RIVERSIDE PARK RESTROOM - NEW CONSTRUCTION

600 LABAREE ST. | WATERTOWN, WI 53098

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	WOOD SECTIONS & DETAILS					

BUILDIN	G CODE SUMMARY
BASED ON THE	WISCONSIN COMMERCIAL BUILDING CODE (2015 INTERNATIONAL BUILDING CODE w/ WI AMENDMENTS)
	2015 INTERNATIONAL EXISTING BUILDING CODE
	2009 ANSI A117.1 ACCESSIBILITY CODE
	ALL OTHER CODES AND ORDINANCES AS REFERENCED BY THE ABOVE CODES
BUILDING AREA	TOTAL AREA FIRST FLOOR: 1,602 GROSS SF
FIRE ALARM:	NOT REQUIRED
OCCUPANCY	U - UTILITY
OCCUPANCY SEPARATION	NONE
CONSTRUCTION TYPE	V-B
SPRINKLER SYSTEM	NOT REQUIRED
FLAME SPREAD & SMOKE INDEX	NO RESTRICTIONS
CODE EXCEPTION	NONE

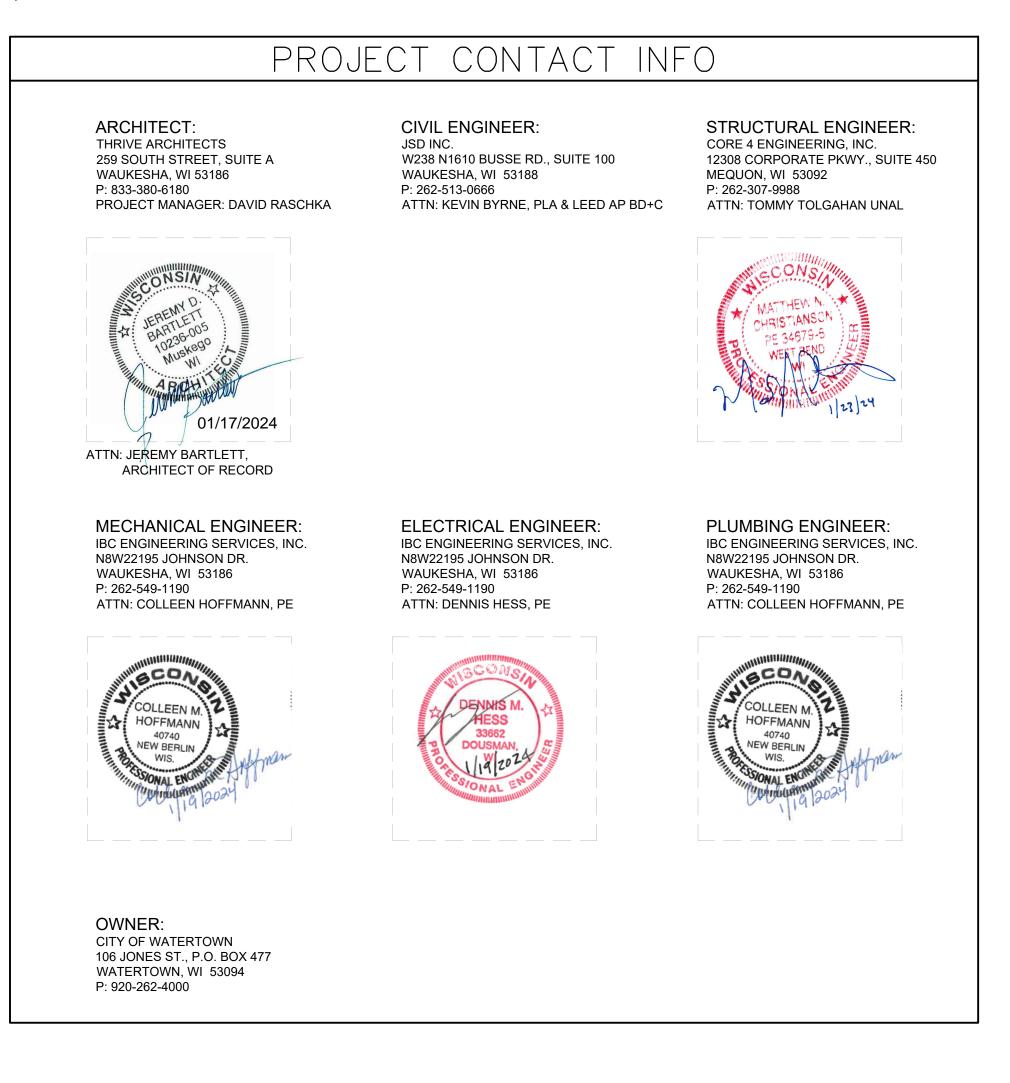
GENERAL NOTES

- 1. CONSTRUCTION IS TO BE IN COMPLIANCE WITH ALL GOVERNING CODES, ORDINANCES & STANDARDS. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, & SUPERVISING ALL SAFETY PRECAUTIONS & PROGRAMS IN CONNECTION WITH THE PERFORMANCE OF THIS PROJECT.
- 2. ARCHITECT/DESIGNER SHALL NOT BE RESPONSIBLE FOR ANY COST, SCHEDULE OR CONSTRUCTION ISSUES ARISING DUE GC/OWNERS FAILURE TO DISTRIBUTE ALL DOCS. SUBCONTRACTORS & SUPPLIERS SHOULD ENDEAVOR TO REVIEW A COMPLETE SET OF DOCS BEFORE BIDDING, FABRICATING & INSTALL.
- 3. GC, SUBCONTRACTORS, MATERIAL SUPPLIERS, OWNER, ETC. MUST NOTIFY ARCHITECT OF ANY ERRORS, OMISSIONS, OF DEFECTS IN THE CONSTRUCTION DOCUMENTS PRIOR TO BIDDING, FABRICATING OR INSTALLING WORK.

 4. SITE DIMENSIONS ARE TO BE FIELD VERIFIED AND ADJUSTED ACCORDINGLY. THE ARCHITECT/DESIGNER SHALL BE
- NOTIFIED OF ANY VARIANCES BEFORE CONTRACTOR BEGINS OR PROCEEDS WORK.

