO BE USED AND NUMBER, SIZE AND ARRANGEMENT OF CONNECTION CONDUITS AND NUMBER OF WIRES IN OUTLET, ALL IN ACCORDANCE WITH THE NEC. ALL BOXES SHALL BE SET IN WALLS, COLLARS, FLOORS OR CEILING 50 AS TO BE FISH WITH THE FINISHED SURFACE AND BE ACCURATELY SET AND RIGIDLY SECURED IN POSITION. PROVIDE PLASTER RINGS, EXTENSION RINGS AND MASONRY RINGS AS REQUIRED FOR FLUSH MOUNTING.

MANUFACTURERS, NATIONAL ELECTRICAL, APPLETON, STEEL CITY OR RAGO
16310.03 - LARGE PULL BOXES
FURNISH AND INSTALL FULL TAP AND CABLE SUPPORT BOXES REQUIRED BY THE NEC FOR EXCESSIVE NUMBER OF 90 DEGREE CONDUIT BENDS, CONDUIT TAPS AND CABLE SUPPORTS.

BOX CONSTRUCTION PER NEC AND CONFORMING TO UL STANDARD #50. BOX TO BE MANUFACTURED WITH MINIMUM 12 GAUGE GALVANIZED STEEL.
PROVIDE SEPARATE PULL BOX FOR EACH FEEDER.

BOXES LOCATED IN DAMP OR WET LOCATIONS SHALL BE HELDED CONSTRUCTION AND FINISHED WHITE INSIDE AND GRAY OUTSIDE WITH WATERPROOF PAINT. PROVIDE GASKETED DOOR AND CORNERS. PROVIDE RAIN DRIP SHIELDS. BOXES SHALL CARRY NEMA 3R (WEATHERPROOF) OR NEMA 4 (WATER TIGHT) LABELS AS SPECIFIED.

ACCEPTABLE MANUFACTURERS: HOFFMAN, KEYSTONE, BIRNS
16310.04 - CONDUIT BODIES

CONDUIT BODIES SHALL BE INSTALLED TO PROVIDE EASE OF CONDUCTORS AND TO PROVIDE NEAT APPEARANCE TO CONDUIT INSTALLATION AND AS SHOWN ON THE DRAWINGS. CONDUIT BODIES SHALL BE CONSTRUCTED OF HALLMARKABLE IRON OR COPPER FREE ALUMINUM CASTINGS. BODIES SHALL BE FINISHED WITH STANDARD DURABLE EXTERIOR COATINGS OF MANUFACTURER SPECIFIED. PROVIDE ROLLERS IN TYPE "C" AND TYPE "L" BODIES, 1/4" SIZE AND LARGER. PROVIDE GASKETED PLATED STEEL OR HALLMARKABLE IRON COVERS.

ACCEPTABLE MANUFACTURERS: GROUSE-HINDS, KILLARK, APPLETON

16310.05 - GUTTERS (WIRING)

8"X8" AND SMALLER - USE STANDARD ASSEMBLY CONSISTING OF CODE GAUGE GALVANIZED OR PAINTED STEEL AND COMBINATION HINGED/SCREWED COVERS.
ACCEPTABLE MANUFACTURERS - SQUARE-D, GENERAL ELECTRIC, WALKER ELECTRIC, B&G STAMPING CO.

16310.06 - SURFACE METAL RACEWAYS
WHERE INDICATED ON THE DRAWINGS, WIRING SHALL BE RUN IN EXPOSED METAL RACEWAYS, COMPLETE WITH OUTLET BOXES AND FITTINGS. ALL CIRCUITS RUN IN SURFACE METAL RACEWAYS SHALL HAVE GROUND CONDUCTOR WITH GREEN INSULATION SIZED PER NEC, BUT NOT SMALLER THAN #12 AWG SCREEN CONNECTED TO EACH OUTLET BOX.

16314 - PANELBOARDS

16314.01 - DESCRIPTION OF WORK
PROVIDE AND INSTALL LIGHTING AND POWER PANEL BOARDS, RATED FOR 600 VOLTS OR LESS, AS SPECIFIED HEREIN AND AS SHOWN OR INDICATED ON THE DRAWINGS AND SCHEDULES.

16314.02 - IDENTIFIERS
PROVIDE SHOP DRAWINGS FOR EACH PANELBOARD. INCLUDE INDIVIDUAL DIAGRAM OF EACH PANELBOARD SHOWING ALL SPECIFIED REQUIREMENTS. IN ADDITION, SUBMITTALS SHALL INDICATE OVERALL PANELBOARD DIMENSIONS, INTERIOR DIMENSIONS, BUS CONFIGURATION, WIRE GUTTER DIMENSIONS, SHORT CIRCUIT RATINGS PANELBOARD AND OVERCURRENT DEVICES.

16314.03 - STANDARDS
CONSTRUCT PANELBOARDS IN ACCORDANCE WITH THE LATEST ADDITION OF THE FOLLOWING STANDARDS:
UL STANDARDS NO. 50, 61, 98, 484, AND 413
NEMA PUBLICATION 6F-1, NEMA ARTICLE 384

PANELBOARD ASSEMBLY SHALL BE UL LABELED, AND LABELED AS SERVICE ENTRANCE EQUIPMENT WHERE USED FOR THAT PURPOSE.
16314.04 - BASIC PANELBOARD CONSTRUCTION
PANELBOARDS TO BE SAME MANUFACTURER AS OTHER DISTRIBUTION EQUIPMENT

PANELBOARDS, BUSING AND OVERCURRENT DEVICE SHALL HAVE INTEGRATED EQUIPMENT FAULT RATING EQUAL TO OR GREATER THAN THE EQUIPMENT FAULT RATING.
BUSINGS SHALL BE 98% CONDUCTIVITY COPPER SIZED TO NEG AND NEMA STANDARDS.

NEUTRAL BUSES SHALL BE COPPER AND SIZED FOR 100% ON THE SAME BASIS AS PHASE BUSINGS AS DESCRIBED AND INSULATED FROM THE CABINET.
PROVIDE 100% CAPACITY CONTINUOUS CUPPER BOUND BUS IN EACH PANEL CABINET. GROUND BUSES SHALL BE BOLTED TO THE CABINET UNLESS SPECIFIED TO BE ISOLATED.

FURNISH PANELBOARDS WITH VOLTAGE, CURRENT, SHORT CIRCUIT RATINGS, SIZE AND MOUNTING AS INDICATED ON THE DRAWINGS AND SCHEDULES. IF THE DRAWINGS DO NOT STATE THE INTERRUPT RATING IT SHALL BE 10000AIC.

16314.05 - POWER DISTRIBUTION PANELBOARDS (2000A AND SMALLER)
POWER DISTRIBUTION PANELS TO BE SQUARE-D TYPE LINE OR APPROVED EQUAL. CIRCUIT BREAKERS SHALL BE BOLT-ON, THERMAL-MAGNETIC TYPE, QUICK-MAKE, QUICK-BREAK, ENCLOSURE COMPENSATED, OF SINGLE CONSTRUCTION TRIP FREE ON FAULTS, THERMAL-INVERSE THE DELAY ELEMENT AND MAGNETIC INSTANTANEOUS TRIP COIL. IN EACH UNGROUNDED PHASE CONDUCTOR, OR APPROVED (4) FOUR FUNCTION SOLID STATE TRIP UNIT. THE (4) FOUR FUNCTION SOLID STATE TRIP UNIT SHALL INCLUDE LONG THE DELAY, SHORT THE DELAY, INSTANTANEOUS AND GROUND FAULT.

AT A MINIMUM GROUND FAULT PROTECTION OF EQUIPMENT SHALL BE PROVIDED FOR SOLIDLY GROUNDING WYE ELECTRICAL SERVICES FOR EACH SERVICE DISCONNECT RATED FOR 1000 AMPERES OR MORE PER NEC 230.

PANEL CABINETS SHALL BE CODE GAUGE GALVANIZED STEEL BOXES WITH TURNED EDGES, REMOVABLE BARRIERS, WIRE GUTTERS ON ALL SIDES AND KNOCKOUTS FOR CONDUIT CONNECTIONS. CABINETS SHALL HAVE ONE PIECE FRONT AND SHALL HAVE HINGED KEY LOCKING DOORS.

16314.06 - LIGHTING AND APPLIANCE PANELBOARDS
LIGHTING AND APPLIANCE PANELBOARDS TO BE SQUARE-D TYPE W400 OR N400 OR APPROVED EQUAL. PANELBOARDS SHALL BE DESIGNED AS SHOWN ON THE DRAWINGS. NUMBER AND SIZE OF CIRCUIT BREAKERS IN EACH PANELBOARD SHALL BE AS SCHEDULED ON THE DRAWINGS.

BREAKERS SHALL BE THERMAL MAGNETIC TYPE, QUICK MAKE, QUICK BREAK, ENCLOSURE COMPENSATED, OF SINGLE CONSTRUCTION. TWO OR THREE POLE BREAKERS, WHERE CALLED FOR, SHALL BE SINGLE UNIT COMMON TRIP. BREAKERS SHALL BE BOLT-ON TYPE.

CABINETS SHALL BE CONSTRUCTED OF ONE PIECE CODE GAUGE GALVANIZED STEEL. THE MOUNTING STUDS AND KNOCKOUTS FOR CONDUIT CONNECTIONS AS REQUIRED. FRONTS SHALL BE ONE PIECE CODE GAUGE FURNITURE STEEL WITH ADJUSTABLE FASTENERS AND RECESSED DOORS FITTED WITH CONCEALED HINGES, FLUSH CATCH AND LOCK. CABINETS SHALL BE SURFACE OR FLUSH MOUNTED AS INDICATED ON THE DRAWINGS. ALL FRONTS AND ALL SURFACE MOUNTED CABINETS SHALL HAVE BUSHROCK PROTECTOR AND 2" FINISHED COATED OF ENAMEL OR LACER.

ALL BRANCH CIRCUITS TO PANELBOARDS SHALL BE CONNECTED IN A MANNER SO THAT LOADS ARE BALANCED OVER EACH PHASE AS EQUALLY AS POSSIBLE. THE BACK DOOR SHALL BE FITTED WITH A GLASS OR PLASTIC COVERED TYPETWENTY SCHEDULE IDENTIFYING ALL BRANCH CIRCUITS.

BREAKERS USED AS SWITCHES FOR 120 OR 277 VOLT CIRCUITS SHALL BE APPROVED FOR THE PURPOSE AND MARKED "SFB".
BREAKERS USED FOR PROTECTION OF HVAC EQUIPMENT SHALL BE HACR TYPE.

16314.07 - IDENTIFICATION
PERMANENTLY ATTACH NAMEPLATES AND CIRCUIT NUMBERS TO EACH PANEL.
PROVIDE EACH PANELBOARD WITH NAMEPLATE SHOWING PANEL DESIGNATION, VOLTAGE RATINGS AND PHASE.

LABEL SHALL BE ENGRAVED LAMINATED-PLASTIC NAMEPLATE. NAMEPLATES SHALL BE BLACK WITH 1/4" HIGH WHITE LETTERS UNLESS OTHERWISE SPECIFIED.

16314.08 - ACCEPTABLE MANUFACTURERS
SQUARE-D
SIEMENS
CUTLER-HAMMER
GENERAL ELECTRIC

16314.09 - INSTALLATION
MOUNT PANELBOARDS SECURELY TO BUILDING STRUCTURE WITH 3/8" MINIMUM DIAMETER GALVANIZED BOLTS AND INSERTS NUMBERED AS REQUIRED FOR THE SIZE OF THE PANEL, BUT NOT LESS THAN 4. MOUNT PANELBOARDS WITH CENTERLINE 4"-6" APPROXIMATELY ABOVE FINISHED FLOOR WITH THE TOP A MAXIMUM OF 14" AFF. WHERE PANELS OF DIFFERENT HEIGHTS ARE MOUNTED ADJACENT, INSTALL THE TOP PANEL TRIM AT THE SAME HEIGHT ABOVE THE FLOOR. CLOSE ALL UNSEED OPENINGS.

MOUNT FEEDER PANELBOARDS TALLER THAN 66" ON 4" HIGH 2500# CONCRETE PAD AND BOLT TO THE WALL AND THE PAD WITH 1/2" DIAMETER BOLTS AND INSERTS.

16410 - SWITCHES AND RECEPTACLES

16410.01 - DESCRIPTION OF WORK
WIRING DEVICES, PLATES AND INSTALLATION.

16410.02 - DEVICES
FURNISH AND INSTALL DEVICES AND ASSOCIATED DEVICE PLATES AS SHOWN ON THE DRAWINGS. ALL OUTLETS AND SWITCHES SHALL BE OF THE SAME MANUFACTURER. COLORS OF SWITCHES AND RECEPTACLES SHALL BE AS REQUESTED BY THE ARCHITECT.

STANDARD RECEPTACLES, UNLESS OTHERWISE NOTED, SHALL BE 3 WIRE GROUNDING TYPE, NEMA CONFIGURATION 5-20R, DUPLEX RECEPTACLE RATED AT 20 AMPS AT 120VAC. RECEPTACLES TO COMPLY WITH UL STANDARD 49B AND FEDERAL SPECIFICATION NG-295.

GROUND-FAULT INTERRUPTER (GFI) RECEPTACLES, UL STANDARD 443. GROUND FAULT INTERRUPTERS; FEED-THROUGH TYPE, WITH INTEGRAL NEHA 5-20R DUPLEX RECEPTACLE. ARRANGE THE GFI RECEPTACLE TO PROTECT CONNECTED DOWNSSTREAM RECEPTACLES ON THE SAME CIRCUIT AS SHOWN OR AS REQUIRED.

PENDENT CORD/CONNECTOR DEVICES: MATCHING LOCKING TYPE, PLUS AND RECEPTACLE BODY CONNECTOR, NEMA L5-20P AND L5-20R, HEAVY DUTY GRADE UNLESS OTHERWISE SPECIFIED.

CORD AND PULL SETS: MATCH VOLTAGE AND CURRENT RATINGS AND THE NUMBER OF CONDUCTORS TO THE REQUIREMENTS OF THE EQUIPMENT BEING CONNECTED. THE CORD SHALL BE RUBBER INSULATED, STRANDED COPPER CONDUCTORS, WITH TYPE 50M-A JACKET.

SWITCHES: QUIET TYPE A-G, SWITCHES, LISTED AND LABELED TO COMPLY WITH UL STANDARD 20 GENERAL USE SNAP SWITCHES, AND FEDERAL SPECIFICATION W-9-P46. MANUFACTURERS AS NOTED IN ELECTRICAL DEVICE SCHEDULE.

WHERE INDICATED ON THE PLANS PROVIDE PILOT LIGHT WITH THE ABOVE SNAP SWITCHES. PILOT LIGHT SHALL SWITCH TO BE INSTALLED IN A TWO GANG PLATE WITH FLUSH NEAR PILOT LIGHT FOR 125 OR 277 VOLT OPERATION AS APPLICABLE, WITH A RED PLASTIC, LEVEL LENS.

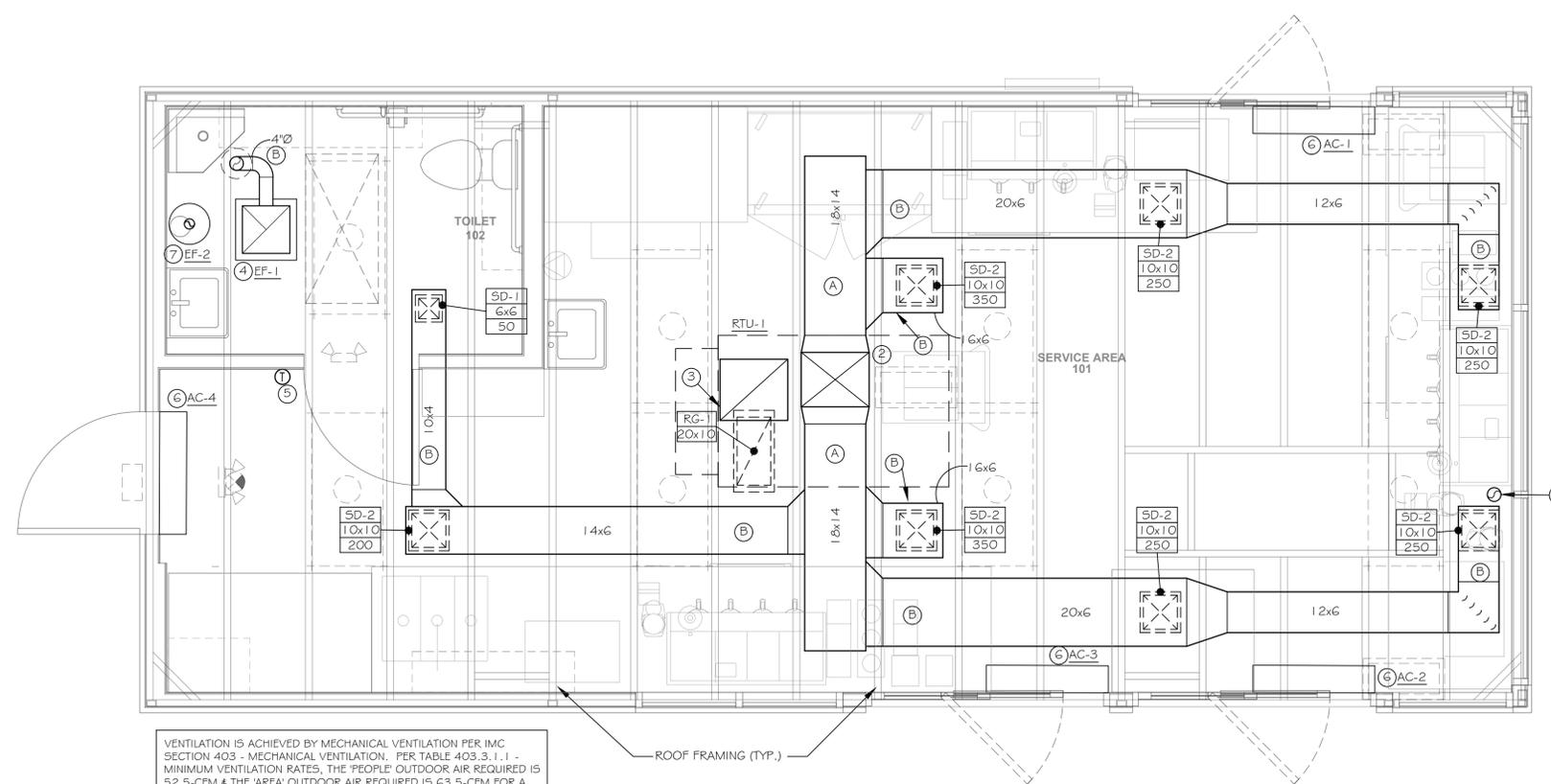
16410.03 - ACCEPTABLE MANUFACTURERS
PASS AND SEYMOUR/LEGRAND
HIREBELL
LEVITON
BRYANT
EATON

16410.04 - DEVICE PLATES
FURNISH AND INSTALL ALL DEVICE COVER PLATES, 0.1" THICK SMOOTH PLASTIC COVER PLATES. VERIFY COLOR AND MATERIAL WITH THE ARCHITECT BEFORE INSTALLATION. SWITCH PLATES IN UNFINISHED ROOMS SHALL BE STAMPED STEEL PLATES, CADMIUM PLATED.