 5. MECH, ELEC, PLUMB & FIRE PROTECTION ARE TO BE DESIGN BUILT, COMPLYING WITH ALL GOVERNING CODES ORDINANCES & STANDARDS, WHICH WILL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR; THE ARCHITECT ASSUMES NO LIABILITY.
- 5. ALL MECH, ELEC, PLUMB & FIRE PROTECTION SYSTEMS/EQUIP. SHALL BE MAINTAINED ACCORDING TO MANUFACTURER'S STANDARDS. BLDG. OWNER SHALL ASSUME FULL RESPONSIBILITY FOR MAINTANANCE/OPPERATION LIPON OCCUPANCY
- 7. THE INSTALLATION AND EXECUTION OF ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S STANDARDS AND SPECIFICATIONS. ALL MEANS & METHODS OF CONSTRUCTION TO BE THE SOLE RESPONSIBILITY OF
- 8. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED IN OCCUPANCIES AND LOCATIONS AS REQUIRED BY THE INTERNATIONAL FIRE CODE. INSTALLATION LOCATIONS SHALL HAVE A MAXIMUM TRAVEL DISTANCE OF 75' TO ANY EXTINGUISHER. EXTINGUISHERS SHALL BE LOCATED IN CONSPICUOUS LOCATIONS WERE THEY WILL BE READILY ACCESSIBLE AND IMMEDIATELY AVAILABLE FOR USE, TYPICALLY ALONG PATHS OF TRAVEL. EXTINGUISHERS SHALL NOT BE OBSTRUCTED FROM VIEW, IF VISUAL OBSTRUCTION CAN NOT BE AVOIDED ANOTHER MEANS SHALL BE PROVIDED TO INDICATE THE EXTINGUISHER LOCATIONS. EXTINGUISHERS NOT EXCEEDING 40" SHALL BE INSTALLED SO THAT ITS TOP IS NOT MORE THAT 5'-0" ABOVE THE FLOOR, EXTINGUISHERS EXCEEDING 40" SHALL BE INSTALLED SO THAT ITS TOP IS NOT MORE THAN 3'-6" ABOVE THE FLOOR. THE CLEARANCE BETWEEN THE FLOOR AND BOTTOM OF HAND HELD UNITS SHALL NOT BE LESS THAN 4". VERIFY EXTINGUISHER LOCATIONS W/ LOCAL FIRE DEPT. & OWNER PRIOR TO INSTALLATION.
- . ALL CONCRETE FLAT WORK MUST BE WET CURED PER ACI REQUIREMENTS AND/OR CURED USING A CURING COMPOUND. REFER TO STRUCTURAL NOTES FOR CURING COMPOUND SPECS. CONTRACTOR IS RESPONSIBLE FOR APPLYING CURING COMPOUNDS PER THE MANUFACTURER'S REQUIREMENTS.

ABV: Above ACOUS: Acoustical	B/0: By Others BO: Bottom Of	DW: Dishwasher DIV: Division	FTG: Footing FND: Foundation	LB: Pound LAM: Laminate(d)	NO, #: Number	REFR: Ref REG: Register	TEMP: Tempered TK: Tight Knot
ADDL: Additional	BR: Bedroom	DR: Door	FRM: Fram(d), (ing)	LAV: Lavatory	O: Non-Operable Window	RE: Reinforced	T&G: Tongue and Groove
ADH: Adhesive	BIX. Bedroom	DH: Double Hung	FBO: Furnished by Others	LH: Left Hand	Section	REQ'D: Required	T/O: Top of
ADJ: Adjustable	CAB: Cabinet	DS: Downspout	FUR: Furred	L: Length	OBS: Obscure	RA: Return Air	TOC: Top of Concrete
AFF: Above Finish Floor	CALC: Calculation	DRWR: Drawer	Tork. Turred	LOA: Length Overall	OC: On Center	REV: Revision	TOW: Top of Wall
AGG: Aggregate	CD: Cabinet Door	DT: Drain Tile	GA: Gage, Gauge	LT: Light	OP: Opaque	R: Riser	TB: Towel Bar
AHJ: Authority Having	CG: Corner Guard	DWG: Drawing	GAL: Gallon	LF: Lineal Feet	OPG: Opening	RD: Rod	T: Tread
Jurisdiction	CIP: Cast-In-Place	D: Nail Size	GL: Glass, Glazing	LL: Live Load	OSB: Orientated Strand Board	R&S: Rod and Shelf	TS: Tubular Steel
A/C: Air Conditioning	(Concrete)		GI: Galvanized Iron	LVL: Laminated Veneer	OD: Outside Diameter	RFG: Roofing	TYP: Typical
ALT: Alternate	CL: Centerline	EW: Each Way	GLBK: Glass Block	Lumber	op. Gatorae Planietor	RM: Room	ти турков.
ALUM: Aluminum	CO: Clean Out	E: East	GLB: Glue Laminated Beam	LVR: Louver	PMT: Paint(ed)	RO: Rough Opening	UL: Underwriters Laboratory
ANC: Anchor, Anchorage	CONTR: Contract (or)	EL: Elevation	GT: Grout		PBD: Particle Board	3 1 3	UNF: Unfinished
AB: Anchor Bolt	COORD: Coordinate	ELEV: Elevation	GRD: Grade, Grading	MFR: Manufacturer	PRT: partition	SCH: Schedule	UNO: Unless Noted Otherwise
ANOD: Anodized	CRPT: Carpet	EQ: Equal	GWB: Gypsum Wall Board	MO: Masonry Opening	PVMT: Pavement	SCN: Screen	
APX: Approximate	CIP: cast—in—place	EQP: Equipment		MAX: Maximum	PERF: Perforate(d)	SECT: Section	VB: Vapor Barrier
APT: Apartment	CLK: Caulking	EXCV: Excavate	HWD: Hardware	MAS: Masonry	PLAS: Plaster	SGD: Sliding Glass Door	VAR: Varnish
ARCH: Architect	CAS: Casement	EXH: Exhaust	HDR: Header	MECH: Mechanic(al)	PLAM: Plastic Laminate	SHTH: Sheathing	VIF: Verify In Field
(architectural)	CB: Catch Basin	EXIST: Existing	HTG: Heating	MC: Medicine Cabinet	PLT: Plate	SHT: Sheet	VRN: Veneer
ASPH: Asphalt	CLG: Ceiling	EXT: Exterior	HVAC: Heating.	MED: Medium	PLYWD: Plywood	SH: Shelf, Shelving	VERT: Vertical
AUTO: Automatic	CT: Ceramic Tile		Ventilation-Air Conditioning	MDF: Medium Density	PCC: Precast Concrete	SIM: Similar	VG: Vertical Grain
AVE: Avenue	CIR: Circle	FOC: Face of Concrete	HT: Height	Fiberboard	PCF: Pounds Per Cubic Foot	SKL: Skylight	VIN: Vinyl Sheet
AVR: Average	CLR: Clear	FOF: Face of Finish	HC: Hollow Core	MDO: Medium Density Overlay	PLF: Pounds Per Linear Foot	S: South	•
AWN: Awning	COL: Column	FOM: Face of Masonry	HOR: Horizontal	MBR: Member	PSF: Pounds Per Square	SLB: Slab	WL: Wall
· ······ •	CONC: Concrete	FOS: Face of Studs	HB: Hose Bib	MMB: Membrane	Foot	SLD: Slider(ing)	WC: Water Closet
BSMT: Basement	CMU: Concrete Masonry	FOW: Face of Wall		MTL: Metal	PSI: Pounds Per Square Inch	SPEC: Specification	WH: Water Heater
BM: Beam	Unit	FBD: Fiberboard	IN: Inch	MWK: Millwork	PBF: Prefabricated	SQ: Square	WP: Water Proofing
BVL: Beveled	CONST: CONSTruction	FCB: Fiber Cement Board	INCL: Include	MIN: Minimum	PRF: Preformed	STD: Standard	WR: Weather Resistant
BITUM: Bituminous	CONT: Continuous	FGL: Fiberglass	ID: Inside Diameter	MIR: Mirror	PT: Pressure Treated	STV: Stove	WRB: Weather Resistive
BLK: Block	CJT: Control Joint	FIN: Finish	INS: Insulate	MISC: Miscellaneous	PL: Property Line	STL: Steel	Barrier
BLKG: Blocking	CORR: Corrugated	FFE: Finished Floor Elevation	INT: Interior	MOD: Module	PH: Toilet Paper Hanger	STR: Structural	WWF: Welded Wire Fabric
BLW: Below	CUFT: Cubic Foot	FA: Fire Alarm	INV: Invert	MLD: Moulding	The foliat rapa. Thanga	SA: Supply Air	WWM: Welded Wire Mesh
BLDV: Boulevard	CUYD: Cubic Yard	FE: Fire Extinguisher		MLB: Micro Laminate Beam	QTY: Quantity	SC: Solid Core	W: West
BTW: Between		FPL: Fireplace	JNT: Joint		QT: Quarry Tile	SW: Shear Wall	WIN: Window
BD: Board	DP: Dampproofing	FLSH: Flashing	JST: Joist	NOM: Nominal		SS: Stainless Steel	W/O: Without
BOT: Bottom	DTL: Detail	FLR: Floor		N: North	RAD: Radius	SYS: System	W/: With
BLDG: Building	DIA: Diameter	FLOR: Fluorescent	KD: Kiln Dried	NIC: Not in Contract	REF: Reference	•	WD: Wood
BUR: Built Up Roofing	DIM: Dimension	FT: Foot, Feet	KIT: Kitchen	NTS: Not To Scale	RFL: Reflect(ed),(ive),(or)	TEL: Telephone	