DEVICE PLATE SHALL BE MANUFACTURED BY THE DEVICE MANUFACTURER WHERE APPLICABLE.
FURNISH HEATHER PROOF DEVICES WITH INDIVIDUAL GASKETED ALUMINUM OR STAINLESS STEEL COVERS.

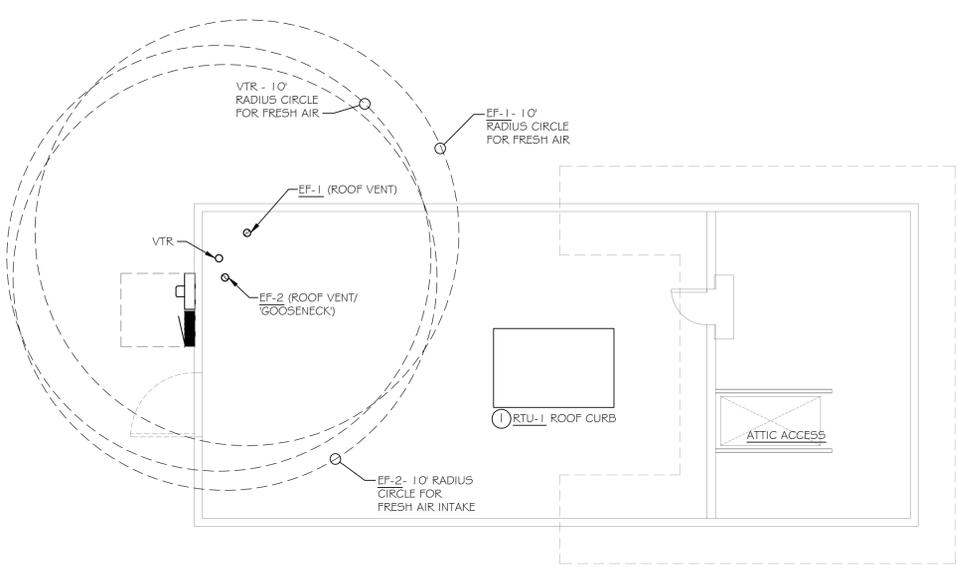
16410.05 - MULTI-OUTLET ASSEMBLIES
COMPLY WITH STANDARD UL-5 "SURFACE METAL RACEWAYS AND FITTINGS".
COMPONENTS OF ASSEMBLIES: PRODUCTS OF A SINGLE MANUFACTURER DESIGNED TO BE USED TOGETHER TO PROVIDE A COMPLETE MATCHING ASSEMBLY OF RACEWAYS AND RECEPTACLES.

RACEWAY MATERIAL: METAL WITH MANUFACTURERS STANDARD CORROSION RESISTANT FINISH.
WIRE: NO. 12 AWG MINIMUM.



VENTILATION IS ACHIEVED BY MECHANICAL VENTILATION PER IMC SECTION 403 - MECHANICAL VENTILATION. PER TABLE 403.3.1.1 - MINIMUM VENTILATION RATES, THE 'PEOPLE' OUTDOOR AIR REQUIRED IS 52.5-CFM & THE 'AREA' OUTDOOR AIR REQUIRED IS 63.5-CFM FOR A TOTAL OUTDOOR AIR REQUIREMENT OF 116-CFM. REFER TO THE ROOFTOP UNIT SCHEDULE FOR REQUIRED OUTDOOR AIR CFM.

A MECHANICAL FLOOR PLAN
SCALE: 1/2" = 1'-0"
0 1 2 4



B MECHANICAL ROOF PLAN
SCALE: 1/4" = 1'-0"
0 1 2 4 8



C MECHANICAL REFLECTIVE CEILING PLAN
SCALE: 1/4" = 1'-0"
0 1 2 4 8

- MECHANICAL KEYED NOTES:**
- ROOFTOP UNIT (RTU) ROOF CURB FOR RTU-1 - INSTALLED AT THE NATIONAL MODULAR FACILITY. RTU-1 IS SHIPPED TO THE SITE & INSTALLED BY THE 'ON-SITE' CONTRACTOR.
 - SA DUCT UP TO RTU-1 ROOF CURB FOR CONNECTION BY 'ON-SITE' CONTRACTOR - SA DUCT SIZE TO MATCH SA CONNECTION SIZE ON RTU-1.
 - RA DUCT UP TO RTU-1 ROOF CURB FOR CONNECTION BY 'ON-SITE' CONTRACTOR - RA DUCT SIZE TO MATCH RA CONNECTION SIZE ON RTU-1.
 - CEILING MOUNT EXHAUST FAN (EF). EXTEND EXHAUST DUCT THRU ROOF & TERMINATE PER MANUFACTURER'S INSTRUCTIONS - PROVIDE INSECT SCREEN.
 - THERMOSTAT (THIS AREA) - ROUTE LOW-VOLTAGE WIRING UP THRU WALL TO ABOVE CEILING & EXTEND TO RTU-1 ROOF CURB. PROVIDE 5'-0" OF EXCESS WIRING FOR CONNECTION TO RTU-1 BY 'ON-SITE' CONTRACTOR.
 - WALL MOUNT AIR CURTAIN WITH 'BUILT-IN' CONTROLS.
 - VERTICAL, INLINE EXHAUST FAN (EF) FOR CRAWL SPACE. MOUNT EXHAUST DUCT IN THE VERTICAL POSITION & SECURE TO WALL DO NOT ENCRUCH ON THE LAVATORY ADA CLEARANCE REQUIREMENTS. EXTEND 3' DUCT THRU FLOOR & TERMINATE AT 4" B.F.F. - PROVIDE INSECT SCREEN. EXTEND 3' DUCT FROM FAN THRU ROOF & TERMINATE WITH A 'GOOSENECK' - PROVIDE INSECT SCREEN. INSTALLATION MEETS THE INTERNATIONAL MECHANICAL CODE, SECTION 406 - VENTILATION OF UNINHABITED SPACES.
 - 4" Ø INTAKE DUCT FOR RECIRCULATION OF CONDITIONED AIR. EXTEND 4" B.F.F. - PROVIDE INSECT SCREEN.

- DUCTWORK KEYED NOTES:**
- DUCT ROUTED BETWEEN OVERHEAD ROOF STRUCTURE.
 - DUCT ROUTED BELOW OVERHEAD ROOF STRUCTURE.

- ON-SITE MECHANICAL CONTRACTOR NOTES:**
- HVAC SYSTEM - ROOFTOP UNIT (RTU-1) IS PROVIDED & SHIPPED TO THE SITE BY NATIONAL MODULAR. RTU-1 TO BE INSTALLED ON-SITE BY THE ON-SITE MECHANICAL CONTRACTOR. RTU-1 IS NOT BEING INSTALLED BY OR AT THE NATIONAL MODULAR LOCATION.
 - THE ONSITE MECHANICAL CONTRACTOR IS REQUIRED TO PROVIDE & INSTALL ALL SUPPLY AIR (SA) & RETURN AIR (RA) DUCTWORK BETWEEN RTU-1 & SA/RA DUCT CONNECTIONS INSIDE THE MODULAR BUILDING.
 - ON-SITE MECHANICAL CONTRACTOR IS REQUIRED TO SEAL ALL SA & RA DUCTWORK THAT IS INSTALLED BY THE ONSITE MECHANICAL CONTRACTOR.
 - THE ONSITE MECHANICAL CONTRACTOR IS REQUIRED TO PROVIDE & INSTALL ALL CONDENSATE PIPING BETWEEN RTU-1 & CONDENSATE PIPING CONNECTION INSIDE THE MODULAR BUILDING - REFER TO B/P I.D.
 - THERMOSTAT & THERMOSTAT CONTROL WIRING PROVIDED & INSTALLED BY NATIONAL MODULAR. 'EXCESS' CONTROL WIRING IS LOCATED ABOVE THE 'LAY-IN' CEILING FOR ON-SITE MECHANICAL CONTRACTOR TO EXTEND & CONNECT TO RTU-1.
 - ICE MACHINE CONDENSING UNITS & REFRIGERANT PIPING PROVIDED BY OWNER. ON-SITE MECHANICAL CONTRACTOR TO INSTALL ICE MACHINE CONDENSING UNITS & ASSOCIATED REFRIGERANT PIPING, SUPPORTS, ETC. PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

EVERYTHING SHOWN ON THIS SHEET HAS BEEN CONSTRUCTED/INSTALLED IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE JOB SITE FOR 'SITE ADAPT' CONSTRUCTION. REFER TO THE 'SITE ADAPT' DRAWINGS FOR ADDITIONAL INFORMATION.

ATTENTION LOCAL INSPECTIONS DEPARTMENT -
THE FOLLOWING ITEMS HAVE NOT BEING COMPLETED BY NATIONAL MODULAR:

MECHANICAL

- INSTALL ROOFTOP UNIT "RTU-1"
- CONNECTION OF SUPPLY AIR & RETURN AIR DUCTWORK - IN ROOF CURB
- CONTROL WIRING - 'RTU-1' CONNECTION
- INSTALL CONDENSATE PIPING FOR "RTU-1"
- INSTALL REMOTE ICE MACHINE CONDENSERS - ROOF
- REFRIGERANT PIPING TO ICE MACHINE

REVISIONS		
No.	Description	Date

sheet issue date:
07-11-2024

project no.:
23.26.04

sheet contents:
Mechanical Floor Plan
(Modular Building)

sheet no.:

MECHANICAL SYMBOL & ABBREVIATION SCHEDULE			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	(UP) DUCT SECTION, POSITIVE PRESSURE (SUPPLY)	UH-#	UNIT HEATER CALLOUT
	(DOWN) DUCT SECTION, POSITIVE PRESSURE (SUPPLY)	SAF-#	SUPPLY AIR FAN CALLOUT
	(UP) DUCT SECTION, NEGATIVE PRESSURE (RETURN)	CH-#	CHILLER CALLOUT
	(DOWN) DUCT SECTION, NEGATIVE PRESSURE (RETURN)	MAU-#	MAKE-UP AIR UNIT CALLOUT
	DUCT DROP, NEGATIVE PRESSURE (EXHAUST)	AH-#	AIR HANDLING UNIT CALLOUT
	DUCT RISER, NEGATIVE PRESSURE (EXHAUST)	CU-#	CONDENSING UNIT CALLOUT
	DUCT DROP, POSITIVE PRESSURE (SUPPLY)	F-#	FURNACE CALLOUT
	DUCT RISER, POSITIVE PRESSURE (SUPPLY)	HP-#	HEAT PUMP CALLOUT
	DUCT DROP, NEGATIVE PRESSURE (RETURN)	EF-#	EXHAUST FAN CALLOUT
	DUCT RISER, NEGATIVE PRESSURE (RETURN)	RTU-#	ROOFTOP UNIT CALLOUT
	DUCT DROP, NEGATIVE PRESSURE (EXHAUST)	SA	SUPPLY AIR
	DUCT RISER, NEGATIVE PRESSURE (EXHAUST)	OA	OUTSIDE AIR
	TURNING VANES	RA	RETURN AIR
	SIDE WALL SUPPLY REGISTER	FA	FRESH AIR
	DUCT SIZE, FIRST SIZE IS SIDE SHOWN (CLEAR INSIDE DIMENSION)	EA	EXHAUST AIR
	DUCT CHANGE OF ELEVATION RISE (R) OR DROP (D)	G.C.	GENERAL CONTRACTOR
	FLEXIBLE CONNECTION	M.C.	MECHANICAL CONTRACTOR
	OPPOSED BLADE BALANCING DAMPER W/ MANUAL LOCKING QUADRANT (RECT DUCT) BUTTERFLY BALANCING DAMPER W/ MANUAL LOCKING QUADRANT (ROUND DUCT) PROVIDE STANDOFFS.	P.C.	PLUMBING CONTRACTOR
	OPPOSED BLADE BALANCING DAMPER W/ MOTORIZED LOCKING QUADRANT (RECT DUCT) BUTTERFLY BALANCING DAMPER W/ MOTORIZED LOCKING QUADRANT (ROUND DUCT) PROVIDE STANDOFFS.	E.C.	ELECTRICAL CONTRACTOR
	FIRE DAMPER (VERTICAL POSITION)	N.I.C.	NOT IN CONTRACT
	FIRE DAMPER IN FLOOR (HORIZONTAL POSITION)	SR	SUPPLY REGISTER
	SMOKE DAMPER	RG	RETURN GRILLE
	COMBINATION FIRE/SMOKE DAMPER (VERTICAL POSITION)	TG	TRANSFER GRILLE
	COMBINATION FIRE/SMOKE DAMPER (HORIZONTAL POSITION)	⊕	CONNECT NEW TO EXISTING. VERIFY EXACT LOCATION.
	ELECTRIC OR DDC THERMOSTAT	⊕	REFER TO PLAN NOTES
	DUCT MOUNTED, REMOTE TEMPERATURE SENSOR	⊕	REFER TO PLAN NOTES
	NATURAL GAS LINE (G)	⊕	TOP CONNECTION
	EXISTING NATURAL GAS LINE (G)	⊕	BOTTOM CONNECTION
	PIPE CAP	⊕	SIDE CONNECTION
	PIPE RISE	⊕	CAPPED OUTLET
	PIPE DROP	⊕	GAS COCK
	PRESSURE REDUCING VALVE	⊕	PRESSURE REDUCING VALVE
	VALVE IN DROP	⊕	VALVE IN DROP
	SHUT OFF VALVE (BALL VALVE)	⊕	SHUT OFF VALVE (BALL VALVE)

NOTE:
THE SYMBOLS & ABBREVIATIONS SHOWN ARE A COMPLETE LIST OF SYMBOLS & ABBREVIATIONS. NOT ALL SYMBOLS OR ABBREVIATIONS MAY BE USED ON THIS PROJECT.

SCHEDULED EQUIPMENT NOTES:

- THE SCHEDULED EQUIPMENT ESTABLISHES THE QUALITY OF EQUIPMENT TO BE USED ON THE PROJECT. SUBSTITUTIONS NOT ALREADY LISTED SHALL BE REVIEWED & APPROVED BY ENGINEER. PRIOR TO SUBMITTING A BID.
- SHOP DRAWING SUBMITTALS ARE REQUIRED FOR REVIEW & APPROVAL ON ALL SCHEDULED EQUIPMENT - ANY MODIFICATIONS TO THE SCHEDULED EQUIPMENT LOAD, OUTPUT, ETC. BY THE EQUIPMENT SUPPLIER AND/OR THE CONTRACTOR(S) SHALL BE REVIEWED & APPROVED BY ENGINEER. PRIOR TO PURCHASE & INSTALLATION.

AIR DEVICE SCHEDULE																		
TAG	MANF.	MODEL	TYPE				MOUNTING SURFACE			MATL.		FINISH		NECK SIZE		DESCRIPTION	NOTES	
			SUPPLY	RETURN	EXHAUST	LAY-IN	CLG.	WALL	EXPOSED (DUCT MFT.)	ALUM.	STEEL	WHITE	CLEAR (ALUM.)	CUSTOM	SQ./Ø			WxHxØ
SD-1	TITUS	250-1	X				X			X	X			SQ.	8x8	X	SURFACE MOUNT, LOUVERED FACE	
SD-2	TITUS	250-1	X				X			X	X			SQ.	12x12	X	SURFACE MOUNT, LOUVERED FACE	
RG-1	TITUS	350-1		X			X			X	X			SQ.	20x10	-	SURFACE MOUNT, FIXED DEFLECTION	

GENERAL NOTES:
1. ALL CEILING DIFFUSERS HAVE A 4-WAY BLOW PATTERN UNLESS OTHERWISE NOTED ON PLANS.
2. MAXIMUM ALLOWABLE NC (NOISE CRITERIA) IS 30.
3. AIR DEVICE(S) SHALL BE APPROVED BY ARCHITECT PRIOR TO PURCHASE - PROVIDE SUBMITTALS FOR APPROVAL.

KEYED NOTES:
DUCT RUNOUT SIZE → $\frac{F}{S \times D}$ ← TAG
← CFM ←
AIR DEVICE CALLOUT SCHEDULE

APPROVED MANUFACTURERS: TITUS, CARNES, PRICE, NAILOR, KRUEGER

EXHAUST FAN SCHEDULE																						
TAG	LOC.	MANF.	MODEL	TYPE				FAN DATA			ACCESSORIES				CONTROLS		ELEC. DATA		NOTES			
				CLG.	ROOF	WALL	INLINE	CFM	S.P.	DRIVE	DISC	BDD	BIRD SCREEN	VSC	D-DR	SWITCH	LIGHTS	THERM. OSTAT		HUMID. STAT	V/Ø	HP (W)
EF-1	TOILET 102	COOK	GC-146	X				75	0.5	DIRECT	X	X		X	X	X			115/1	(70)	-	①②③
EF-2	TOILET 102	FAN TECH	FG-4XL				X	75	1.0	DIRECT						X			115/1	(72)	-	④⑤

NOTES:
① CEILING MOUNT EXHAUST FAN - PROVIDE WITH VIBRATION ISOLATION, VARIABLE SPEED CONTROLLER, BACK-DRAFT DAMPER, MOUNTING BRACKET & GRILLE.
② EC TO MOUNT VARIABLE SPEED CONTROLLER ON E.F. HOUSING (ACCESSIBLE).
③ EF TO BE CONTROLLED WITH ROOM LIGHTS - REFER TO ELECTRICAL.
④ INLINE CENTRIFUGAL EXHAUST FAN - PROVIDE WITH WALL CLAMPS. TO BE USED FOR THE CRAWL SPACE VENTILATION PER IMC SECTION 406.
⑤ EF TO RUN CONTINUOUSLY.

APPROVED MANUFACTURERS: COOK, PENN, GREENHECK, ACME, FAN-TECH

ELECTRIC ROOFTOP UNIT SCHEDULE																					
TAG	LOC.	MANF.	MODEL	TON	TYPE			FAN DATA			OA		COOLING DATA		HEATING DATA		ELEC. DATA		WT. (lbs.)	NOTES	
					DNFLW.	HORIZ.	INLINE	CFM	ESP	HP	CFM	AMB TEMP.	TOTAL MBH	SENS. MBH	KW	STAGES	V/Ø	MCA			MOCP
RTU-1	ROOF	DAIKIN	DFC-048	4.0	X			1600	0.7	I	150	105	46.5	36.8	20.0	21	240/1	113	125	-	①②

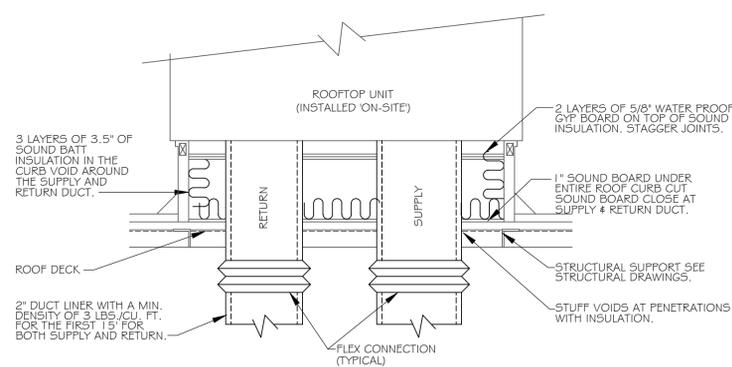
NOTES:
① STANDARD EFFICIENCY, PACKAGED (ELECTRIC) ROOFTOP UNIT (410-A) - PROVIDE WITH CUSTOM ROOF CURB (BUILT BY NATIONAL MODULAR), DISCONNECT SWITCH, ECONOMIZER (ENTHALPY), CRANKCASE HEATER, HAIL GUARD AND 2" PLEATED FILTERS.
② COOLING CAPACITY BASED ON 80-DEG F DB AND 67-DEG F WB EVAPORATOR COIL ENTERING AIR TEMPERATURE WITH 105-DEG F DB AMBIENT AIR CONDITIONS ON CONDENSING UNIT.

APPROVED MANUFACTURERS: DAIKIN, CARRIER, LENNOX, TRANE, RHEEM-RUUD, YORK, ALLIED

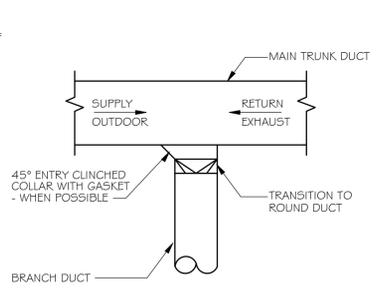
AIR CURTAIN SCHEDULE													
TAG	MANF.	MODEL	FAN HP	CFM	VELOCITY FPM	MCA	MOCP	ELECTRICAL DATA				WEIGHT (LB)	NOTES
								VOLTS	PHASE	HP	KW		
AC-1	AWOCO	RM-1209H	0.5	1389	5960	-	-	230	1	-	6.2	90	②
AC-2	AWOCO	RM-1209H	0.5	1389	5960	-	-	230	1	-	6.2	90	②
AC-3	AWOCO	RM-1209H	0.5	1389	5960	-	-	230	1	-	6.2	90	②

NOTES:
① NON-HEATED AIR CURTAIN - PROVIDE ADJUSTABLE TIME DELAY ACCESSORY & FACTORY WALL BRACKET.
② HEATED AIR CURTAIN - PROVIDE ADJUSTABLE TIME DELAY ACCESSORY & FACTORY WALL BRACKET.

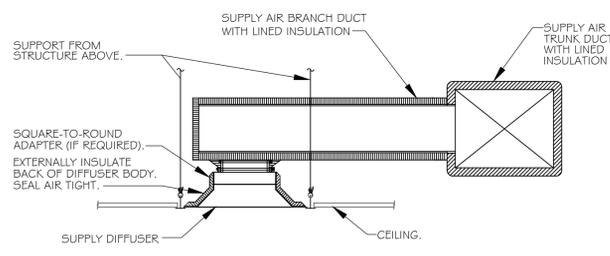
- MECHANICAL KEYED NOTES:**
- RUSSELL MODEL RL6A17ADA EVAPORATOR UNIT (INSIDE COOLER) - INSTALLED AT NATIONAL MODULAR.
 - RUSSELL MODEL RFO150E4SDANT CONDENSING UNIT (ON ROOF) - INSTALLED AT NATIONAL MODULAR.
 - CONDENSATE PIPING INSTALLED AT NATIONAL MODULAR.



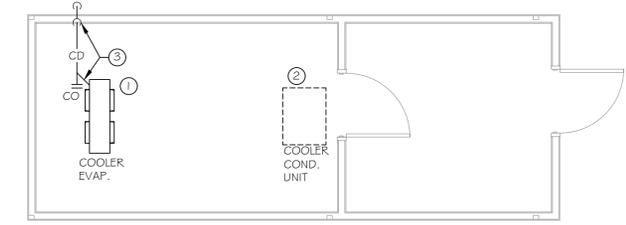
1 ROOFTOP CURB DETAIL
NOT TO SCALE



2 TYPICAL BRANCH CONNECTION DETAIL
NOT TO SCALE

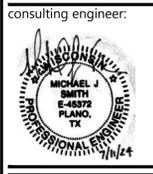


3 CEILING DIFFUSER DETAIL
NOT TO SCALE



COOLER HAS BEEN COMPLETELY CONSTRUCTED IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE JOB SITE - MECHANICAL EQUIPMENT IS INSTALLED, REFRIGERANT PIPING IS INSTALLED & CHARGED AND THE CONDENSATE PIPING IS INSTALLED.

A MECHANICAL COOLER PLAN
SCALE: 1/4" = 1'-0"
0 1 2 4 8



REVISIONS		
No.	Description	Date

sheet issue date:
07-11-2024

project no:
23.26.04

sheet contents:
Mechanical Schedules & Details
(Modular Building)

sheet no:
M2.0



7 BREW DRIVE-THRU, La Crosse, WI - Mormon Coulee

MECHANICAL KEYED NOTES:

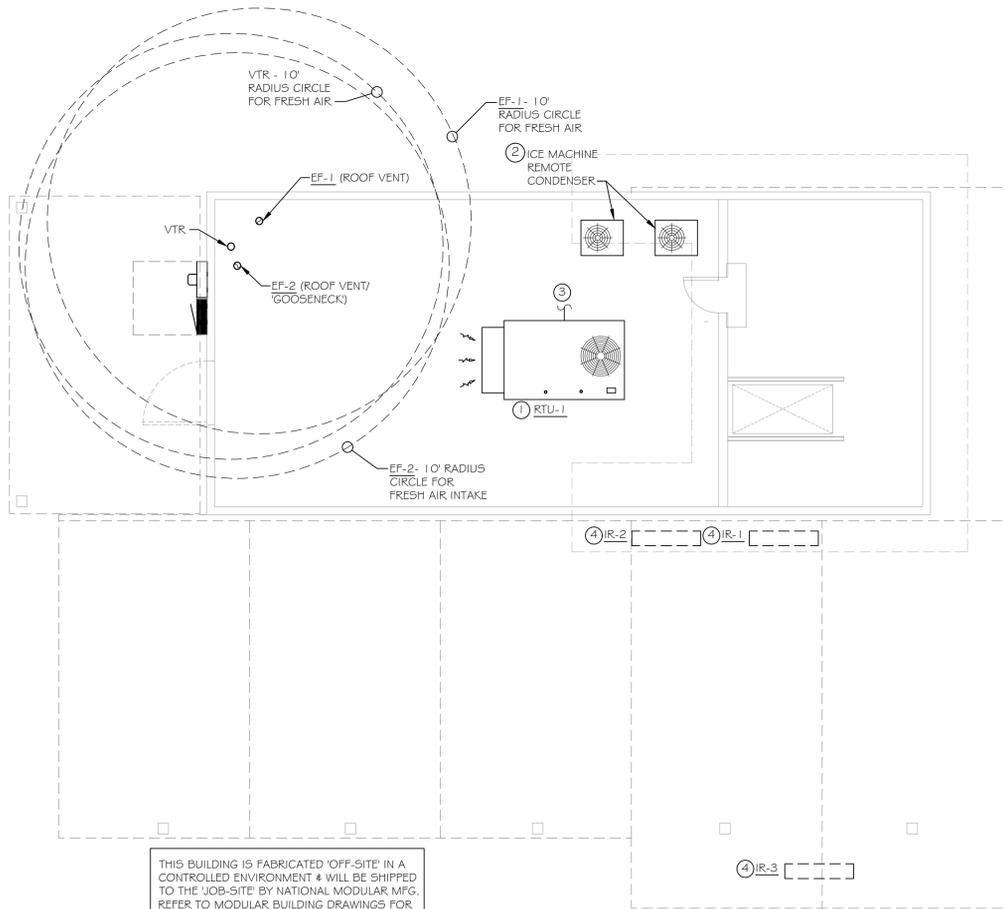
- RTU PROVIDED & SHIPPED BY NATIONAL MODULAR MFG. M.C. TO INSTALL RTU ON ROOF CURB & SECURE RTU TO ROOF CURB - INSTALLATION PER MANUFACTURER'S INSTRUCTIONS, EXTEND SUPPLY & RETURN AIR DUCT FROM RTU TO DUCTWORK INSTALLED IN MODULAR BUILDING. REFER TO MODULAR BUILDING DRAWINGS FOR ADDITIONAL INFORMATION.

- ICE MAKER CONDENSING UNIT PROVIDED BY OWNER, INSTALLED BY 'ON-SITE' CONTRACTOR - INSTALL ON ROOF PER MANUFACTURER'S INSTRUCTIONS. ALL REFRIGERANT PIPING PROVIDED BY OWNER & INSTALLED BY 'ON-SITE' CONTRACTOR.

- CONNECT NEW 3/4" CONDENSATE TO RTU (PER MANUFACTURER'S INSTRUCTIONS). EXTEND TO NEAREST ROOF SCUPPER - PROVIDE PIPING SUPPORTS EVERY 10'-0" O.C. & EACH CHANGE OF DIRECTION. REFER TO DETAIL FOR ADDITIONAL INFORMATION.

- INFRARED HEATER (IR) PROVIDED BY OWNER, INSTALLED BY 'ON-SITE' CONTRACTOR. INSTALL PER MANUFACTURER'S INSTRUCTIONS. COORDINATE ACTUAL LOCATION WITH OWNER PRIOR TO INSTALLATION.

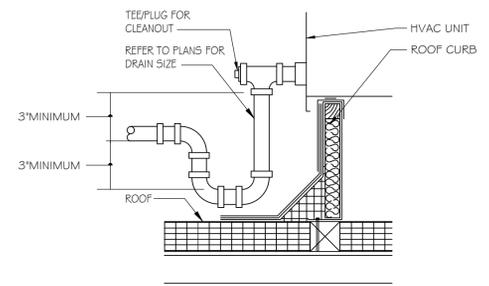
'ON-SITE' CONTRACTOR TO INSTALL ALL MECHANICAL EQUIPMENT SHIPPED BY NATMOD & ALL EQUIPMENT PROVIDED BY OWNER. THIS INCLUDES DUCTWORK CONNECTIONS TO RTU, CONDENSATE PIPING, REFRIGERANT PIPING, SUPPORTS, CONTROLS, INSULATION, ETC AS REQUIRE FOR A FULLY OPERATIONAL & COMPLETED MECHANICAL SYSTEM.



THIS BUILDING IS FABRICATED 'OFF-SITE' IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE 'JOB-SITE' BY NATIONAL MODULAR MFG. REFER TO MODULAR BUILDING DRAWINGS FOR ADDITIONAL INFORMATION.

A MECHANICAL SITE PLAN

SCALE: 1/4" = 1'-0"
0 1 2 4 8



1 RTU CONDENSATE DRAIN DETAIL
NOT TO SCALE

REVISIONS

No.	Description	Date

sheet issue date:
07-11-2024

project no.:
23.26.04

sheet contents:
Mechanical Site Plan
(Site Adapt)

sheet no.:

M3.0

DIVISION 15

15A: GENERAL

15A 1-1 GENERAL REQUIREMENTS

REQUIREMENTS UNDER DIVISION ONE AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THESE SPECIFICATIONS SHALL BE A PART OF THIS SECTION. CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH ITS CONTENTS AS TO REQUIREMENTS THAT AFFECT THIS DIVISION OR SECTION. THE WORK REQUIRED UNDER THIS SECTION INCLUDES MATERIAL, EQUIPMENT, APPLIANCES, TRANSPORTATION, SERVICES, AND LABOR REQUIRED TO COMPLETE THE ENTIRE SYSTEM AS REQUIRED BY DRAWINGS AND SPECIFICATIONS.

THE SPECIFICATIONS AND DRAWINGS FOR THE PROJECT ARE COMPLEMENTARY, AND PORTIONS OF THE WORK DESCRIBED IN ONE SHALL BE PROVIDED AS IF DESCRIBED IN BOTH. IN THE EVENT OF DISCREPANCIES, NOTIFY THE ENGINEER AND/OR OWNER AND REQUEST CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED.

15A 1-2 INSPECTION OF SITE

PRIOR TO SUBMITTING BID, VISIT THE SITE OF THE PROPOSED WORK AND BECOME FULLY INFORMED AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. FAILURE TO DO SO WILL NOT BE CONSIDERED SUFFICIENT JUSTIFICATION TO REQUEST OR OBTAIN EXTRA COMPENSATION OVER AND ABOVE THE CONTRACT PRICE.

15A 1-3 MATERIAL AND WORKMANSHIP

PROVIDE NEW MATERIAL, EQUIPMENT, AND APPARATUS UNDER THIS CONTRACT UNLESS OTHERWISE STATED HEREIN, OF BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE, AND FREE FROM ANY DEFECTS. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT NECESSARILY INTENDED TO DESIGNATE THE REQUIRED TRIM. WRITTEN DESCRIPTION OF THE OF THE TRIM GOVERN MODEL NUMBERS.

WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE A NEAT AND "WORKMANLIKE" APPEARANCE WHEN COMPLETED, TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER. WORKMANSHIP SHALL BE THE FINEST POSSIBLE BY EXPERIENCED MECHANICS. INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES AND LAWS.

THE COMPLETE INSTALLATION SHALL FUNCTION AS DESIGNED AND INTENDED WITH RESPECT TO EFFICIENCY, CAPACITY, NOISE LEVEL, ECT. ABNORMAL NOISE CAUSED BY BY RATTLING EQUIPMENT, PIPING, DUCTS, AIR DEVICES, AND SQUEAKS IN MOVING COMPONENTS WILL NOT BE ACCEPTABLE. IN GENERAL, MATERIALS AND EQUIPMENT SHALL BE OF COMMERCIAL SPECIFICATION GRADE IN QUALITY. LIGHT DUTY AND RESIDENTIAL TYPE EQUIPMENT WILL NOT BE ACCEPTED.

REMOVE FROM THE PREMISES WASTE MATERIAL PRESENT AS A RESULT OF WORK, INCLUDING CARTONS, CRATING, PAPER, AND STICKERS, ETC. CLEAN EQUIPMENT INSTALLED UNDER THIS CONTRACT TO PRESENT A NEAT AND CLEAN INSTALLATION AT THE TERMINATION OF THE WORK.

REPAIR OR REPLACE PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT TO THE SATISFACTION OF AUTHORITIES AND REGULATIONS HAVING JURISDICTION.

15A 1-4 COORDINATION

COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT THE VARIOUS COMPONENTS OF THE SYSTEMS WILL BE INSTALLED AT THE PROPER TIME, WILL FIT THE AVAILABLE SPACE, AND WILL ALLOW PROPER SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.

UNLESS OTHERWISE INDICATED, THE GENERAL CONTRACTOR WILL PROVIDE CHASES AND OPENINGS IN BUILDING CONSTRUCTION REQUIRED FOR INSTALLATION OF THE SYSTEMS SPECIFIED HEREIN. CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE BUILDING, AS VARIATIONS MAY OCCUR. CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS THAT COULD HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.

PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF CEILING, WALL, OR FLOOR FINISHES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT INTENDED TO DESIGNATE THE REQUIRED TRIM.

15A 1-5 ORDINANCES AND CODES

WORK PERFORMED UNDER THIS CONTRACT SHALL, AT MINIMUM, BE IN CONFORMANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES HAVING JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INSTALLATION WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ANY AMENDMENTS AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), UNDERWRITERS LABORATORIES (UL), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS (ASHRAE), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) AND OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE. WHERE THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THESE REFERENCED CODES, STANDARDS, ETC., THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE.

PROCURE AND PAY FOR PERMITS AND LICENSES REQUIRED FOR THE ACCOMPLISHMENT OF THE WORK HEREIN DESCRIBED, WHERE REQUIRED, OBTAIN, PAY FOR AND FURNISH CERTIFICATES OF INSPECTION TO OWNER. CONTRACTOR WILL BE HELD RESPONSIBLE FOR VIOLATIONS OF THE LAW.

15A 1-6 PROTECTION OF EQUIPMENT AND MATERIALS

STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS DELIVERED TO JOB SITE. COVER WITH WATERPROOF, TEAR-RESISTANT, HEAVY TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER, DIRT, PAINT, WATER, OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT HAS BEEN DAMAGED BY CONSTRUCTION ACTIVATES WILL BE REJECTED, AND CONTRACTOR IS OBLIGATED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A LIKE KIND.

KEEP PREMISES ROOM CLEAN FROM FOREIGN MATERIAL CREATED DURING WORK PERFORMED UNDER THIS CONTRACT, PIPING, EQUIPMENT, ETC., SHALL HAVE A NEAT AND CLEAN APPEARANCE AT THE TERMINATION OF THE WORK.

PLUG OR CAP OPEN ENDS OF DUCTWORK AND PIPING SYSTEMS WHILE STORED OR INSTALLED DURING CONSTRUCTION WHEN NOT IN USE TO PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS.

KEEP THE MANUFACTURER PROVIDED PROTECTIVE COVERING ON FLOOR DRAINS, FLOOR SINKS, AND TRENCH DRAINS DURING CONSTRUCTION. REMOVE COVERINGS AT THE TERMINATION OF THE WORK AND POLISH EXPOSED SURFACES.

15A 1-7 OPERATION AND MAINTENANCE INSTRUCTIONS

COLLECT AND COMPILE A COMPLETE BROCHURE OF FIXTURES, MATERIALS, AND EQUIPMENT FURNISHED AND INSTALLED ON THIS PROJECT. INCLUDE OPERATIONAL AND MAINTENANCE INSTRUCTIONS, MANUFACTURER'S CATALOG SHEETS, WIRING DIAGRAMS, PARTS LISTS, APPROVED SHOP DRAWINGS, AND DESCRIPTIVE LITERATURE FURNISHED BY THE MANUFACTURER. INCLUDE AN INSIDE COVER SHEET THAT LISTS THE PROJECT NAME, DATE, OWNER, ARCHITECT, ENGINEER, GENERAL CONTRACTOR, SUBCONTRACTOR, AND AN INDEX OF CONTENTS.

SUBMIT COPIES OF LITERATURE BOUND IN APPROVED BINDERS TO THE ARCHITECT AND OWNER AT THE TERMINATION OF THE WORK. PAPER CLIPS, STAPLES, RUBBER BANDS, AND MAILING ENVELOPES ARE NOT CONSIDERED APPROVED BINDERS. FINAL APPROVAL OF PLUMBING SYSTEMS WILL BE WITHHELD UNTIL THIS EQUIPMENT BROCHURE IS DEEMED COMPLETE BY THE ARCHITECT, ENGINEER, AND OWNER.