259 South Street, Suite A

WAUKESHA, WI 53186

600 Labaree St Watertown, WI

LITE Sheet Title

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T1.

VICINITY MAP

SCALE: N.T.S.



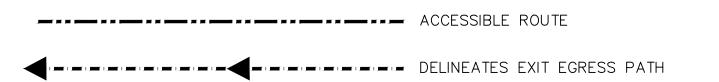
RIVERSIDE PARK RESTROOM - NEW CONSTRUCTION

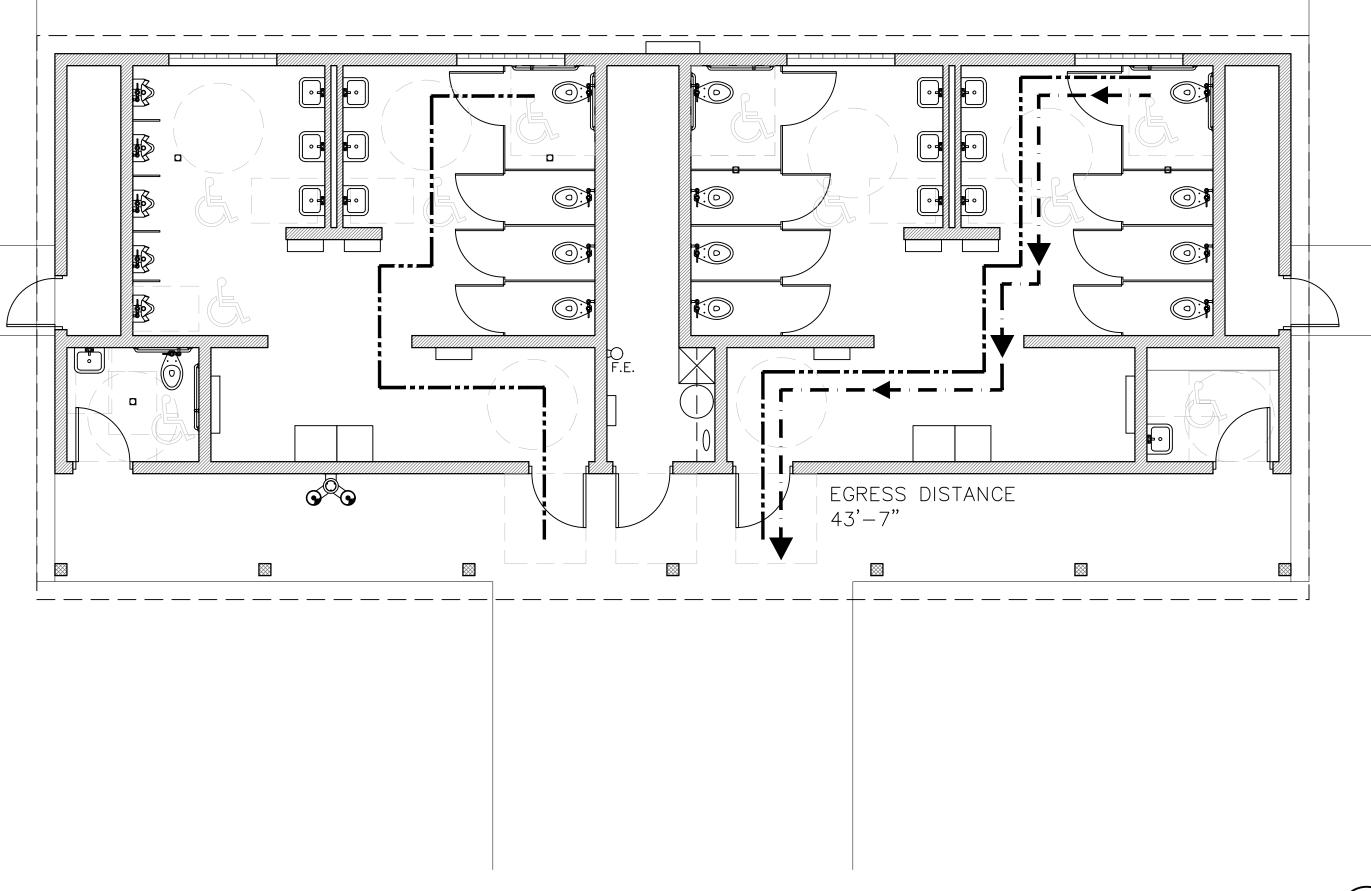
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OCCUPANT LOAD PER TABLE 1004.1.2 TOTAL OCCUPANT LOAD = 183 OCCUPANTS					
OCCUPANCY	SF	FLOOR AREA	CALC. OCC.	ASSIGNED OCC.	
UTILITY	1,602 SF	500/GROSS	3	45	

# OF OCCUPANTS EGRESS WIDTH FACTOR EGRESS WIDTH REQUIRED EGRESS WIDTH PROVIDED					
45	.2 INCHES PER OCCUPANT	9"	34"		
NO. OF EXITS REQUIRED PER SECTION 1006 = 1 NO. OF EXITS PROVIDED = 1 MAXIMUM EXIT TRAVEL DISTANCE PER TABLE 1017.2 = 200' (w/out SPRINKLER)					

FIRE-RESISTANCE RATING SUMMARY REFER TO IBC CHAPTER 6	
CONSTRUCTION TYPE V-B PRIMARY STRUCTURAL FRAME BEARING WALLS	0
EXTERIOR	0
INTERIOR	0
NONBEARING WALLS	0
FLOOR CONSTRUCTION	0
ROOF CONSTRUCTION	0







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259 South Street, Suite A WAUKESHA, WI 53186 p: 833-380-6180

Riverside Park

Restrooms

600 Labaree St Watertown, WI

New Construction

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CODE SHEET

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CONSTRUCTION SEQUENCING

- 1. INSTALL PERIMETER SILT FENCE AND INLET PROTECTION.
- 2. STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
- 3. CONDUCT ROUGH GRADING EFFORTS AND INSTALL CHECK DAMS WITHIN DRAINAGE DITCHES AS NEEDED.
- 4. INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION.
- 5. COMPLETE INSTALLATION OF GRAVEL BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
- 6. FINAL GRADING BY CITY.
- 7. EROSION CONTROLS SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED OR 70% VEGETATIVE COVER IS ESTABLISHED.

CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM NO. 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.

DEMOLITION NOTES

- THIS PLAN INDICATES ITEMS ON THE PROPERTY INTENDED FOR DEMOLITION BASED ON THE CURRENT SITE DESIGN THAT HAVE BEEN IDENTIFIED BY A REASONABLE OBSERVATION OF THE EXISTING CONDITIONS THROUGH FIELD SURVEY RECONNAISSANCE, "DIGGER'S HOTLINE" LOCATION, AND GENERAL "STANDARD OF CARE". THERE MAY BE ADDITIONAL ITEMS THAT CAN NOT BE IDENTIFIED BY A REASONABLE ABOVE GROUND OBSERVATION, OF WHICH THE ENGINEER WOULD HAVE NO KNOWLEDGE OR MAY BE A PART OF ANOTHER DESIGN DISCIPLINE. IT IS THE CONTRACTOR'S/BIDDER'S RESPONSIBILITY TO REVIEW THE PLANS, INSPECT THE SITE AND PROVIDE THEIR OWN DUE DILIGENCE TO INCLUDE IN THEIR BID WHAT ADDITIONAL ITEMS, IN THEIR OPINION, MAY BE NECESSARY FOR DEMOLITION. ANY ADDITIONAL ITEMS IDENTIFIED BY THE CONTRACTOR/BIDDER SHALL BE IDENTIFIED IN THE BID AND REPORTED TO THE ENGINEER OF RECORD. JSD TAKES NO RESPONSIBILITY FOR ITEMS ON THE PROPERTY THAT COULD NOT BE LOCATED BY A REASONABLE OBSERVATION OF THE PROPERTY OR OF WHICH THEY WOULD HAVE NO KNOWLEDGE.
- CONTRACTOR SHALL KEEP ALL STREETS AND PRIVATE DRIVES FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT,
- ALL TREES WITHIN THE CONSTRUCTION LIMITS SHALL BE PROTECTED UNLESS SPECIFICALLY CALLED OUT FOR REMOVAL. ALL TREES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY AND STUMPS SHALL BE GROUND TO PROPOSED
- 4. ALL LIGHT POLES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY, INCLUDING BASE AND ALL APPURTENANCES. SALVAGE FOR RELOCATION. COORDINATE RELOCATION AND/OR ABANDONMENT OF ALL ELECTRIC LINES WITH ELECTRICAL ENGINEER AND OWNER PRIOR TO DEMOLITION.
- ABANDONED/REMOVED ITEMS SHALL BE DISPOSED OF OFF SITE UNLESS OTHERWISE NOTED.
- CONTRACTOR TO REPLACE ALL SIDEWALK AND CURB AND GUTTER ABUTTING THE PROPERTIES, WHICH IS DAMAGED BY THE CONSTRUCTION, OR ANY SIDEWALK AND CURB AND GUTTER THAT THE CITY ENGINEER DETERMINES NEEDS TO BE REPLACED BECAUSE IT IS NOT AT A DESIRABLE GRADE REGARDLESS OF WHETHER THE CONDITION EXISTED PRIOR TO
- PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
- EXAMINE ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF
- VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCIES. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCIES ARE RESOLVED.
- NOTIFYING ALL UTILITIES PRIOR TO THE REMOVAL OF ANY UNDERGROUND UTILITIES.
- NOTIFYING THE DESIGN ENGINEER AND LOCAL CONTROLLING MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION.
- ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S
- 9. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF THESE IMPROVEMENTS.
- 10. CONTRACTOR TO COORDINATE PRIVATE UTILITY REMOVAL / ABANDONMENT AND NECESSARY RELOCATION WITH RESPECTIVE UTILITY COMPANY. COORDINATION REQUIRED PRIOR TO CONSTRUCTION.
- 11. ALL DEMOLITION SHALL BE IN ACCORDANCE WITH THE APPROVED MUNICIPALITY RECYCLING PLAN.
- 12. ANY CONTAMINATED SOILS SHALL BE REMOVED IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS TO AN APPROVED LANDFILL.
- 13. ALL EXISTING UTILITIES TO BE FIELD LOCATED AND FLAGGED BY CONTRACTOR.
- 14. EXISTING FIBER OPTIC LINE TO BE CLEARLY MARKED PRIOR TO ANY EXCAVATION. CONTRACTOR TO NOTIFY ENGINEER FIBER OPTIC LINE LOCATION.
- 15. ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF DEMOLITION ACTIVITIES. CONTRACTOR SHALL KEEP ALL STREETS AND PAVEMENT FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST

LEGEND PROPERTY LINE ----- EASEMENT LINE ---- RIGHT OF WAY LINE EXISTING ASPHALT PAVEMENT AND BASE TO BE REMOVED BY CITY, N.I.C. EXISTING CONCRETE PAVEMENT AND BASE TO BE REMOVED BY THE CITY, N.I.C. EXISTING BUILDING TO BE REMOVED BY THE CITY, REFER TO BLDG. PLAN, N.I.C. ——SF———SF—— SILT FENCE PAVEMENT SAWCUT BY CITY, N.I.C. -XXXXXXXXXXXXXX EXISTING CURB TO BE REMOVED BY CITY, N.I.C. REMOVE TREE EXISTING ELECTRICAL TO BE REMOVED AND RELOCATED BY OTHERS, N.I.C. PROTECT EXISTING TREES INLET PROTECTION REMOVE AND DISPOSE OF VEGETATION. STRIP AND STOCKPILE TOPSOIL, THICKNESS MAY VARY

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VEGETATION AND TOPSOIL PREVIOUSLY REMOVED

BY CITY FOR UTILITY INSTALLATION, N.I.C.