15A 1-8 WARRANTIES

WARRANT EACH SYSTEM AND EACH ELEMENT THEREOF AGAINST ALL DEFECTS DUE TO FAULTY WORKMANSHIP. DESIGN OR MATERIAL FOR A PERIOD OF 12 MONTHS FROM DATE OF SUBSTANTIAL COMPLETION, UNLESS SPECIFIC ITEMS ARE NOTED TO CARRY A LONGER WARRANTY IN THE CONSTRUCTION DOCUMENTS OR MANUFACTURER'S STANDARD WARRANTY EXCEEDS 12 MONTHS. REMEDY ALL DEFECTS, OCCURRING WITHIN THE WARRANTY PERIOD(S) STATED IN THE GENERAL CONDITIONS AND DIVISION 1.

WARRANTIES SHALL INCLUDE LABOR AND MATERIAL. MAKE REPAIRS OR REPLACEMENTS WITHOUT ANY ADDITIONAL COST TO THE OWNER.

PERFORM THE REMEDIAL WORK PROMPTLY, UPON WRITTEN NOTICE FROM THE ENGINEER OR OWNER.

AT THE TIME OF SUBSTANTIAL COMPLETION, DELIVER TO THE OWNER ALL WARRANTIES, IN WRITING AND PROPERLY EXECUTED, INCLUDING TERM LIMITS FOR WARRANTIES EXTENDING BEYOND THE ONE YEAR PERIOD, EACH WARRANTY INSTRUMENT BEING ADDRESSED TO THE OWNER AND STATING THE COMMENCEMENT DATE AND TERM.

15A 1-9 CUTTING AND PATCHING

PERFORM CUTTING OF WALLS, FLOORS, CEILINGS, ETC., AS REQUIRED TO INSTALL WORK UNDER THIS SECTION. OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO CUTTING. DO NOT CUT OR DISTURB STRUCTURAL MEMBERS WITHOUT PRIOR APPROVAL FROM THE ARCHITECT. CUT HOLES AS SMALL AS POSSIBLE. GENERAL CONTRACTOR SHALL PATCH WALLS, FLOORS, ETC., AS REQUIRED BY WORK UNDER THIS SECTION. PATCHING SHALL MATCH THE ORIGINAL MATERIAL AND CONSTRUCTION. REPAIR AND REFINISH AREAS DISTURBED BY WORK TO THE CONDITION OF ADJOINING SURFACES IN A MANNER SATISFACTORY TO THE ARCHITECT.

15A 1-10 ROUGH-IN

COORDINATE WITHOUT DELAY ROUGHING-IN WITH GENERAL CONSTRUCTION. CONCEAL PIPING AND CONDUIT ROUGH-IN EXCEPT IN UNFINISHED AREAS AND WHERE OTHERWISE SHOWN.

15A 1-11 STRUCTURAL STEEL

STRUCTURAL STEEL USED FOR PIPE SUPPORTS, EQUIPMENT SUPPORTS, ETC., SHALL BE NEW, CLEAN, AND CONFORM TO ASTM DESIGNATION A-36.

SUPPORT PLUMBING AND MECHANICAL EQUIPMENT AND PIPING FROM THE BUILDING STRUCTURE. DO NOT SUPPORT PLUMBING EQUIPMENT FROM CEILINGS, OTHER MECHANICAL OR ELECTRICAL COMPONENTS, AND OTHER NON-STRUCTURAL ELEMENTS.

15A 1-12 ACCESS DOORS

PROVIDE ACCESS DOORS IN CEILING AND WALLS WHERE INDICATED OR REQUIRED FOR ACCESS TO CONCEALED VALVES AND EQUIPMENT INSTALLED UNDER THIS SECTION. PROVIDE CONCEALED HINGES, SCREWDRIVER-TYPE LOCK, ANCHOR STRAPS MANUFACTURED BY MILCOR, ZURN, TITUS, OR EQUAL. OBTAIN ARCHITECT'S APPROVAL OF TYPE, SIZE, LOCATION, AND COLOR BEFORE ORDERING.

15A 1-13 PENETRATIONS

SEAL FLOOR, EXTERIOR WALL, AND ROOF PENETRATIONS WATER AND WEATHERTIGHT WITH APPROPRIATE NON-SHRINK, NON-HARDENING COMMERCIAL CONSTRUCTION SEALANT. SEAL ROOF PENETRATIONS WITH 4 POUND PER SQUARE FOOT LEAD FLASHING. PROVIDE A SLEEVE, AND SEAL NON-FIRE-RATED FLOOR AND WALL PENETRATIONS WITH FIBERGLASS PACKING ND SILICONE CAULK (FOR ACOUSTICAL INSULATION).

COORDINATE FIRE RATING REQUIREMENTS AND LOCATIONS WITH THE ARCHITECT. SEAL PENETRATIONS OF FIRE-RATED ASSEMBLIES WITH 3M CP-25 FIRE BARRIER CAULK (PROVIDE THICKNESS AND METHOD AS REQUIRED AND RECOMMENDED BY MANUFACTURER) TO MAINTAIN THE FIRE RESISTANCE RATING OF FIRE-RATED ASSEMBLIES.

SEAL EXTERIOR WALL PENETRATIONS BELOW GRADE WITH CAST IRON WALL PIPES AND MODULAR MECHANICAL SLEEVE SEALS, MANUFACTURED BY THUNDERLINE/LINK SEAL, CALPICO, INC AND METRAFLEX.

PROVIDE SLEEVES FOR HORIZONTAL PIPE PASSING THROUGH OR UNDER FOUNDATION. SLEEVES SHALL BE CAST IRON SOIL PIPE TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED.

PROVIDE SLEEVES FOR VERTICAL PIPE PASSING THROUGH SLAB ON GRADE. SLEEVES SHALL BE SCHEDULE 40 PVC PIPE, TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED. SEAL WATER-TIGHT WITH SILICONE CAULK.

15B: HEATING, VENTILATION, AND AIR CONDITIONING.

15B 1-1 DUCTWORK

ALL DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS CORRESPONDING TO THE SYSTEM PRESSURE. DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR A TWO-INCH PRESSURE RATING AND SEAL CLASS B.

SUPPLY AND RETURN DUCTWORK INSIDE THE BUILDING SHALL BE INSULATED WITH 1" THICK ACOUSTICAL LINING WITH A MINIMUM R-VALUE OF 4.5 OR EXTERNALLY WRAPPED WITH 2" THICK GLASS FIBER DUCT WRAP. INSULATE SUPPLY AND RETURN DUCTWORK LOCATED OUTSIDE THE BUILDING WITH 2" LINER AND SEAL SEAMS WEATHER TIGHT. DEDICATED OUTSIDE AIR SUPPLY DUCTWORK LOCATED WITHIN THE BUILDING SHALL BE INSULATED WITH 2" DUCT WRAP.

FLEXIBLE DUCTWORK MAINS ARE NOT PERMITTED. PROVIDE MAXIMUM 5'-0" FLEXIBLE DUCT CONNECTIONS TO CEILING DIFFUSERS.

FURNISH AND INSTALL VOLUME/BALANCE DAMPERS AT ALL BRANCH DUCTS TO DIFFUSERS. LOCATE DAMPERS A MINIMUM OF 4'-0" AWAY FROM DIFFUSERS.

INSTALL VTR'S EXHAUST FANS, AND FLUES A MINIMUM OF 5'-0" FROM PARAPET OR OUTSIDE WALL AND 10'-0" MINIMUM FROM EQUIPMENT WITH OUTSIDE AIR INTAKE.

15B 1-2 ELECTRICAL WIRING

LINE VOLTAGE WIRING SHALL BE FURNISHED BY DIVISION 16. LINE VOLTAGE CONTROL AND INTERLOCK WIRING FOR MECHANICAL SYSTEMS SHALL ALSO BE FURNISHED BY DIVISION 16 CONTRACTOR. LOW VOLTAGE CONTROL WIRING SHALL BE BY THE DIVISION 15 CONTRACTOR. PROVIDE WIRING DIAGRAMS TO THE DIVISION 16 CONTRACTOR AS REQUIRED FOR PROPER EQUIPMENT HOOKUP. COORDINATE WITH THE DIVISION 16 CONTRACTOR THE ACTUAL WIRE SIZING AMPS FOR MECHANICAL EQUIPMENT (FROM THE EQUIPMENT NAMEPLATE) TO ENSURE PROPER INSTALLATION.

ALL TEMPERATURE SENSORS, FAN SWITCHES, AND SPEED CONTROLS SHALL BE INSTALLED 48" ABOVE THE FLOOR FOR ADA REQUIREMENTS.

15B 1-3 FINAL TESTING AND ADJUSTMENTS

AIR BALANCE SHALL BE PERFORMED BY AN INDEPENDENT AIR BALANCE CONTRACTOR. BALANCE EACH SUPPLY, RETURN, AND OUTSIDE AIR DEVICE WITHIN 5% OF REQUIREMENTS AND FURNISH A REPORT TO THE CONSTRUCTION MANAGER. THE ENTIRE HVAC SYSTEM MUST BE FULLY OPERABLE, BALANCED, AND APPROVED BY OWNER'S REPRESENTATIVE ON THE DAY TENANT OPENS FOR BUSINESS.

ADJUST THERMOSTATS AND CONTROL DEVICES TO OPERATE AS INTENDED. ADJUST BURNERS, PUMPS, FANS, ETC. FOR PROPER AND EFFICIENT OPERATION. CERTIFY TO ARCHITECT THAT ADJUSTMENTS HAVE BEEN MADE AND THAT SYSTEM IS OPERATING SATISFACTORILY. CALIBRATE, SET AND ADJUST AUTOMATIC TEMPERATURE CONTROLS. CHECK PROPER SEQUENCING OF INTERLOCK SYSTEMS, AND OPERATION OF SAFETY CONTROLS.

15C 1-4 SYSTEM TESTING AND ADJUSTING

UPON COMPLETION OF EACH PHASE OF THE INSTALLATION, TEST EACH SYSTEM IN CONFORMANCE WITH LOCAL CODE REQUIREMENTS AND LANDLORD CRITERIA, FURNISH LABOR AND EQUIPMENT REQUIRED TO TEST PLUMBING WORK INSTALLED UNDER THIS CONTRACT, AND ASSUME COST INVOLVED IN MAKING THE TESTS, AND REPAIRING AND/OR REPLACING DAMAGE RESULTING THERE FROM.

NOTIFY THE ARCHITECT AND THE AUTHORITY HAVING JURISDICTION, THREE (3) WORKING DAYS PRIOR TO MAKING PLUMBING SYSTEM TEST. LEAVE CONCEALED WORK UNCOVERED UNTIL THE REQUIRED TEST HAVE BEEN COMPLETED, BUT IF NECESSARY DUE TO CONSTRUCTION PROCEDURE, TEST ON PORTIONS OF THE WORK MAY BE MADE, AND WHEN SATISFACTORY, THE WORK MAY BE CONCEALED. TEST PIPING BEFORE INSULATION IS INSTALLED, AND BEFORE BACKFILL. PIPES, JOINTS, FLANGES, VALVE STEMS, ETC. SHALL BE LEAK TIGHT. REPAIR OR REPLACE SYSTEM DEFECTS WITH NEW MATERIALS. CAULKING OF DEFECTIVE JOINTS, CRACKS OR HOLES WILL NOT BE PERMITTED. REPEAT EST AFTER DEFECTS HAVE BEEN ELIMINATED. MAKE TESTS IN THE PRESENCE OF THE ADMINISTRATIVE AUTHORITY AND/OR THE OWNER'S AUTHORIZED REPRESENTATIVE.

15C 1-5 GUARANTEE

THE WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL INCLUDE THE FURNISHING, INSTALLATION, AND CONNECTION OF PLUMBING SYSTEMS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. BY SIGNING THE CONTRACT, THE CONTRACTOR ACKNOWLEDGES THAT HE HAS ACQUAINTED HIMSELF WITH THE SITE AND THE EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, AND THE DRAWINGS AND SPECIFICATIONS PERTAINING THERETO, AND HE INDICATES THAT HE WILL COMPLY WITH THE REQUIREMENTS AND INTENT OF PERTINENT DOCUMENTS IN THE PERFORMANCE OF THE WORK.

GUARANTEE THAT THE PLUMBING INSTALLED UNDER THIS CONTRACT IS FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ON (1) YEAR FROM THE DATE OF JOB ACCEPTANCE BY THE OWNER. THIS SHALL INCLUDE A GUARANTEE OF FREE CIRCULATION OF LIQUIDS THROUGHOUT THE SYSTEM AS INTENDED WITHOUT LEAKS, EXCESSIVE NOISE, OR WATER HAMMER.

IF DEFECTS OCCUR DURING THE ONE YEAR GUARANTEE PERIOD, REPAIR OR REPLACE SUCH DEFECTS AT NO EXPENSE TO THE OWNER, AND TO THE SATISFACTION OF THE OWNER, ARCHITECT AND ENGINEER.

HVAC GENERAL NOTES:

1. PLANS ARE SCHEMATIC IN NATURE & INTENDED TO DEPICT GENERAL SCOPE OF PROJECT. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION AND COORDINATE WITH OTHER TRADES PRIOR TO INSTALLATION. ALL WORK SHALL BE CLOSELY COORDINATED WITH G.C. PRIOR TO PURCHASE, FABRICATION & INSTALLATION.
2. CONSTRUCTION PER ALL APPLICABLE CODES & STANDARDS. CODES GOVERN UPON ANY DISCREPANCIES WITH THE PLANS.
3. ALL MATERIAL AND EQUIPMENT SHALL BE NEW AND OF THE BEST QUALITY, AND BE PRODUCED BY REPUTABLE MANUFACTURER'S USED IN COMMERCIAL CONSTRUCTION.
4. SUBMIT OPERATION AND MAINTENANCE MANUALS TO GC UPON COMPLETION OF PROJECT.
5. PROVIDE GUARANTEE ON ALL EQUIPMENT, MATERIAL AND WORKMANSHIP FOR ONE YEAR UPON COMPLETION OF PROJECT. ANY DEFECTS ARISING WITHIN ONE YEAR SHALL BE REPAIRED OR REPLACED AT NO COST TO THE OWNER.
6. TEST ALL PIPING IN ACCORDANCE WITH LOCAL CODES AND STANDARDS.
7. PROJECT LOCATED IN CLIMATE ZONE 4 (ASHRAE STANDARD 90.1 - ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS). ALL ROUND DUCTWORK SHALL BE WRAPPED & ALL RECT./SQ. DUCTWORK SHALL BE LINED ('CERTAIN-TEED', 'OWENS-CORNING' OR ENGINEER APPROVED EQUAL) AS FOLLOWS (COORDINATE ACTUAL LOCATION OF DUCT & BUILDING INSULATION TYPE WITH G.C.):

DUCT LOCATION	SUPPLY DUCT	RETURN DUCT
VENTILATED ATTIC	R-6	R-3.5
UNVENTED ATTIC ABV. INSULATED CL.G.	R-6	R-3.5
UNVENTED ATTIC WITH ROOF INSULATION	R-3.5	NONE *
UNCONDITIONED SPACE	R-3.5	NONE *
INDIRECTLY CONDITIONED	R-3.5	NONE *
CONDITIONED SPACE	NONE	NONE *

* RA DUCT SHALL HAVE 1/2" DUCT LINER (min.). UNLESS LOCATED IN A 'CONDITIONED SPACE', EXHAUST DUCT SHALL HAVE MINIMUM R-VALUE OF R-3.5.
8. DUCTWORK SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS - ADJUST FOR LINER AS REQUIRED.
9. SIX FOOT (max.) ALLOWED FOR FLEX DUCT (ABOVE ACCESSIBLE CEILINGS ONLY). FLEX DUCT SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS & AS PER THE RATED/LISTED APPLICATION.
10. ALL DUCT SHALL BE SEALED WITH HARDCAST DT TAPE WITH FTA ADHESIVE OR HARDCAST 5FG-1402 (FOIL GRIP) TAPE OR ENGINEER APPROVED EQUAL. EXPOSED DUCTWORK (IN CONDITIONED SPACE) DOES NOT REQUIRE TO BE SEALED.
11. MAINTAIN A MINIMUM OF 1'0" BETWEEN FRESH AIR INTAKE AND EXHAUST/ VENT TERMINATIONS. WHERE THEY ARE WITHIN 1'0", FRESH AIR INTAKE SHALL BE LOCATED 2' (min.) BELOW EXHAUST/VENT TERMINATION. FIELD VERIFY ACTUAL REQUIREMENTS PRIOR TO ROUGH-IN.

12. ACTUAL LOCATION OF MECHANICAL EQUIPMENT & DEVICES PER G.C. - COORDINATE PRIOR TO ROUGH-IN.

13. PROVIDE DUCT TRANSITIONS AS REQUIRED TO MAKE CONNECTION TO MECHANICAL EQUIPMENT & DEVICES USED. ALL DUCTS SHALL BE CONSTRUCTED & INSTALLED PER SMACNA STANDARDS.

14. PROVIDE MECHANICAL EQUIPMENT WITH PROGRAMMABLE THERMOSTAT WITH AUTO CHANGEOVER (WHITE-ROGERS, HONEYWELL OR APPROVED EQUAL). LOW VOLTAGE CONTROL WIRING FOR MECHANICAL EQUIPMENT BY M.C. COORDINATE ACTUAL LOCATION WITH FURNITURE & G.C. PRIOR TO ROUGH-IN. OWNER SHALL APPROVE THERMOSTAT PRIOR TO PURCHASE.

15. DO NOT ROUTE ANY PIPING OR DUCTWORK ABOVE ELECTRICAL PANELS, TRANSFORMERS & EQUIPMENT - COORDINATE WITH E.C.

16. FURNISH AND INSTALL ALL GALVANIZED STEEL DUCTWORK AND HOUSINGS AS SHOWN ON DRAWINGS. ALL DUCTWORK SHALL BE IN CONFORMANCE WITH CURRENT SMACNA STANDARDS RELATIVE TO GAUGE, BRACING, JOINTS, ETC. SUPPORT HORIZONTAL RUNS OF DUCT FROM STRAP IRON HANGERS ON CENTERS NOT TO EXCEED 8'-0". DO NOT SUPPORT CEILING GRID, CONDUITS, PIPES, EQUIPMENT, ETC. FROM DUCTWORK.

17. ALL EXTERIOR PENETRATIONS SHALL BE SEALED WEATHERTIGHT. FIELD VERIFY ACTUAL REQUIREMENTS.

18. PROVIDE ACCESS & CLEARANCES TO MECHANICAL EQUIPMENT & DEVICES AS REQUIRED BY MANUFACTURER & CODE - FIELD VERIFY.

19. DUCT MATERIALS SHALL BE AS FOLLOWS:

a) RECTANGULAR DUCTWORK SHALL BE ASTM G90 GALVANIZED STEEL: ASTM A525, LOCK-FORMING QUALITY, 1.25 OZ. ZINC COATED EACH SIDE.

b) ROUND RIGID DUCTWORK - SNAP-LOCK PIPE WITH TRANSVERSE JOINTS TAPED.

c) ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS, MANUAL 1 5d. ALL SUPPLY AIR DUCT PRESSURE SHALL BE THE SAME AS THE EXTERNAL STATIC PRESSURE (ESP) OF THE EQUIPMENT SUPPLYING THE DUCT. THE EQUIPMENT (ESP) SHALL BE THE PRESSURE CLASS FOR THE ENTIRE SUPPLY DUCT SYSTEM.