CIVIL SHEET INDEX

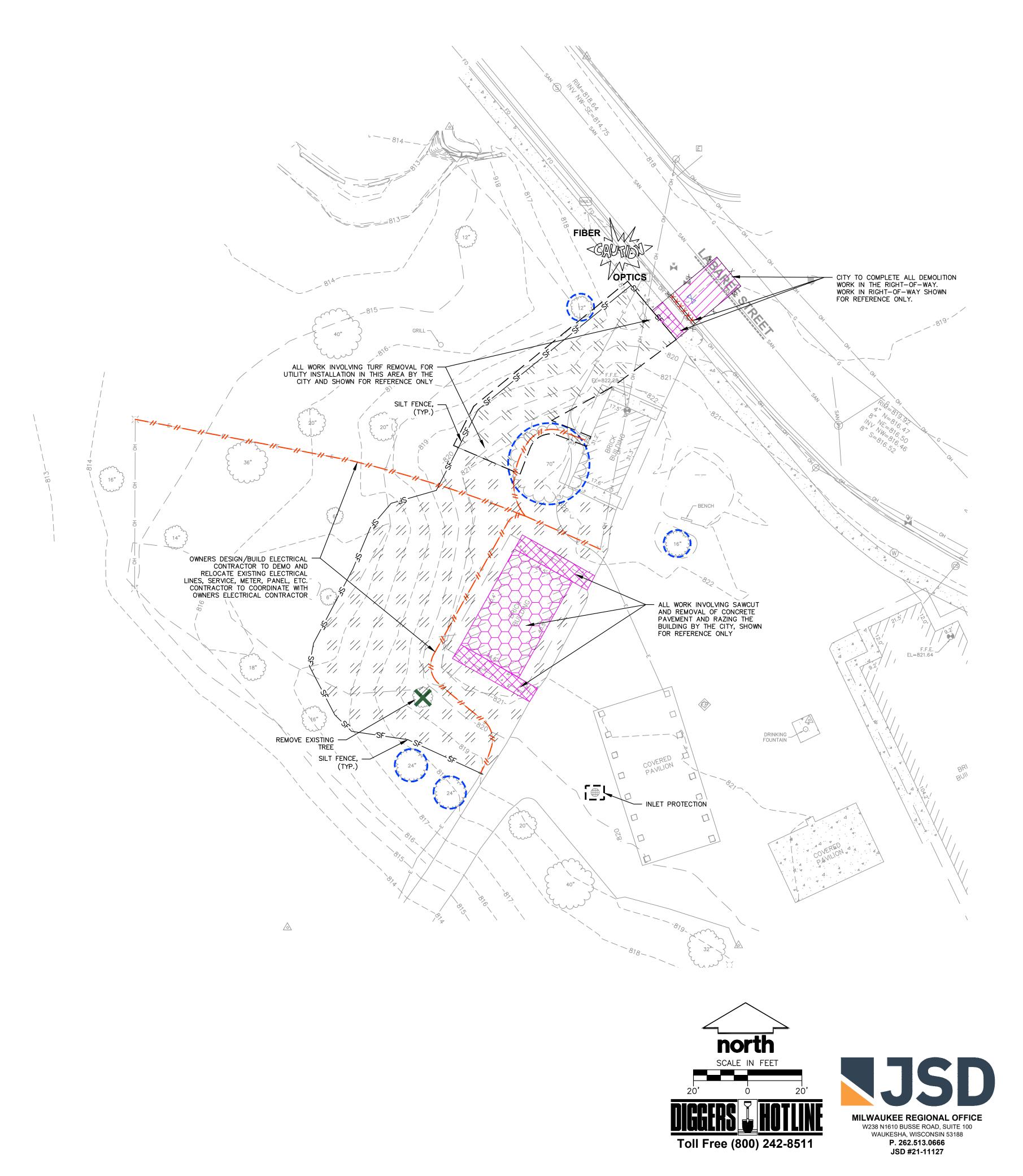
C1.0 - SITE DEMOLITION PLANS

C2.0 - SITE LAYOUT PLAN

C3.0 - GRADING AND EROSION CONTROL PLAN C4.0 - UTILITY PLAN

C5.0 - DETAILS

C5.1 - NOTES AND DETAILS





259 South Street, Suite A WAUKESHA, WI 53186 p: 833-380-6180

hoProject Info. — 22005 -

Riverside Park Restrooms

New Construction

600 Labaree St Watertown, WI

—Sheet Title —

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GENERAL NOTES

- 1. WATER AND SANITARY SEWER WERE INSTALLED BY THE CITY AND STUBBED TO THE BACK OF THE BUILDING.
- 2. ROUGH GRADE IN THE CONTRACT.
 FINISH GRADE, SODDING, LANDSCAPING, AND EROSION MATTING NOT IN CONTRACT. CITY TO COMPLETE THE WORK.
- 3. OLD BUILDING ELECTRICAL IS DISCONNECTED.
- 4. ELECTRICAL CONTRACTOR TO COORDINATE OUTDOOR PANEL, METER, ETC.
- 5. BUILDING AND CONCRETE SIDEWALK IN CONTRACT.