20. G.C. SHALL PROVIDE GUARDS FOR MECHANICAL EQUIPMENT THAT REQUIRE SERVICE THAT ARE LOCATED WITHIN 1'0" OF A ROOF EDGE OR OPENING LOCATED MORE THAN 30" ABOVE FLOOR ROOF OR GRADE. GUARD LOCATION & CONSTRUCTION PER IMC & IBC. FIELD VERIFY ACTUAL REQUIREMENTS & COORDINATE WITH G.C. PRIOR TO START OF CONSTRUCTION.

21. M.C. SHALL PAINT (FLAT BLACK) INSIDE OF CHASES, DUCTWORK, GRILLES AND/OR DIFFUSERS THAT ARE VISIBLE THROUGH THE FACE OF GRILLES & DIFFUSERS - FIELD VERIFY.

22. UNLESS OTHERWISE NOTED, BRANCH DUCTWORK (DUCT RUNOUT SIZE) TO AIR OUTLETS SHALL BE SAME SIZE AS OUTLET NECK SIZE.



707 n. 6th street
kansas city, ks 66101
www.veritas-ad.com
913.624.1610

consulting engineer:



7 BREW DRIVE-THRU, La Crosse, WI - Mormon Coulee

REVISIONS

No.	Description	Date
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sheet issue date:
07-11-2024
project no.:
23.26.04

sheet contents:
Mechanical Specifications

sheet no.:
M4.0



PLUMBING NOTES

- CONNECT NEW 4" SANITARY SEWER TO EXISTING. FIELD VERIFY EXACT LOCATION, REFER TO CIVIL PLANS.
- CONNECT NEW 1" DOMESTIC WATER SUPPLY TO EXISTING WATER SERVICE. REFER TO CIVIL PLANS.
- REMOVE EXISTING TANKLESS WATER HEATER IN THIS APPROXIMATE LOCATION. DEMOLISH AND INSTALL PIPE AS NECESSARY TO RECONNECT TO NEW TANK WATER HEATER WH-1. NEW WH1 TO BE LOCATED ABOVE MS1 ON SUPPORT PLATFORM.
- 1/2" FW TO BEVERAGE EQUIPMENT. PROVIDE BACKFLOW PREVENTION CONFORMING TO ASSE 1022 AT POINT OF CONNECTION TO EACH BEVERAGE DISPENSING EQUIPMENT AND ICE MACHINE.
- RPZ TO BE LOCATED IN RESTROOM. EXPOSED. INSTALL 12" 30" A.F.S. AND 12" MIN. FROM ANY WALL OR OBSTRUCTION. ROUTE RELIEF VALVE TO FLOOR SINK BELOW.
- 1/2" FW LINE UP WALL AND CAPPED FOR FUTURE USE.
- COORDINATE EXACT SUMP PUMP LOCATION IN CRAWLSPACE WITH ARCHITECTURAL PLANS. SUMP PUMP TO DISCHARGE TO GREEN SPACE SO AS TO NOT CAUSE A NUISANCE OR EROSION.

PLUMBING NOTES

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE SUBMITTING BID. ANY CHANGES REQUIRED DUE TO INCORRECT EXISTING INFORMATION WILL BE THE CONTRACTOR'S RESPONSIBILITY.

PROVIDE SEISMIC BRACING BASED ON APPROPRIATE SEISMIC ZONE REQUIREMENTS PER SMACNA PUBLISHED SEISMIC DETAILS, LOCAL AND NATIONAL CODES. CONTRACTOR'S RESPONSIBILITY INCLUDES STRUCTURAL ENGINEER'S CERTIFICATION ON DETAILS SUBMITTED FOR PERMITTING.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	BRANCH SIZES (MINIMUM)				MANUFACTURER	MODEL	DESCRIPTION	NOTES
		CW	HW	WASTE	VENT				
WC1	WATER CLOSET HANDICAP	12"	12"	4"	2"	AMERICAN STANDARD	CADET 2467.016	16-12 1/4" ELONGATED BOWL, 1.6 GPF. PROVIDE AMERICAN STANDARD SEAT S311.012 'LAUREL' WITHOUT COVER.	1,2
L1	LAVATORY	12"	12"	2"	1 1/4"	KOHLER	BRENHAM K-1995-1L	WALL HUNG WITH CARRIER ARM HANGERS, VITREOUS CHINA, ADA COMPLIANT. WHITE FINISH AND 1-1/4" P-TRAP.	1,3,4
MS1	MOP SINK	12"	12"	3"	1 1/2"	AMERICAN STANDARD	FLOORWELL 7741.00.020	28"X27"X19" ENAMELED CAST IRON SERVICE SINK. GLOSSY WHITE FINISH, WALL MOUNTED WITH K-8088 P-TRAP.	1
S1	HAND SINK	12"	12"	2"	1 1/2"	ADVANCE TABCO	DA-15	STAINLESS STEEL DROP-IN SINK, 10"X14"X20" BOWL SIZE. PROVIDED WITH K-62 FAUCET AND 3" DRAIN BASKET. PROVIDE WITH P-TRAP.	3,4
S2	3-COMP SINK	12"	12"	3"	1 1/2"			CUSTOM 3 COMPARTMENT SINK BY OWNER	
FD1	FLOOR DRAIN			3"	1 1/2"	ZURN	ZN-415-8B	6" DURA-COATED CAST IRON BODY, POLISHED NICKEL BRONZE TOP, BOTTOM OUTLET, ADJUSTABLE COLLAR.	
FS1	FLOOR SINK			3"	1 1/2"	ZURN	ZN-267	18" X 6" WIDE TRENCH DRAIN, DURA-COATED CAST IRON BODY, POLISHED NICKEL BRONZE TOP, BOTTOM OUTLET.	
TD1	TRENCH DRAIN			3"				60"X12" CUSTOM STAINLESS STEEL TRENCH DRAIN BY OWNER.	
WCO	WALL CLEAN OUT					ZURN	HL-1810	DURA-COATED CAST IRON BODY W/LEVEL-TROL™, ADJUSTABLE TO FINISH SURFACE.	
WHA	WATER HAMMER ARRESTOR					ZURN	Z-1700	CONFORM TO FDI WH-201, ASSE 1010 TEMP TO 300°F, MAX 125 PSIG WORKING PRESSURE.	
	BALL VALVE					WILKINS	850	FULL PORT BRASS BALL VALVE WITH LEVER HANDLE.	
RPZ	REDUCED PRESSURE ZONE ASSEMBLY	3/4"				WATTS	LF006M307	LEAD FREE CAST COPPER SILICON ALLOY BODY. INTERNAL RELIEF VALVE, BALL VALVE TEST COCKS, ASSE 1013 APPROVED. PROVIDE WITH QUARTER TURN BALL VALVES (QT ACCESSORY).	
FPWH	FREEZE-PROOF WALL HYDRANT	3/4"				WOODFORD	865	CONCEALED BOX TYPE, AUTOMATIC DRAINING, FREEZELESS WALL HYDRANT WITH SINGLE CHECK HOSE CONNECTION ANTI-SIPHON VACUUM BREAKER, ASSE 1019-B APPROVED, 3/4" N.P.T. INLET AND 3/4" N.P.T. OUTLET.	
DCV	DUAL CHECK VALVE					WATTS	SD-3	ASSE 1022 DUAL CHECK BACKFLOW PREVENTER.	

- NOTES:**
- ALL FIXTURES TO BE WHITE.
 - MOUNT CONTROLS ON ACCESSIBLE / WIDE SIDE OF TOILET.
 - PROVIDE TRIBURO GUARD PROTECTIVE PIPE COVERS ON EXPOSED HOT WATER AND DRAIN LINES.
 - PROVIDE WATTS SERIES USG-8 MIXING VALVE OR EQUAL, SET DISCHARGE TEMPERATURE TO 110°F.
 - SIZE PER MANUFACTURER'S RECOMMENDATIONS.
 - SIZE PER PIPING SIZE ON PLANS.

SUMP PUMP AND BASIN SCHEDULE

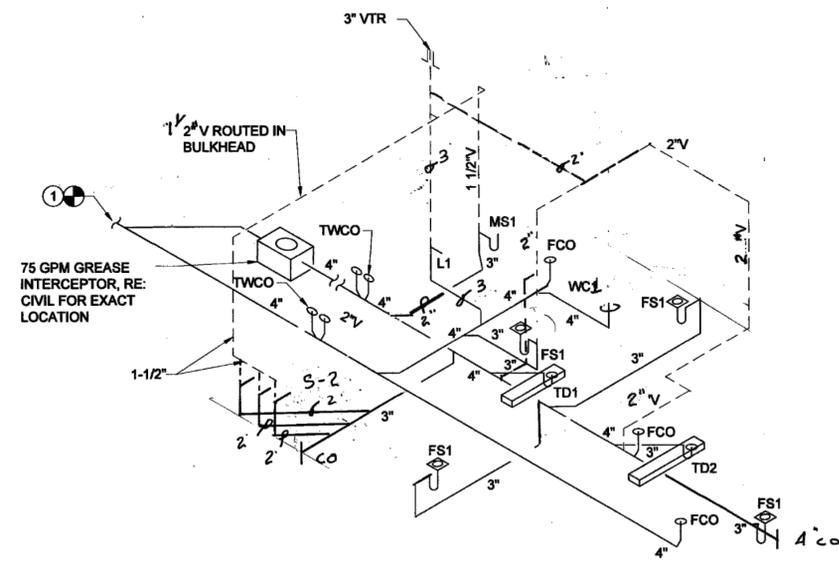
MARK	MANUFACTURER	PUMP MODEL	SLOTTED BASIN DIMENSIONS	GPM @ 5 FT OF HEAD	NOTES
SP1	ZOELLER	S3	12-1/2" X 14-7/8" X 17"	43	1-3

1. PROVIDE WITH ACCESSIBLE ELECTRICAL POWER OUTLET.
2. PROVIDE WITH OPTIONAL CHECK VALVE.
3. PROVIDE WITH ZOELLER BRANDED POLYETHYLENE SLOTTED BASIN AND BASIN COVER

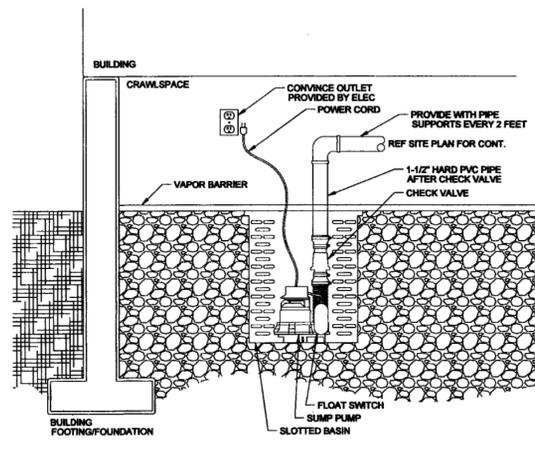
GREASE TRAP CALCULATIONS

MARK	BOWL SIZE	VOLUME	QTY	TOTAL VOLUME	GALLONS
S2	18.3" x 14" x 16.3"	1465.26 CU. IN.	3	4395.78 CU. IN.	19.3

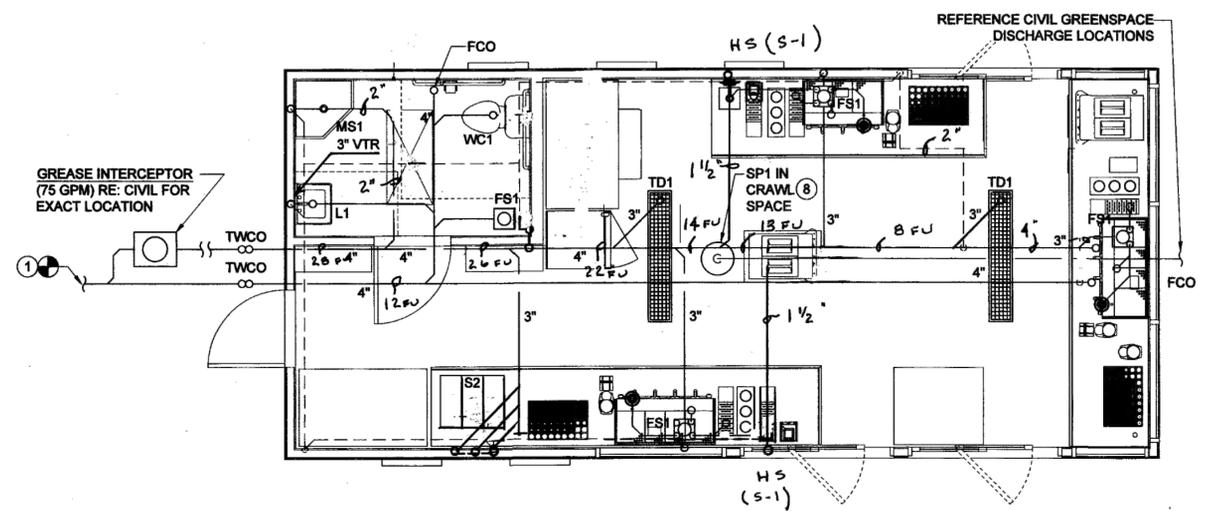
- 75% FILL FACTOR: 19.3 x 0.75 = 14.5
- ONE-MINUTE DRAIN TIME: 14.5 / 1 = 14.5 GPM
- PROPOSED GREASE TRAP SIZE: 75 GPM
- PROPOSED MAKE/MODEL: SCHIER PRODUCTS / GB-75



3 SANITARY RISER
SCALE: N.T.S.



1 SUMP PUMP ELEVATION
SCALE: N.T.S.



1 SANITARY PLAN
SCALE: 3/8" = 1'-0"

- INDEX:**
- P-1 - Sanitary Plan & Isometric Plan
 - P-2 - Water Floor Plan
 - P-3 - Water Isometric Plan

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APPROVED
By Glen Schlueter at 10:51 am, Feb 16, 2023

REVISIONS

No.	Description	Date
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sheet issue date:
07-11-2024

project no.:
23.26.04

sheet contents:
Plumbing Floor Plan -
Sanitary
(Modular Building)

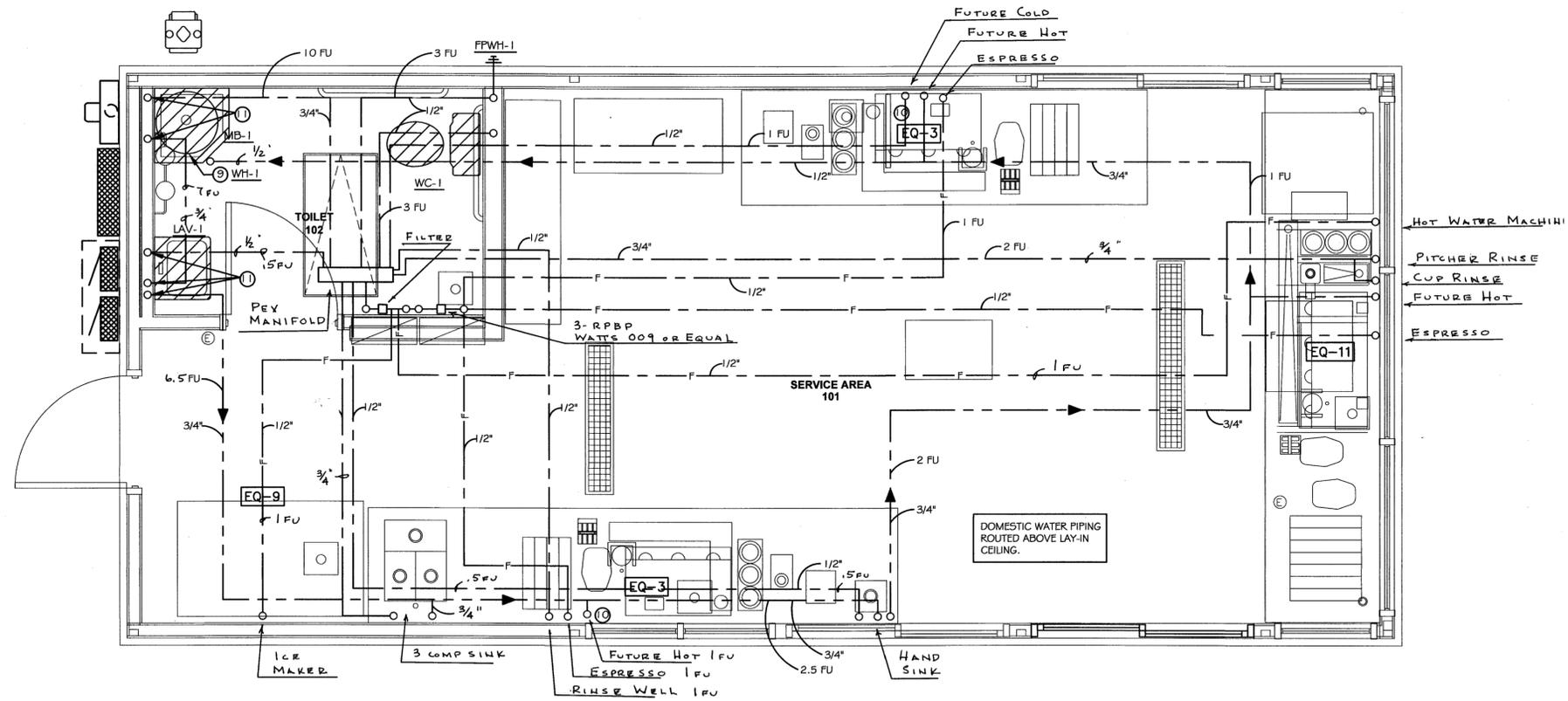
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A PLUMBING FLOOR PLAN - DOMESTIC WATER

SCALE: 1/2" = 1'-0"



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7 BREWS
WATER PIPE FLOOR PLAN
P-2

7 BREW DRIVE-THRU, La Crose, WI - Mormon Coulee

REVISIONS
No. Description Date

sheet issue date:
07-11-2024

project no.:
23.26.04

sheet contents:
Plumbing Floor Plan -
Domestic Water
(Modular Building)

sheet no.:

P2.0

Information Needed for Water Service Sizing

1. 18 Demand of building in gallons per minute.
2. 70 Low pressure at main in street (or at external pressure tank).
3. 10 Difference in elevation from main to meter (or external pressure tank to building control valve).
4. 3/4 Size of water meter (if applicable).
5. 80 Developed length from main to meter (or external pressure tank to building control valve).

You Must First Find the Available Pressure After the Water Meter (or at building control valve). To obtain this pressure, you must:

6. 8 Find pressure loss due to friction in 1 inch water service.
7. 4.34 Find pressure loss due to elevation, main to meter (or external pressure tank to building control valve). Multiply the difference in elevation by .434 p.s.i./ft.
8. 6 Find pressure loss due to meter. (from manufacturer or AWWA).
9. 51.66 Subtract the loss due to friction (Step 6), loss due to elevation (Step 7), and loss due to meter (Step 8) from the low main pressure (or low pressure at external pressure tank). This calculation is the available pressure after the water meter (or at the building control valve). This answer is entered in Line B, below.

Information Needed for Water Distribution Sizing

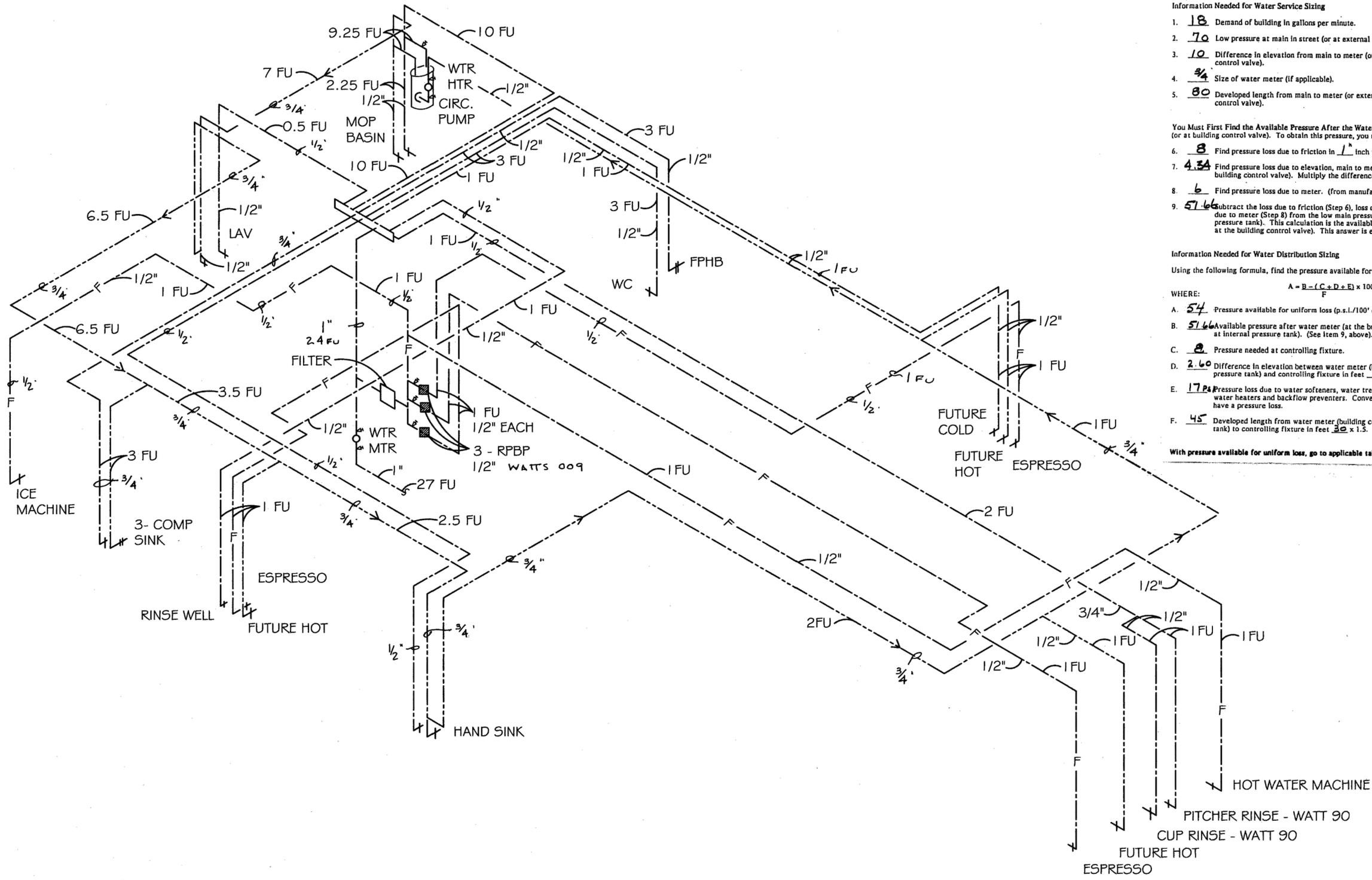
Using the following formula, find the pressure available for uniform loss (p.s.i./100' of pipe)

$$A = \frac{B - (C + D + E)}{F} \times 100$$

WHERE:

- A. 54 Pressure available for uniform loss (p.s.i./100' of pipe).
- B. 51.66 Available pressure after water meter (at the building control valve or low pressure at internal pressure tank). (See item 9, above).
- C. 8 Pressure needed at controlling fixture.
- D. 2.60 Difference in elevation between water meter (building control valve or internal pressure tank) and controlling fixture in feet 6 x .434 p.s.i./ft.
- E. 17.8 Pressure loss due to water softeners, water treatment devices, instantaneous water heaters and backflow preventers. Conventional water heaters usually do not have a pressure loss.
- F. 45 Developed length from water meter (building control valve or internal pressure tank) to controlling fixture in feet 30 x 1.5.

With pressure available for uniform loss, go to applicable table for distribution sizing.



A DOMESTIC WATER RISER DIAGRAM
SCALE: NTS

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APPROVED
By Glen Schlueter at 10:50 am, Feb 16, 2023

7 BREWS
WATER ISOMETRIC



707 n. 6th street
kansas city, ks 66101
www.veritas-ad.com
913.624.1610
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7 BREW DRIVE-THRU, La Crosse, WI - Mormon Coulee

No.	Description	Date

sheet issue date:
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project no.:
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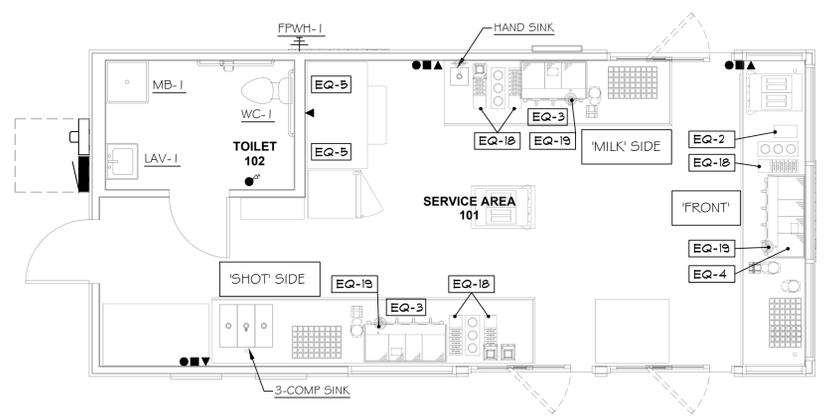
sheet contents:
Mechanical Schedules
& Details
(Modular Building)

sheet no.:

COFFEE EQUIPMENT CONNECTION SCHEDULE (SITE ADAPT CONNECTIONS):

EQ-2	HOT WATER MACHINE	BY OTHERS. PROVIDE 1/2" HW CONNECTION AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.
EQ-3	ESPRESSO MACHINE	BY OTHERS. PROVIDE 1/2" FW/CW CONNECTION(S) AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.
EQ-4	ESPRESSO MACHINE	BY OTHERS. PROVIDE 1/2" FW/CW CONNECTION(S) AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.
EQ-5	ICE MAKER W/ BIN	BY OTHERS. PROVIDE 1/2" FW CONNECTION AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.
EQ-18	RAPID RINSER	BY OTHERS. PROVIDE 1/2" CW CONNECTION AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.
EQ-19	RINSE WELL	BY OTHERS. PROVIDE 1/2" CW CONNECTION AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.
	HAND SINK	SINK AND TRIM BY OTHERS. PROVIDE 1/2" CW, 1/2" HW & 2" WASTE CONNECTIONS PER LOCAL CODE REQUIREMENTS. PROVIDE WATTS SERIES USG-B MIXING VALVE OR EQUAL, SET DISCHARGE TEMPERATURE TO 110-deg F. DEPENDING ON LOCAL AHJ, EITHER DIRECT CONNECT WASTE OR INDIRECT CONNECT TO FLOOR SINK - PROVIDE AIR GAP.
	3-COMPARTMENT SINK	SINK AND TRIM BY OTHERS. PROVIDE 1/2" CW, 1/2" HW & 3" WASTE CONNECTIONS PER LOCAL CODE REQUIREMENTS. DEPENDING ON LOCAL AHJ, EITHER DIRECT CONNECT WASTE OR INDIRECT CONNECT TO FLOOR SINK - PROVIDE AIR GAP.

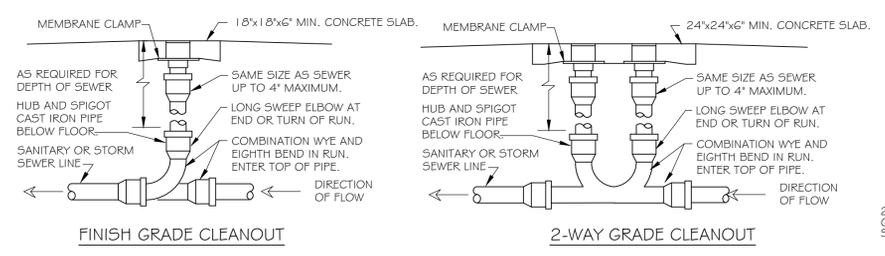
- COFFEE EQUIPMENT NOTES:**
- ACTUAL EQUIPMENT INCLUDING ALL ASSOCIATED ACCESSORIES, FALCETS, TRIM, ETC. PROVIDED BY OTHERS. VERIFY ACTUAL KITCHEN EQUIPMENT LOCATION, ROUGH-IN & CONNECTION REQUIREMENTS WITH NATIONAL MODULAR PRIOR TO ROUGH-IN.
 - COFFEE EQUIPMENT INSTALLED BY OTHERS, CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO EQUIPMENT - PROVIDE ACCESSIBLE SHUT-OFF VALVES, DISCONNECTS, ETC. AS REQUIRED BY 7BREW.
 - PROVIDE ADDITIONAL BACKFLOW PROTECTION AS REQUIRED BY AUTHORITY HAVING JURISDICTION (AHJ) AND/OR COFFEE EQUIPMENT SUPPLIER (7BREW). IF REQUIRED, P.C. SHALL PROVIDE & INSTALL THE REQUIRED BACKFLOW DEVICES IN ACCORDANCE WITH CODE & LOCAL A.H.J.
 - PROVIDE METAL BODY, CHROME PLATED, 1/4-TURN STOP(S) ON ALL DOMESTIC WATER SUPPLY(S) TO COFFEE EQUIPMENT. COORDINATE REQUIREMENTS WITH 7BREW PRIOR TO ROUGH-IN.



DOMESTIC WATER SYMBOL LIST

●	DOMESTIC COLD WATER (CW)
■	DOMESTIC HOT WATER (HW)
▼	FILTERED WATER (FW)

B PLUMBING FLOOR PLAN - EQUIPMENT CONNECTIONS
SCALE: 1/4" = 1'-0"
0 1 2 4 8



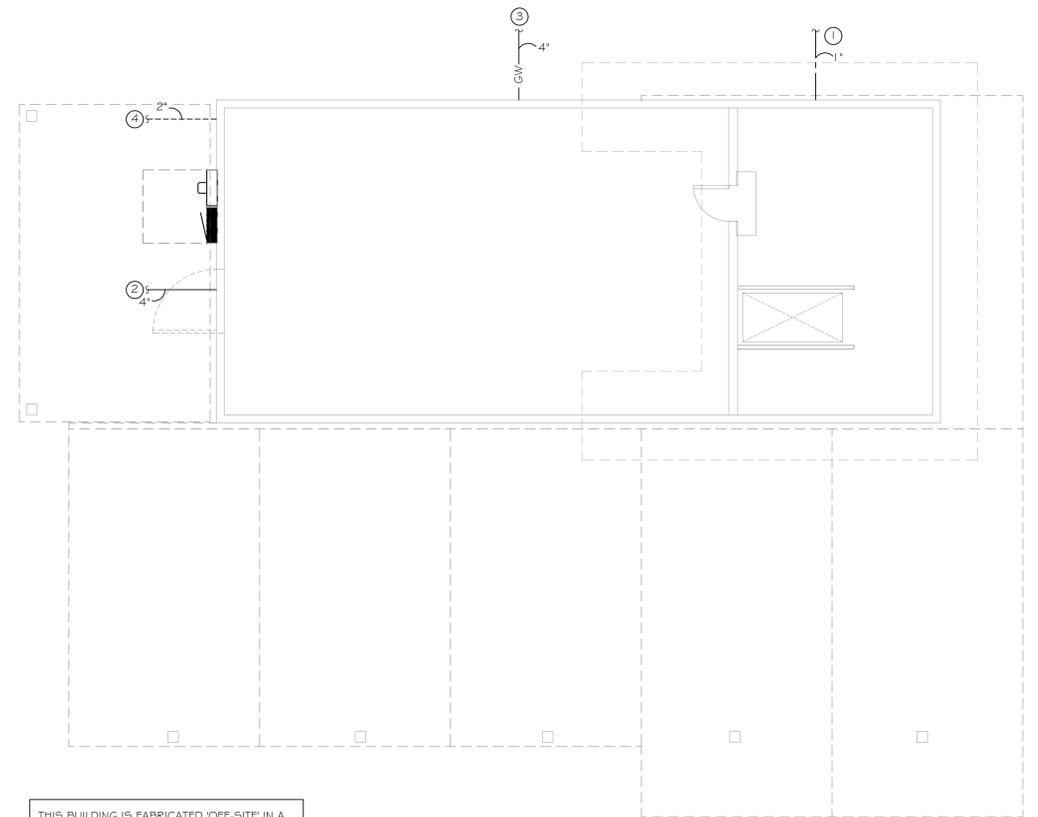
- NOTES:**
- LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT 50' INTERVALS ON STRAIGHT RUNS, AND/OR WHERE SHOWN ON PLANS. PROVIDE BACK FILL PER ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND. CONSULT LOCAL CODES FOR OTHER CO REQUIREMENTS.
 - ROUND SECURED GASKETED NICKEL BRONZE ADJUSTABLE TOP WITH 'CO' CAST IN COVER. PROVIDE CLEANOUT TOP WITH VARIATIONS SUITABLE FOR FLOOR COVERING (CARPET FLOORS). PROVIDE GASKETED PLASTIC FLUG IN CAST IRON BODY. USE TEFLON JOINT COMPOUND ON FLUG THREADS. CLEAN THE TOP OF EXPOSED CO AFTER INSTALLATION.

1 CLEANOUT DETAILS - GRADE
NOT TO SCALE

WATER HEATER SCHEDULE - ELECTRIC, TANK

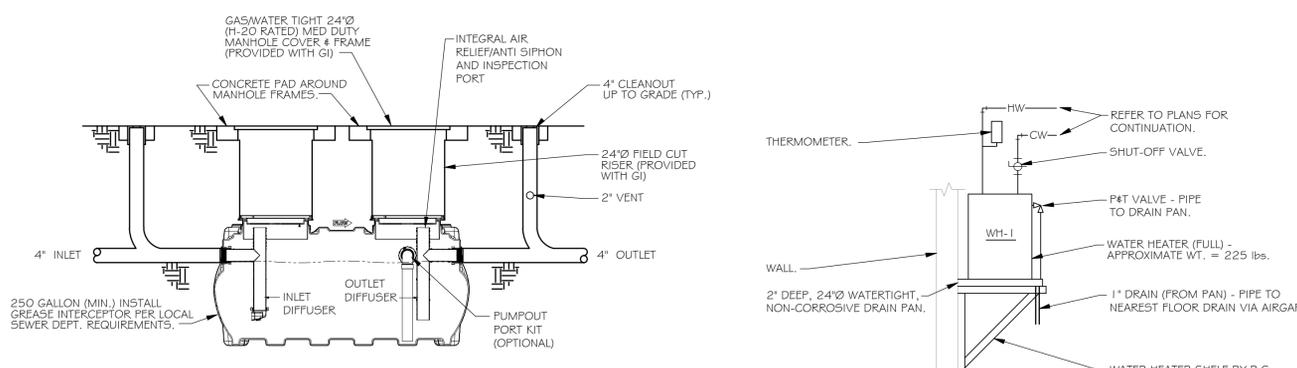
TAG	LOC.	MANF.	MODEL	TYPE	GAL. CAP.	FIRST HR. RATING (GAL)	REC. 90°F RISE (GPH)	ELEC. DATA			NOTES
								V/Ø	KW	NO.	
WH-1	102	BRADFORD WHITE	REL120LG	TANK	19	-	50	240/1	5.5	2	①

NOTES:
① ELECTRIC, TANK TYPE WATER HEATER WITH SIMULTANEOUS HEATING ELEMENTS - PROVIDE WITH 'HEAT TRAP' & OUTLET THERMOMETER.
APPROVED MANUFACTURERS: LOCHINVAR, AO SMITH, STATE, RHEEM/RUUD, NATIONAL, BRADFORD WHITE



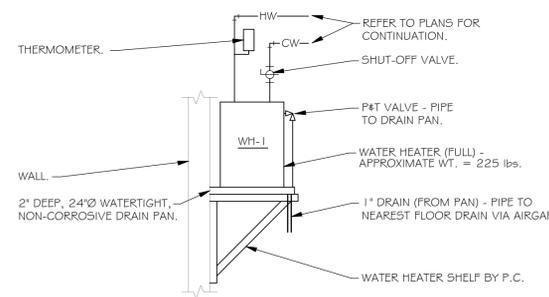
THIS BUILDING IS FABRICATED 'OFF-SITE' IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE 'JOB-SITE' BY NATIONAL MODULAR MFG. REFER TO MODULAR BUILDING DRAWINGS FOR ADDITIONAL INFORMATION.

A PLUMBING SITE PLAN
SCALE: 1/4" = 1'-0"
0 1 2 4 8



- NOTE:**
- SCHIER MODEL GB-250 - PROVIDE WITH 'PUMPOUT PORT' & FIELD CUT RISERS - P.C. SHALL COORDINATE RISER LENGTH WITH ACTUAL SITE CONDITIONS PRIOR TO PURCHASE.
 - TOP OF RING & COVER SHALL BE A MINIMUM OF 2" ABOVE SURROUNDING GRADE.
 - INSTALLATION & FABRICATION PER LATEST ADOPTED CODE & AUTHORITY HAVING JURISDICTION (AHJ).

2 GREASE INTERCEPTOR DETAIL
NOT TO SCALE



WATER HEATER SHELF IS MANUFACTURED BY 'HOLDRITE' - PRODUCT NUMBER 'QUICK STAND #40-SMHP-14'. THE WALL MOUNTED EQUIPMENT PLATFORM IS ENGINEERED TO SUPPORT WATER HEATERS UP TO 20 U.S. GALLONS (TOTAL MAXIMUM WEIGHT OF 375-LBS). THIS PARTICULAR MODEL ALSO ACTS AS A DRAIN PAN.