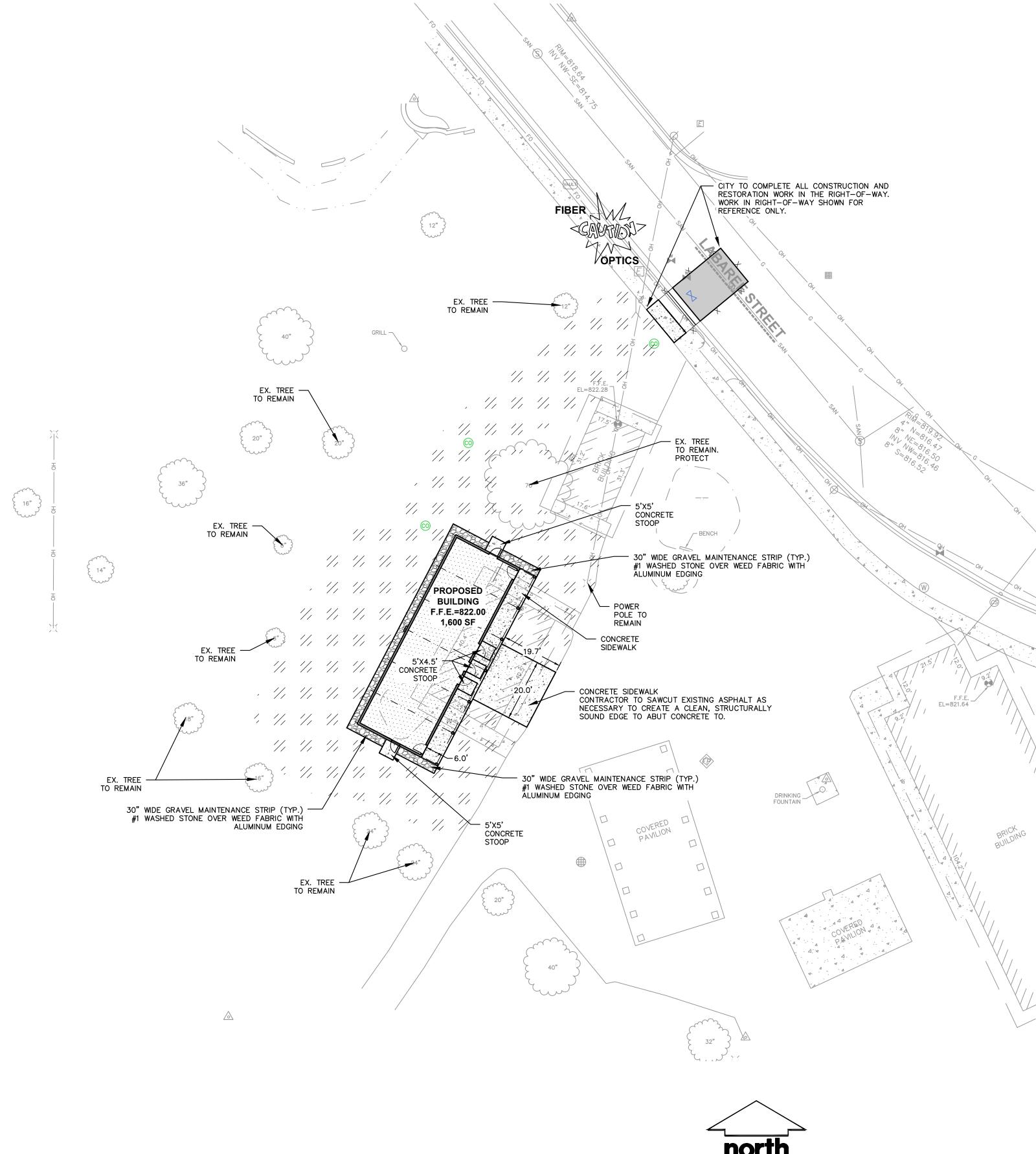
PAVING NOTES

GENERAL

- 1.1. ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION, LATEST EDITION, APPLICABLE CITY OF WATERTOWN ORDINANCES.
- 1.2. SURFACE PREPARATION NOTIFY ENGINEER/OWNER OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.
- 2. CONCRETE PAVING SPECIFICATIONS
- 2.1. CONCRETE PAVING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 415 AND 416 OF THE STATE HIGHWAY SPECIFICATIONS.
- 2.2. CONTRACTOR SHALL SAWCUT ASPHALT AND REMOVE AS NECESSARY TO CREATE A CLEAN, STRUCTURALLY SOUND EDGE TO ABUT CONCRETE TO.
- 2.3. CONCRETE PAVEMENT SHALL BE REINFORCED WITH NOVOMESH 950 (OR EQUAL) FIBER REINFORCEMENT AT A RATE OF 5 LBS/CUBIC YARD.
- 2.4. CURING COMPOUNDS SHALL CONFORM TO SECTION 415 OF THE STATE HIGHWAY SPECIFICATIONS.
- 2.5. CONTRACTOR SHALL PROVIDE CONTROL JOINTS AND CONSTRUCTION JOINTS OF ONE-QUARTER CONCRETE THICKNESS AT AN EQUAL RATIO OF LENGTH TO WIDTH WHEREVER POSSIBLE WITH A MAXIMUM LENGTH BETWEEN JOINTS OF 8' ON CENTER.
- 2.6. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS IN SIDEWALKS AT A MAXIMUM 24' ON CENTER.
- 2.7. EXTERIOR CONCRETE SURFACES SHALL BE BROOM FINISHED.
- 2.8. ALL CONCRETE SURFACES TO BE SEALED WITH TYPE TK-26UV CONCRETE SEALANT.

SITE INFORMA	ATION BLOCK
SITE ADDRESS	812 LABAREE ST (ZONING SR-4)
PROPERTY ACREAGE	11.38 ACRES
DISTURBANCE AREA	0.23 ACRES
NUMBER OF BUILDING STORIES	
TOTAL BUILDING SQUARE FOOTAGE	1,600 SF

LEGEND	
	PROPERTY LINE
- · - · - · - · - · -	EASEMENT LINE
	RIGHT OF WAY LINE
	STANDARD CURB AND GUTTER BY CITY
	LIGHT DUTY ASPHALT PAVEMENT BY CITY
	CONCRETE SIDEWALK 5" CONCRETE 6" CRUSHED AGGREGATE BASE COURSE
	30" WIDE GRAVEL MAINTENANCE STRIP
X X	SAWCUT PAVEMENT BY CITY
<u>©</u>	SANITARY CLEANOUT
\bowtie	WATER VALVE
// // // //	CONTRACTOR TO ROUGH GRADE AREA. CITY TO COMPLETE FINISH GRADE, SEEDING, AND EROSION MATTING.







Architect

259 South Street, Suite A WAUKESHA, WI 53186 p: 833-380-6180

hoProject Info. — 22005 -Riverside Park

New Construction

Restrooms

600 Labaree St Watertown, WI

—Sheet Title —

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Revisions — No. Date Description 1.23.24 | Bid & Permit Set

GENERAL NOTES

- 1. ALL WORK IN THE ROW AND/OR PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN AND MUNICIPAL REQUIREMENTS.
- 2. EXISTING GRADE SPOT ELEVATIONS SHOWN FOR INFORMATIONAL PURPOSES. DURING CONSTRUCTION MATCH EXISTING
- 3. NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND
- 4. JSD SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER/CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY ANY OR ALL REGULATORY AGENCIES.