3 WATER HEATER DETAIL
NOT TO SCALE

- PLUMBING KEYED NOTES:**
- 1" DOMESTIC WATER SERVICE - REFER TO CIVIL SITE UTILITY PLAN FOR ACTUAL LOCATION & ROUTING REQUIREMENTS.
 - 4" SANITARY WASTE SERVICE - PROVIDE CLEANOUTS AS REQUIRED BY AHJ. REFER TO CIVIL SITE UTILITY PLAN FOR ACTUAL LOCATION & ROUTING REQUIREMENTS.
 - 4" GREASE WASTE SERVICE - PROVIDE CLEANOUTS AS REQUIRED BY AHJ. REFER TO CIVIL SITE UTILITY PLAN FOR ACTUAL LOCATION & ROUTING REQUIREMENTS. PROVIDE & INSTALL NEW GREASE INTERCEPTOR - SCHIER GB-250 (OR EQUAL GI). REFER TO DETAIL FOR ADDITIONAL INFORMATION. REFER TO CIVIL PLANS FOR ACTUAL LOCATION & ORIENTATION.
 - 2" V BELOW GRADE FOR GREASE INTERCEPTOR - REFER TO CIVIL SITE UTILITY PLAN FOR ACTUAL LOCATION & ROUTING REQUIREMENTS.

- SITE UTILITIES (DOMESTIC WATER, SANITARY SEWER, GREASE WASTE & VENT) INSTALLATION (DEPTH, ROUTING & CONNECTION REQUIREMENTS) TO BE COORDINATED WITH CIVIL ENGINEER.
- P.C. TO COORDINATE LOCATIONS OF ALL EXTERIOR CLEANOUTS WITH G.C. & OWNER PRIOR TO ROUGH-IN. MAINTAIN VISIBILITY & ACCESSIBILITY AS REQUIRED BY CODE.



REVISIONS

No.	Description	Date

sheet issue date: 07-11-2024
project no.: 23.26.04
sheet contents: Plumbing Crawl Space Plan (Site Adapt)
sheet no.:

DIVISION 15

15A: GENERAL

15A 1-1 GENERAL REQUIREMENTS

REQUIREMENTS UNDER DIVISION ONE AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THESE SPECIFICATIONS SHALL BE A PART OF THIS SECTION. CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH ITS CONTENTS AS TO REQUIREMENTS THAT AFFECT THIS DIVISION OR SECTION. THE WORK REQUIRED UNDER THIS SECTION INCLUDES MATERIAL, EQUIPMENT, APPLIANCES, TRANSPORTATION, SERVICES, AND LABOR REQUIRED TO COMPLETE THE ENTIRE SYSTEM AS REQUIRED BY DRAWINGS AND SPECIFICATIONS.

THE SPECIFICATIONS AND DRAWINGS FOR THE PROJECT ARE COMPLEMENTARY, AND PORTIONS OF THE WORK DESCRIBED IN ONE SHALL BE PROVIDED AS IF DESCRIBED IN BOTH, IN THE EVENT OF DISCREPANCIES, NOTIFY THE ENGINEER AND/OR OWNER AND REQUEST CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED.

15A 1-2 INSPECTION OF SITE

PRIOR TO SUBMITTING BID, VISIT THE SITE OF THE PROPOSED WORK AND BECOME FULLY INFORMED AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. FAILURE TO DO SO WILL NOT BE CONSIDERED SUFFICIENT JUSTIFICATION TO REQUEST OR OBTAIN EXTRA COMPENSATION OVER AND ABOVE THE CONTRACT PRICE.

15A 1-3 MATERIAL AND WORKMANSHIP

PROVIDE NEW MATERIAL, EQUIPMENT, AND APPARATUS UNDER THIS CONTRACT UNLESS OTHERWISE STATED HEREIN, OF BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE, AND FREE FROM ANY DEFECTS. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT NECESSARILY INTENDED TO DESIGNATE THE REQUIRED TRIM, WRITTEN DESCRIPTION OF THE OF THE TRIM GOVERN MODEL NUMBERS.

WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE A NEAT AND "WORKMANLIKE" APPEARANCE WHEN COMPLETED, TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER. WORKMANSHIP SHALL BE THE FINEST POSSIBLE BY EXPERIENCED MECHANICS. INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES AND LAWS.

THE COMPLETE INSTALLATION SHALL FUNCTION AS DESIGNED AND INTENDED WITH RESPECT TO EFFICIENCY, CAPACITY, NOISE LEVEL, ECT. ABNORMAL NOISE CAUSED BY BY RATTLING EQUIPMENT, PIPING, DUCTS, AIR DEVICES, AND SQUEAKS IN MOVING COMPONENTS WILL NOT BE ACCEPTABLE. IN GENERAL, MATERIALS AND EQUIPMENT SHALL BE OF COMMERCIAL SPECIFICATION GRADE IN QUALITY. LIGHT DUTY AND RESIDENTIAL TYPE EQUIPMENT WILL NOT BE ACCEPTED.

REMOVE FROM THE PREMISES WASTE MATERIAL PRESENT AS A RESULT OF WORK, INCLUDING CARTONS, CRATING, PAPER, AND STICKERS, ETC. CLEAN EQUIPMENT INSTALLED UNDER THIS CONTRACT TO PRESENT A NEAT AND CLEAN INSTALLATION AT THE TERMINATION OF THE WORK.

REPAIR OR REPLACE PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT TO THE SATISFACTION OF AUTHORITIES AND REGULATIONS HAVING JURISDICTION.

15A 1-4 COORDINATION

COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT THE VARIOUS COMPONENTS OF THE SYSTEMS WILL BE INSTALLED AT THE PROPER TIME, WILL FIT THE AVAILABLE SPACE, AND WILL ALLOW PROPER SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.

UNLESS OTHERWISE INDICATED, THE GENERAL CONTRACTOR WILL PROVIDE CHASES AND OPENINGS IN BUILDING CONSTRUCTION REQUIRED FOR INSTALLATION OF THE SYSTEMS SPECIFIED HEREIN. CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE BUILDING, AS VARIATIONS MAY OCCUR. CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS THAT COULD HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.

PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF CEILING, WALL, OR FLOOR FINISHES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT INTENDED TO DESIGNATE THE REQUIRED TRIM.

15A 1-5 ORDINANCES AND CODES

WORK PERFORMED UNDER THIS CONTRACT SHALL, AT MINIMUM, BE IN CONFORMANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES HAVING JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INSTALLATION WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ANY AMENDMENTS AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), UNDERWRITERS LABORATORIES (UL), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS (ASHRAE), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) AND OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE. WHERE THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THERE REFERENCED CODES, STANDARDS, ETC., THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE.

PROCURE AND PAY FOR PERMITS AND LICENSES REQUIRED FOR THE ACCOMPLISHMENT OF THE WORK HEREIN DESCRIBED, WHERE REQUIRED. OBTAIN, PAY FOR AND FURNISH CERTIFICATES OF INSPECTION TO OWNER. CONTRACTOR WILL BE HELD RESPONSIBLE FOR VIOLATIONS OF THE LAW.

15A 1-6 PROTECTION OF EQUIPMENT AND MATERIALS

STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS DELIVERED TO JOB SITE. COVER WITH WATERPROOF, TEAR-RESISTANT, HEAVY TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER, DIRT, PAINT, WATER, OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT HAS BEEN DAMAGED BY CONSTRUCTION ACTIVATES WILL BE REJECTED, AND CONTRACTOR IS OBLIGATED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A LIKE KIND.

KEEP PREMISES ROOM CLEAN FROM FOREIGN MATERIAL, CREATED DURING WORK PERFORMED UNDER THIS CONTRACT. PIPING, EQUIPMENT, ETC., SHALL HAVE A NEAT AND CLEAN APPEARANCE AT THE TERMINATION OF THE WORK.

PLUG OR CAP OPEN ENDS OF DUCTWORK AND PIPING SYSTEMS WHILE STORED OR INSTALLED DURING CONSTRUCTION WHEN NOT IN USE TO PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS.

KEEP THE MANUFACTURER PROVIDED PROTECTIVE COVERING ON FLOOR DRAINS, FLOOR SINKS, AND TRENCH DRAINS DURING CONSTRUCTION. REMOVE COVERINGS AT THE TERMINATION OF THE WORK AND POLISH EXPOSED SURFACES.

15A 1-7 OPERATION AND MAINTENANCE INSTRUCTIONS

COLLECT AND COMPILE A COMPLETE BROCHURE OF FIXTURES, MATERIALS, AND EQUIPMENT FURNISHED AND INSTALLED ON THIS PROJECT. INCLUDE OPERATIONAL AND MAINTENANCE INSTRUCTIONS, MANUFACTURER'S CATALOG SHEETS, WIRING DIAGRAMS, PARTS LISTS, APPROVED SHOP DRAWINGS, AND DESCRIPTIVE LITERATURE FURNISHED BY THE MANUFACTURER. INCLUDE AN INSIDE COVER SHEET THAT LISTS THE PROJECT NAME, DATE, OWNER, ARCHITECT, ENGINEER, GENERAL CONTRACTOR, SUBCONTRACTOR, AND AN INDEX OF CONTENTS.

SUBMIT COPIES OF LITERATURE BOUND IN APPROVED BINDERS TO THE ARCHITECT AND OWNER AT THE TERMINATION OF THE WORK. PAPER CLIPS, STAPLES, RUBBER BANDS, AND MAILING ENVELOPES ARE NOT CONSIDERED APPROVED BINDERS. FINAL APPROVAL OF PLUMBING SYSTEMS WILL BE WITHHELD UNTIL THIS EQUIPMENT BROCHURE IS DEEMED COMPLETE BY THE ARCHITECT, ENGINEER, AND OWNER.

15A 1-8 WARRANTIES

WARRANT EACH SYSTEM AND EACH ELEMENT THEREOF AGAINST ALL DEFECTS DUE TO FAULTY WORKMANSHIP, DESIGN OR MATERIAL FOR A PERIOD OF 12 MONTHS FROM DATE OF SUBSTANTIAL COMPLETION, UNLESS SPECIFIC ITEMS ARE NOTED TO CARRY A LONGER WARRANTY IN THE CONSTRUCTION DOCUMENTS OR MANUFACTURER'S STANDARD WARRANTY EXCEEDS 12 MONTHS. REMEDY ALL DEFECTS, OCCURRING WITHIN THE WARRANTY PERIOD(S) STATED IN THE GENERAL CONDITIONS AND DIVISION 1.

WARRANTIES SHALL INCLUDE LABOR AND MATERIAL. MAKE REPAIRS OR REPLACEMENTS WITHOUT ANY ADDITIONAL COST TO THE OWNER.

PERFORM THE REMEDIAL WORK PROMPTLY, UPON WRITTEN NOTICE FROM THE ENGINEER OR OWNER.

AT THE TIME OF SUBSTANTIAL COMPLETION, DELIVER TO THE OWNER ALL WARRANTIES, IN WRITING AND PROPERLY EXECUTED, INCLUDING TERM LIMITS FOR WARRANTIES EXTENDING BEYOND THE ONE YEAR PERIOD, EACH WARRANTY INSTRUMENT BEING ADDRESSED TO THE OWNER AND STATING THE COMMENCEMENT DATE AND TERM.

15A 1-9 CUTTING AND PATCHING

PERFORM CUTTING OF WALLS, FLOORS, CEILINGS, ETC., AS REQUIRED TO INSTALL WORK UNDER THIS SECTION. OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO CUTTING, DO NOT CUT OR DISTURB STRUCTURAL MEMBERS WITHOUT PRIOR APPROVAL FROM THE ARCHITECT. CUT HOLES AS SMALL AS POSSIBLE. GENERAL CONTRACTOR SHALL PATCH WALLS, FLOORS, ETC., AS REQUIRED BY WORK UNDER THIS SECTION. PATCHING SHALL MATCH THE ORIGINAL MATERIAL AND CONSTRUCTION. REPAIR AND REFINISH AREAS DISTURBED BY WORK TO THE CONDITION OF ADJOINING SURFACES IN A MANNER SATISFACTORY TO THE ARCHITECT.

15A 1-10 ROUGH-IN

COORDINATE WITHOUT DELAY ROUGHING-IN WITH GENERAL CONSTRUCTION. CONCEAL PIPING AND CONDUIT ROUGH-IN EXCEPT IN UNFINISHED AREAS AND WHERE OTHERWISE SHOWN.

15A 1-11 STRUCTURAL STEEL

STRUCTURAL STEEL USED FOR PIPE SUPPORTS, EQUIPMENT SUPPORTS, ETC., SHALL BE NEW, CLEAN, AND CONFORM TO ASTM DESIGNATION A-36.

SUPPORT PLUMBING AND MECHANICAL EQUIPMENT AND PIPING FROM THE BUILDING STRUCTURE. DO NOT SUPPORT PLUMBING EQUIPMENT FORM CEILINGS, OTHER MECHANICAL OR ELECTRICAL COMPONENTS, AND OTHER NON-STRUCTURAL ELEMENTS.

15A 1-12 ACCESS DOORS

PROVIDE ACCESS DOORS IN CEILING AND WALLS WHERE INDICATED OR REQUIRED FOR ACCESS TO CONCEALED VALVES AND EQUIPMENT INSTALLED UNDER THIS SECTION. PROVIDE CONCEALED HINGES, SCREWDRIWER-TYPE LOCK, ANCHOR STRAPS MANUFACTURED BY MILCOR, ZURN, TITUS, OR EQUAL. OBTAIN ARCHITECT'S APPROVAL OF TYPE, SIZE, LOCATION, AND COLOR BEFORE ORDERING.

15A 1-13 PENETRATIONS

SEAL FLOOR, EXTERIOR WALL, AND ROOF PENETRATIONS WATER AND WEATERTIGHT WITH APPROPRIATE NON-SHRINK, NON-HARDENING COMMERCIAL CONSTRUCTION SEALANT. SEAL ROOF PENETRATIONS WITH 4 POUND PER SQUARE FOOT LEAD FLASHING. PROVIDE A SLEEVE, AND SEAL NON-FIRE-RATED FLOOR AND WALL PENETRATIONS WITH FIBERGLASS PACKING AND SILICONE CAULK (FOR ACOUSTICAL INSULATION).

COORDINATE FIRE RATING REQUIREMENTS AND LOCATIONS WITH THE ARCHITECT. SEAL PENETRATIONS OF FIRE-RATED ASSEMBLIES WITH 3M CP-25 FIRE BARRIER CAULK (PROVIDE THICKNESS AND METHOD AS REQUIRED AND RECOMMENDED BY MANUFACTURER) TO MAINTAIN THE FIRE RESISTANCE RATING OF FIRE-RATED ASSEMBLIES.

SEAL EXTERIOR WALL PENETRATIONS BELOW GRADE WITH CAST IRON WALL PIPES AND MODULAR MECHANICAL SLEEVE SEALS, MANUFACTURED BY THUNDERLINE/LINK SEAL, CALPICO, INC AND METRAFLX.

PROVIDE SLEEVES FOR HORIZONTAL PIPE PASSING THROUGH OR UNDER FOUNDATION. SLEEVES SHALL BE CAST IRON SOIL PIPE TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED.

PROVIDE SLEEVES FOR VERTICAL PIPE PASSING THROUGH SLAB ON GRADE. SLEEVES SHALL BE SCHEDULE 40 PVC PIPE, TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED. SEAL WATER-TIGHT WITH SILICONE CAULK.

15C: PLUMBING

15C 1-1 PIPING MATERIALS

MATERIALS SPECIFIED OR NOTED ON THE DRAWINGS ARE SUBJECT TO THE APPROVAL OF LOCAL CODE AUTHORITIES. VERIFY APPROVAL BEFORE INSTALLING ANY MATERIAL OR JOINING METHOD.

DOMESTIC WATER (COLD, HOT, SOFT): DOMESTIC WATER PIPING INSTALLED ABOVE THE FLOOR SLAB INSIDE THE BUILDING SHALL BE TYPE 'L' HARD TEMPER COPPER TUBE WITH WROUGHT COPPER.

FITTINGS AND SOLDERED CONNECTIONS MADE UP WITH 95/5 SOLDER. BRAZED MECHANICALLY FORMED TEE CONNECTIONS (T-DRILL) MAY BE USED IN COPPER LINES WHERE APPROVED BY CODE CONNECTION SHALL BE MADE WITH BRAZED SILVER SOLDER (SILFOS) JOINTS IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS.

UNDERGROUND DOMESTIC WATER PIPING SHALL BE TYPE "K" SOFT TEMPER COPPER TUBING WITH FLARED COPPER ALLOY FITTINGS AND CONNECTIONS, OR TYPE "K" HARD TEMPER COPPER TUBING WITH CONVENTIONAL WROUGHT COPPER FITTINGS AND SILVER SOLDER (SILFOS) JOINTS. INSTALL AS FEW UNDERGROUND COPPER PIPING JOINTS AS POSSIBLE. AT BUILDING SERVICE ENTRANCE, NO JOINTS SHALL BE INSTALLED UNDER OR WITHIN 5 FEET OF THE BUILDING. INSTALL DOMESTIC WATER PIPING BELOW GRADE OUTSIDE BUILDING AT ADEQUATE DEPTH TO PREVENT FREEZING.

INTERIOR WASTE AND VENT BELOW SLAB, WASTE AND A VERT PIPE BELOW SLAB INSIDE BUILDING SHALL BE STANDARD WEIGHT CAST IRON SOIL PIPE WITH HUB AND SPIGOT FITTINGS WITH NEOPRENE GASKET JOINTS. HUBLESS WASTE AND VENT PIPE IS NOT PERMITTED BELOW BASE SLAB. PVC DWV PIPE WITH SOCKET FITTINGS AND SOLVET WELD JOINTS IS ALSO PERMITTED WHERE APPROVED BY CODE.

INTERIOR WASTE AND VENT ABOVE SLAB: WASTE AND VENT PIPE ABOVE SLAB INSIDE BUILDING SHALL BE HUBLESS CAST IRON SOIL PIPE AND FITTINGS WITH HUBLESS COUPLINGS. PVC DWV PIPE WITH SOCKET FITTINGS AND SOLVENT WLD JOINTS IS ALSO PERMITTED WHERE APPROVED BY CODE AND LOCAL AUTHORITY HAVING JURISDICTION.

INDIRECT AND CONDENSATE DRAIN INSIDE BUILDING: INDIRECT AND CONDENSATE DRAIN PIPE INSTALLED INSIDE THE BUILDING SHALL BE TYPE "M" HARD COPPER WITH WROUGHT COPPER FITTINGS FOR 1" AND SMALLER AND "DWV" COPPER WITH WROUGHT COPPER DRAINAGE PATTERN FITTINGS FOR 1-1/4" AND LARGER HARD TEMPER COPPER TUBE AND SOLDERED CONNECTIONS MADE WITH 95/5 SOLDER. INSTALL CLEANOUTS AT ELBOWS GREATER THAN 45 DEGREES.

GAS PIPING: SCHEDULE 40 BLACK CARBON STEEL WITH MALLEABLE IRON THREADED FITTINGS. PAINT ALL GAS PIPING EXPOSED TO WEATHER WITH ONE COAT OF PRIMER AND TWO COATS OF RUST-PROOF PAINT. COLOR SHALL MATCH BUILDING COLORS. COORDINATE WITH GENERAL CONTRACTOR.