GRADING AND SEEDING NOTES

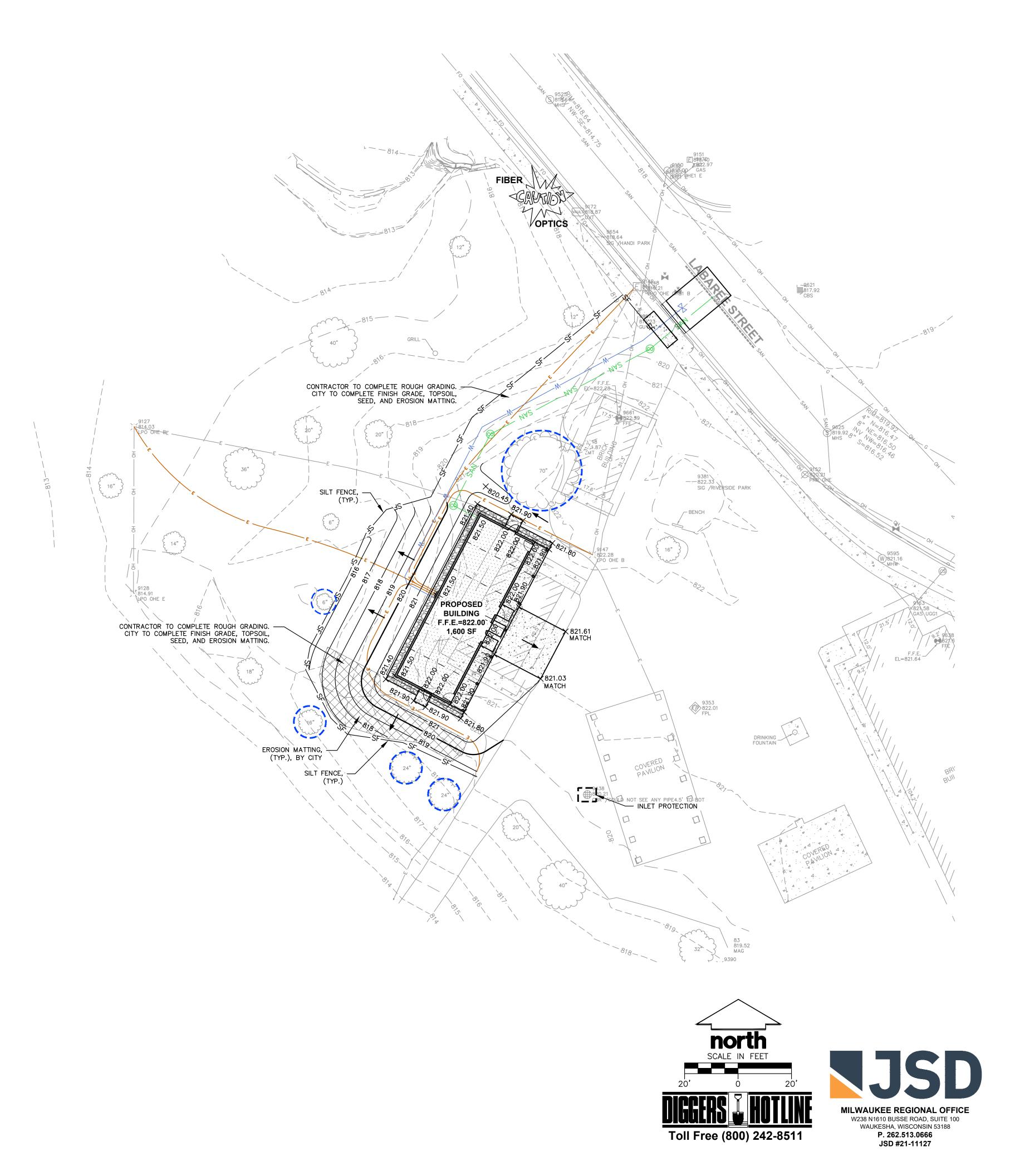
- 1. ALL PROPOSED GRADES SHOWN ARE FINISHED GRADES, CONTRACTOR SHALL VERIFY ALL GRADES, MAKE SURE ALL AREAS
- DRAIN PROPERLY AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- 2. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR COMPUTATIONS OF ALL GRADING QUANTITIES. WHILE JSD PROFESSIONAL SERVICES, INC. ATTEMPTS TO PROVIDE A COST EFFECTIVE APPROACH TO BALANCE EARTHWORK, GRADING DESIGN IS BASED ON MANY FACTORS, INCLUDING SAFETY, AESTHETICS, AND COMMON ENGINEERING STANDARDS OF CARE. THEREFORE, NO GUARANTEE CAN BE MADE FOR A BALANCED SITE.
- 3. PARKING LOT AND DRIVEWAY ELEVATIONS ARE PAVEMENT GRADES, NOT TOP OF CURB GRADES, UNLESS OTHERWISE NOTED.
- 4. ANY WORK WITHIN RIGHT-OF-WAY SHALL BE PROPERLY PERMITTED AND COORDINATED WITH THE APPROPRIATE OFFICIALS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. ALL GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS
- 5. CONTRACTOR SHALL PROVIDE NOTICE TO THE MUNICIPALITY IN ADVANCE OF ANY SOIL DISTURBING ACTIVITIES, IN ACCORDANCE WITH MUNICIPAL REQUIREMENTS.
- THE FOLLOWING NOTES APPLY TO RESTORATION WORK COMPLETED BY THE CITY, N.I.C.
- 6. ALL DISTURBED AREAS SHALL BE SODDED AND/OR SEEDED AND MULCHED IMMEDIATELY FOLLOWING GRADING ACTIVITIES. SOD/SEED MIX TO BE IN ACCORDANCE WITH LANDSCAPE PLAN.
- 7. CITY SHALL WATER ALL NEWLY SODDED/SEEDED AREAS DURING THE SUMMER MONTHS WHENEVER THERE IS A 7 DAY LAPSE WITH NO SIGNIFICANT RAINFALL.
- 8. CITY TO DEEP TILL ALL COMPACTED PERVIOUS SURFACES PRIOR TO SODDING AND/OR SEEDING AND MULCHING.
- 9. ALL SLOPES 20% OR GREATER SHALL BE TEMPORARY SEEDED, MULCHED, OR OTHER MEANS OF COVER PLACED ON THEM WITHIN 2 WEEKS OF DISTURBANCE.
- 10. ALL EXPOSED SOIL AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 30 DAYS AND REQUIRE VEGETATIVE COVER FOR LESS THAN 1 YEAR, REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1059 AND CITY OF WATERTOWN ORDINANCE.

LEGEND

LEGEND	
	PROPERTY LINE
	EASEMENT LINE
	RIGHT OF WAY LINE
	STANDARD CURB AND GUTTER
——SF———SF——	SILT FENCE
959	PROPOSED 1 FOOT CONTOUR
960——	PROPOSED 5 FOOT CONTOUR
- - - 9 59 -	EXISTING 1 FOOT CONTOUR
— — ·960· — —	EXISTING 5 FOOT CONTOUR
O	PROTECT EXISTING TREES
	EROSION MATTING, BY CITY
SAN	SANITARY SERVICE
<u>©</u>	SANITARY CLEANOUT
W	WATER SERVICE
\bowtie	WATER VALVE
	INLET PROTECTION — SILT LOGS OR STAKED STRAW BALES

DRAINAGE ARROW

SEE UTILITY SHEET FOR ADDITIONAL INFORMATION





Architect

259 South Street, Suite A WAUKESHA, WI 53186 p: 833-380-6180

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Riverside Park Restrooms

New Construction

600 Labaree St Watertown, WI

Z

—Sheet Title —

GRADING AND EROSION CONTROL PLAN

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UTILITY PLAN AND NOTES: FOR REFERENCE ONLY - SCOPE NOT IN CONTRACT. UTILITIES BY CITY, CONTRACTOR TO COORDINATE WITH CITY AND CITY'S CONTRACTORS.

- 1. ALL EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATIONS OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR/OWNER SHALL
- CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION. 2. PRIOR TO CONSTRUCTION, THE PRIME CONTRACTOR IS RESPONSIBLE FOR:
- EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION. OBTAINING ALL PERMITS INCLUDING PERMIT COSTS, TAP FEES, METER DEPOSITS,
- VERIFYING ALL ELEVATIONS, LOCATIONS AND SIZES OF SANITARY, WATER AND STORM LATERALS AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS. NOTIFY ENGINEER OF ANY DISCREPANCY. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS

BONDS, AND ALL OTHER FEES REQUIRED FOR PROPOSED WORK TO OBTAIN

- NOTIFYING ALL UTILITIES PRIOR TO INSTALLATION OF ANY UNDERGROUND IMPROVEMENTS.
- NOTIFYING THE DESIGN ENGINEER AND MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION OBSERVATION. COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION OF THE PROPOSED DEVELOPMENT AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.
- 3. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN - AND ALL STATE AND LOCAL CODES AND SPECIFICATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS AND CODES APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.
- 4. SPECIFICATIONS SHALL COMPLY WITH THE CITY OF WATERTOWN SPECIAL PROVISIONS.
- 5. LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION.
- 6. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF IMPROVEMENTS.
- 7. CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVER NIGHT AS REQUIRED IN CONSTRUCTION SITES WHERE THE POTENTIAL FOR PEDESTRIAN INJURY EXISTS.
- 8. CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT ALL UTILITY COVERS (SUCH AS MANHOLE COVERS, VALVE BOX COVERS, ETC.) TO MATCH THE FINISHED GRADES OF THE AREAS
- 9. THE PRIME CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION OF THE PROPOSED DEVELOPMENT AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS
- 10. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH AS-BUILT CONDITIONS OF THE DESIGNATED IMPROVEMENTS IN ORDER THAT THE APPROPRIATE DRAWINGS CAN BE PREPARED, IF REQUIRED. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE ENGINEER AS WORK PROGRESSES.