15C 1-2 PIPING AND EQUIPMENT INSULATION

DOMESTIC COLD WATER, HOT WATER, INDIRECT AND CONDENSATE DRAIN PIPE (WITHIN BUILDING): 1" ONE-PIECE FIBERGLASS COVERING WITH FIRE-RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINTED, OWENS-CORNING OR ARMSTRONG. FOR PIPING AT HANGERS PROVIDE 8" LONG SECTIONS OF HIGH DENSITY, HIGH TEMPERATURE CALCIUM SILICATE BY JOHNS-MANVILLE, FIBERGLASS BY KNAUF, OR 8" LONG STYROFOAM BILLETS BY DOW. INSULATION SHALL BE CONTINUOUS ALONG THE PIPE SURFACE, EXCEPT AT VALVES, UNIONS, AND WHERE PIPING IS EXPOSED AT FITTURES.

FOR HOT AND COLD WATER PIPING INSTALLED INSIDE MASONRY UNITS OF WALLS, PROVIDE 1" FLEXIBLE UNICELLULAR INSULATION BY ARMACELL.

COVER FITTINGS WITH ZESTON, KNAUF, OR EQUAL ONE-PIECE PVC PREMOLDED INSULATING COVERS. FITTING COVERS, JACKETS AND ADHESIVES SHALL NOT EXCEED FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPMENT RATING OF 50 PER ASTM E84. AT ALL ELBOWS AND TEES, FILL VOIDS BETWEEN COVERS AND PIPING WITH FIBERGLASS INSULATION AND TAPE JOINTS. INSTALL PIPE INSULATION IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS, WHERE PREMOLDED INSULATING FITTINGS ARE NOT APPROVED BY LOCAL AUTHORITIES. MITER INSULATION AT FITTINGS.

15C 1-3 PIPING INSTALLATION

GENERAL: CLEAN PIPE THOROUGHLY PRIOR TO INSTALLATION. BEAM ENDS OF PIPE TO REMOVE BURRS. CUT PIPE ACCURATELY TO MEASUREMENTS TAKEN ON THE JOB. INSTALL WITH ADEQUATE CLEARANCE FOR INSTALLATION OF COVERINGS WHERE REQUIRED. PIPE SHALL NOT BE SPRUNG OR BENT, NEATLY ALIGN PIPE, CONNECT IT SECURELY, AND SUPPORT IT FROM THE BUILDING STRUCTURE WITH HANGERS AS SPECIFIED BELOW. PROVIDE CHROME-PLATED ESCUTCHEONS ON PIPES PASSING THROUGH CEILINGS, FLOORS OR WALLS OF FINISHED SPACES. RUN PIPES FREELY THROUGH FLOOR AND WALL PENETRATIONS USING PIPE SLEEVES. DO NOT GROUT IN PLACE UNLESS REQUIRED FOR STRUCTURAL FIRE INTEGRITY. INSTALL PIPE CONCEALED IN FINISHES SPACES WHEREVER POSSIBLE. USE A DIELECTRIC UNION WHERE FERROUS AND COPPER PIPE CONNECT. DIELECTRIC UNION SHALL HAVE A ZINC-PLATED STEEL BODY, A THREADED NYLON INSERT, AND INSULATING PRESSURE GASKET. NO FERROUS METAL-TO-COPPER CONNECTION MADE WITHOUT INSULATING UNIONS WILL BE ALLOWED.

HANGER SUPPORTS: PIPE HANGERS SHALL BE AS DESCRIBED IN THE SPECIFICATIONS BY B-LINE OR EQUAL BY ANVIL, MICHIGAN, TRUSCON, OR UNISTRUT. CONNECT HANGERS TO THE STRUCTURE WITH SIDE BEAM CONNECTORS AND ALL THREAD HANGER ROD. PROVIDE ENGINEERED SUPPORT STRUTS BETWEEN JOISTS AND OTHER STRUCTURAL MEMBERS AS REQUIRED TO PROVIDE A RIGID HANGING INSTALLATION. DO NOT HANG PIPES FROM OTHER PIPES, CONDUIT OR DUCTWORK. PROVIDE HANGER RODS AND SPACE HANGERS AT INTERVALS AS REQUIRED.

SOIL, WASTE AND STORM: GRADE SOIL AND WASTE PIPING TO A UNIFORM SLOPE OF NOT LESS THAN 1/8" PER FOOT FOR PIPING 4" OR LARGER, AND NOT LESS THAN 1/4" PER FOOT FOR PIPING 3" OR SMALLER. SLOPE STORM PIPING AT 1/8" PER FOOT. LAY PIPE AT UNIFORM SLOPE, FREE FROM SAGS, WITH HUB END UPSTREAM. SUPPORT PIPE AT EACH JOINT. MAKE CHANGES IN DIRECTION FROM HORIZONTAL TO VERTICAL, AT FIXTURE BRANCHES AND OTHER BRANCH CONNECTION WITH SANITARY "TEES" OR SHORT SWEEP "ELLS". MAKE CHANGES IN DIRECTION FROM VERTICAL TO HORIZONTAL OR IN THE HORIZONTAL WITH LONG RADIUS FITTINGS, LONG SWEEPING "ELLS", COMBINATION "Y" FITTINGS, OR 45 DEGREE "ELLS" (1/8 BEND FITTINGS) AND "Y" FITTINGS.

DOMESTIC WATER: ARRANGE COLD, HOT AND HOT WATER RECIRCULATION PIPING TO DRAIN AT THE LOWEST POINT IN EACH SYSTEM. INSTALL AT LEAST ONE PIPE UNION ADJACENT TO ALL SHUTOFF VALVES, AT CONNECTION POINT OF EACH PIECE OF EQUIPMENT, AND ELSEWHERE IN THE SYSTEM WHERE REQUIRED TO ALLOW PROPER MAINTENANCE. PROVIDE UNIONS OF THE GROUND JOINT TYPE. MAKE ALLOWANCE FOR EXPANSION AND CONTRACTION WHERE REQUIRED BY THE INSTALLATION, WHERE WATER PIPING OCCURS IN EXTERIOR WALLS, HOLD PIPE AS CLOSE AS POSSIBLE TO THE INTERIOR FACE OF WALL AND INSTALL INSULATION BATT OR OTHER INSULATION (MINIMUM R8) BETWEEN PIPING AND THE EXTERIOR WALL FACE.

15C 1-4 SYSTEM TESTING AND ADJUSTING

UPON COMPLETION OF EACH PHASE OF THE INSTALLATION, TEST EACH SYSTEM IN CONFORMANCE WITH LOCAL CODE REQUIREMENTS AND LANDLORD CRITERIA. FURNISH LABOR AND EQUIPMENT REQUIRED TO TEST PLUMBING WORK INSTALLED UNDER THIS CONTRACT, AND ASSUME COST INVOLVED IN MAKING THE TESTS, AND REPAIRING AND/OR REPLACING DAMAGE RESULTING THERE FROM.

NOTIFY THE ARCHITECT AND THE AUTHORITY HAVING JURISDICTION, THREE (3) WORKING DAYS PRIOR TO MAKING PLUMBING SYSTEM TEST. LEAVE CONCEALED WORK UNCOVERED UNTIL THE REQUIRED TEST HAVE BEEN COMPLETED, BUT IF NECESSARY DUE TO CONSTRUCTION PROCEDURE, TEST ON PORTIONS OF THE WORK MAY BE MADE, AND WHEN SATISFACTORY, THE WORK MAY BE CONCEALED. TEST PIPING BEFORE INSULATION IS INSTALLED, AND BEFORE BACKFILL. PIPES, JOINTS, FLANGES, VALVE STEMS, ETC. SHALL BE LEAK TIGHT. REPAIR OR REPLACE SYSTEM DEFECTS WITH NEW MATERIALS. CAULKING OF DEFECTIVE JOINTS, CRACKS OR HOLES WILL NOT BE PERMITTED. REPEAT EST AFTER DEFECTS HAVE BEEN ELIMINATED, MAKE TESTS IN THE PRESENCE OF THE ADMINISTRATIVE AUTHORITY AND/OR THE OWNER'S AUTHORIZED REPRESENTATIVE.

15C 1-5 GUARANTEE

THE WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL INCLUDE THE FURNISHING, INSTALLATION, AND CONNECTION OF PLUMBING SYSTEMS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. BY SIGNING THE CONTRACT, THE CONTRACTOR ACKNOWLEDGES THAT HE HAS ACQUAINTED HIMSELF WITH THE SITE AND THE EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, AND THE DRAWINGS AND SPECIFICATIONS PERTAINING THERETO, AND HE INDICATES THAT HE WILL COMPLY WITH THE REQUIREMENTS AND INTENT OF PERTINENT DOCUMENTS IN THE PERFORMANCE OF THE WORK.

GUARANTEE THAT THE PLUMBING INSTALLED UNDER THIS CONTRACT IS FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ON (1) YEAR FROM THE DATE OF JOB ACCEPTANCE BY THE OWNER. THIS SHALL INCLUDE A GUARANTEE OF FREE CIRCULATION OF LIQUIDS THROUGHOUT THE SYSTEM AS INTENDED WITHOUT LEAKS, EXCESSIVE NOISE, OR WATER HAMMER.

IF DEFECTS OCCUR DURING THE ONE YEAR GUARANTEE PERIOD, REPAIR OR REPLACE SUCH DEFECTS AT NO EXPENSE TO THE OWNER, AND TO THE SATISFACTION OF THE OWNER, ARCHITECT AND ENGINEER.

PLUMBING GENERAL NOTES:

- PLANS ARE SCHEMATIC IN NATURE & INTENDED TO DEPIC GENERAL SCOPE OF PROJECT. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION AND COORDINATE WITH OTHER TRADES PRIOR TO INSTALLATION. ALL WORK SHALL BE CLOSELY COORDINATED WITH G.C. PRIOR TO PURCHASE, FABRICATION & INSTALLATION.
- CONSTRUCTION PER ALL APPLICABLE CODES & STANDARDS. CODES GOVERN UPON ANY DISCREPANCIES WITH THE PLANS.
- ALL MATERIAL AND EQUIPMENT SHALL BE NEW AND OF THE BEST QUALITY, AND BE PRODUCED BY REPUTABLE MANUFACTURERS USED IN COMMERCIAL CONSTRUCTION.
- SUBMIT OPERATION AND MAINTENANCE MANUALS TO GC UPON COMPLETION OF PROJECT.
- PROVIDE GUARANTEE ON ALL EQUIPMENT, MATERIAL AND WORKMANSHIP FOR ONE YEAR UPON COMPLETION OF PROJECT. ANY DEFECTS ARISING WITHIN ONE YEAR SHALL BE REPAIRED OR REPLACED AT NO COST TO THE OWNER.
- TEST ALL PIPING IN ACCORDANCE WITH LOCAL CODES AND STANDARDS.
- DO NOT ROUTE ANY PIPING ABOVE ELECTRICAL PANELS, TRANSFORMERS & EQUIPMENT NOR BELOW MECHANICAL EQUIPMENT - COORDINATE WITH E.C. AND M.C.
- ROUTE ALL PIPING ON "WARM" SIDE OF INSULATION - WITHIN A CONDITIONED SPACE G.C. SHALL PROVIDE A "TURB-OUT", THICKENED WALL OR DROPPED SOFFIT AS REQUIRED. PIPING SHALL NOT BE ROUTED IN UNCONDITIONED SPACES, ATTICS, CRAWL SPACES, EXTERIOR WALLS, EXTERIOR SOFFITS, OR EAVES, ETC. WITHOUT THE ENGINUITY LLC. WRITTEN APPROVAL.
- INSTALL ACCESSIBLE SHUT-OFF VALVES AS SHOWN ON PLANS & AS NECESSARY FOR MAINTENANCE TO FIXTURES AND EQUIPMENT. COORDINATE LOCATION OF ALL VALVES WITH G.C. TO ENSURE ACCESSIBILITY.
- PROVIDE FLOOR RECEPTOR WITH DEEP SEAL TRAP & A CW TRAP PRIMER CONNECTION OR TRAP GUARD PER LOCAL AUTHORITY HAVING JURISDICTION (A.H.U.).
- WASTE & VENT PIPING SHALL BE PVC OR ABS-DWV PIPING WITH APPROVED SOLVENT CEMENTED FITTINGS - WASTE PIPING SHALL HAVE MINIMUM 1/4" PER FOOT SLOPE. CONDENSATE PIPING SHALL BE PVC WITH 1" PER 10'-0" SLOPE.
- DOMESTIC WATER PIPING SHALL BE COPPER (TYPE 'L' MINIMUM) - TYPE 'L' ABOVE GRADE AND INSIDE BUILDING, TYPE 'K' BELOW GRADE. PEX PIPING CAN BE USED INSIDE BUILDING IN LIEU OF COPPER. PEX SYSTEM MUST BE SUBMITTED FOR REVIEW AS A SHOP DRAWING SUBMITTAL. THIS INCLUDES, BUT IS NOT LIMITED TO, PIPING, MANIFOLD FITTING, VALVES, SUPPORTS, ANCHORS & SLEEVES.
- DOMESTIC WATER PIPING SHALL BE INSULATED WITH FIBERGLASS RIGID INSULATION OR APPROVED FOAM INSULATION - ARMSTRONG OR OWENS CORNING. SEAL ALL ENDS, JOINTS & FITTINGS. HW SHALL HAVE 1" THICKNESS & CW SHALL HAVE 3/4" THICKNESS.
- MAINTAIN A MINIMUM OF 1'0" BETWEEN FRESH AIR INTAKE AND EXHAUST/ VENT TERMINATIONS. WHERE THEY ARE WITHIN 1'0", FRESH AIR INTAKE SHALL BE LOCATED 2' (min) BELOW EXHAUST/VENT TERMINATION. FIELD VERIFY ACTUAL REQUIREMENTS PRIOR TO ROUGH-IN.
- PROVIDE CLEANOUTS AS SHOWN ON PLANS AND AS REQUIRED BY CODE. MAINTAIN ACCESS FOR SERVICE.
- ACTUAL LOCATION OF PLUMBING EQUIPMENT, FIXTURES & DEVICES PER G.C. - COORDINATE PRIOR TO ROUGH-IN.
- REFER TO PLUMBING FIXTURE SCHEDULE FOR SIZE OF DOMESTIC WATER, WASTE & VENT PIPING SERVING EACH FIXTURE.
- PIPING SUPPORTS, HANGERS & ANCHORS PER LATEST ADOPTED CODE.
- IT IS THE RESPONSIBILITY OF THE P.C. TO FIELD VERIFY ACTUAL LOCATION, FLOW ELEVATION & CONNECTION REQUIREMENTS OF SITE UTILITIES PRIOR TO SUBMITTING A BID & START OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE SITE UTILITIES & THE PLANS SHALL BE ADDRESSED WITH THE G.C. & COORDINATED WITH ENGINUITY.

ON-SITE PLUMBING CONTRACTOR NOTES:

- ON-SITE PLUMBING CONTRACTOR TO PROVIDE & INSTALL ALL OF THE DOMESTIC WATER, GREASE WASTE, SANITARY WASTE & VENT PIPING LOCATED WITHIN THE CRAWL SPACE & ON THE SITE.
- ON-SITE PLUMBING CONTRACTOR TO EXTEND DOMESTIC WATER SERVICE THRU FLOOR & PROVIDE THE FOLLOWING:
 - PROVIDE & INSTALL WATER METER (AS REQUIRED)
 - INSTALL RPZ (PROVIDED BY NATIONAL MODULAR)
 - INSTALL FILTRATION SYSTEM (PROVIDED BY OWNER)
 - PROVIDE & INSTALL ALL REQUIRED DOMESTIC WATER PIPING, FITTINGS & SHUT-OFF VALVES AS REQUIRED - REFER TO DOMESTIC WATER ONE-LINE DIAGRAM
- ON-SITE PLUMBING CONTRACTOR TO CONNECT ALL GREASE WASTE, SANITARY WASTE & VENT PIPING LOCATED WITHIN THE CRAWLSPACE TO THE PLUMBING FIXTURE, TRENCH DRAIN, FLOOR SINK & "STUB-OUT" LOCATED IN THE MODULAR BUILDING.
- ON-SITE PLUMBING CONTRACTOR TO PROVIDE & INSTALL THE GREASE INTERCEPTOR - PER LOCAL STANDARDS.
- ON-SITE PLUMBING CONTRACTOR TO CONNECT DOMESTIC WATER & WASTE PIPING TO COFFEE EQUIPMENT - REFER TO COFFEE EQUIPMENT CONNECTION SCHEDULE.
- NATURAL GAS REQUIREMENT FOR THE ON-SITE PLUMBING CONTRACTOR TO INCLUDE THE FOLLOWING:
 - CONNECTION FROM THE GAS METER TO THE NATURAL GAS "STUB-OUT" ON THE MODULAR BUILDING
 - CONNECTION FROM THE HVAC EQUIPMENT TO THE NATURAL GAS CONNECTION ON THE MODULAR BUILDING
- ON-SITE PLUMBING CONTRACTOR TO COORDINATE ALL UTILITY ROUTING & TERMINATIONS WITH UTILITY COMPANY.
- ON-SITE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL PLUMBING PIPING TESTING - PER LOCAL STANDARDS.
- PLUMBING FIXTURES ARE INSTALLED AS PART OF THE MODULAR BUILDING. ONCE ALL UTILITY SERVICES ARE CONNECTED & PIPING TESTED, ON-SITE PLUMBING CONTRACTOR TO ENSURE PROPER OPERATION.
- WATER HEATER IS INSTALLED AS PART OF THE MODULAR BUILDING. ONCE ALL UTILITY SERVICES ARE CONNECTED & PIPING TESTED, ON-SITE PLUMBING CONTRACTOR TO "SET-UP" THE WATER HEATER PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

EVERYTHING SHOWN ON THIS SHEET HAS BEEN CONSTRUCTED/INSTALLED IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE JOB SITE FOR "SITE ADAPT" CONSTRUCTION. REFER TO THE "SITE ADAPT" DRAWINGS FOR ADDITIONAL INFORMATION.

ATTENTION LOCAL INSPECTIONS DEPARTMENT - THE FOLLOWING ITEMS HAVE NOT BEING COMPLETED BY NATIONAL MODULAR:

- PLUMBING
- SANITARY PIPING LOCATED IN CRAWL SPACE.
 - GREASE WASTE PIPING LOCATED IN THE CRAWL SPACE.
 - VENT PIPING LOCATED IN THE CRAWL SPACE.
 - DOMESTIC WATER PIPING LOCATED IN THE CRAWL SPACE.
 - SUMP PUMP INSTALLATION



707 n. 6th street
kansas city, ks 66101

www.veritas-ad.com
913.624.1610

consulting engineer:



7 BREW DRIVE-THRU, La Crose, WI - Mormon Coulee

REVISIONS

No.	Description	Date
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sheet issue date:
07-11-2024

project no.:
23.26.04

sheet contents:
Plumbing Specifications

sheet no.:

P5.0