PIPE - POLYVINYL CHLORIDE (PVC) PIPE SHALL MEET THE REQUIREMENTS OF AWWA STANDARD C-900, CLASS 150, DR-18, WITH CAST IRON O.D. AND INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS. NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH BLUE INSULATION TRACER WIRE AND CONFORM WITH SPS 382.30(11)(h)

VALVES AND VALVE BOXES - GATE VALVES SHALL BE AWWA GATE VALVES MEETING THE REQUIREMENTS OF AWWA C-500 AND CHAPTER 8.27.0 OF THE "STANDARD SPECIFICATIONS". GATE VALVES AND VALVE BOXES SHALL CONFORM TO LOCAL PLUMBING ORDINANCES.

BEDDING AND COVER MATERIAL — PIPE BEDDING AND COVER MATERIAL SHALL BE SAND, CRUSHED STONE CHIPS OR CRUSHED STONE SCREENINGS CONFORMING TO CHAPTER 8.43.2 OF THE "STANDARD SPECIFICATIONS".

BACKFILL: PRIVATE SERVICE - BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD

BACKFILL AND BEDDING: PUBLIC R.O.W - ALL EXCAVATION IN THE PUBLIC STREET RIGHT-OF-WAY HALL BE BACKFILLED WITH SLURRY IN ACCORDANCE WITH LOCAL REGULATIONS.

13. SANITARY SEWER SPECIFICATIONS -

PIPE - SANITARY SEWER PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) MEETING REQUIREMENTS OF ASTM D 3034, SDR-35, WITH INTEGRAL BELL TYPE FLEXIBLE ELASTOMERIC JOINTS, MEETING THE REQUIREMENTS OF ASTM D-3212.

BEDDING AND COVER MATERIAL - BEDDING AND COVER MATERIAL SHALL CONFORM TO THE APPROPRIATE SECTIONS OF THE "STANDARD SPECIFICATION" WITH THE FOLLOWING MODIFICATION: "COVER MATERIAL SHALL BE THE SAME AS USED FOR BEDDING AND SHALL CONFORM TO SECTION 8.43.2 (A). BEDDING AND COVER MATERIAL SHALL BE PLACED IN A MINIMUM OF THREE SEPARATE LIFTS, OR AS REQUIRED TO INSURE ADEQUATE COMPACTING OF THESE MATERIALS, WITH ONE LIFT OF BEDDING MATERIAL ENDING AT OR NEAR THE SPRINGLINE OF THE PIPE. THE CONTRACTOR SHALL TAKE CARE TO COMPLETELY WORK BEDDING MATERIAL UNDER THE HAUNCH OF THE PIPE TO PROVIDE ADEQUATE SIDE SUPPORT."

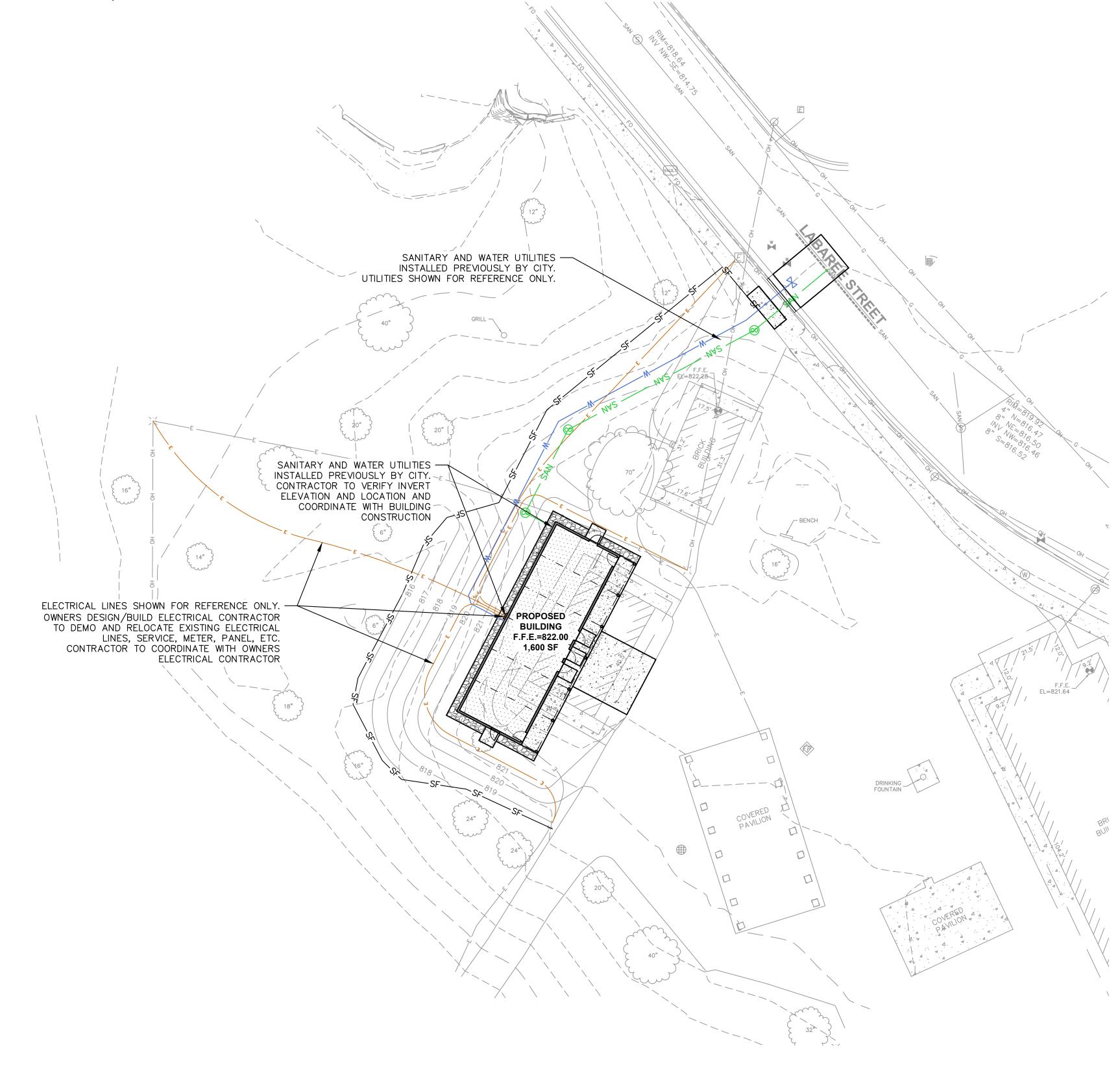
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BACKFILL AND BEDDING: PUBLIC R.O.W - ALL EXCAVATION IN THE PUBLIC STREET RIGHT-OF-WAY HALL BE BACKFILLED WITH SLURRY IN ACCORDANCE WITH LOCAL REGULATIONS.

14. WATERMAIN AND SANITARY SEWER SHALL BE INSULATED WHEREVER THE DEPTH OF COVER IS LESS THAN 6 FEET. INSULATION AND INSTALLATION OF INSULATION SHALL BE CONFORMING WITH CHAPTER 4.17.0 "INSULATION" OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN 6TH EDITION UPDATED WITH ITS LATEST ADDENDUM (TYP.).

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<u>©</u>	SANITARY CLEANOUT
W	WATER SERVICE
\bowtie	WATER VALVE







JSD #21-11127



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WAUKESHA, WI 53186

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Riverside Park Restrooms

New Construction

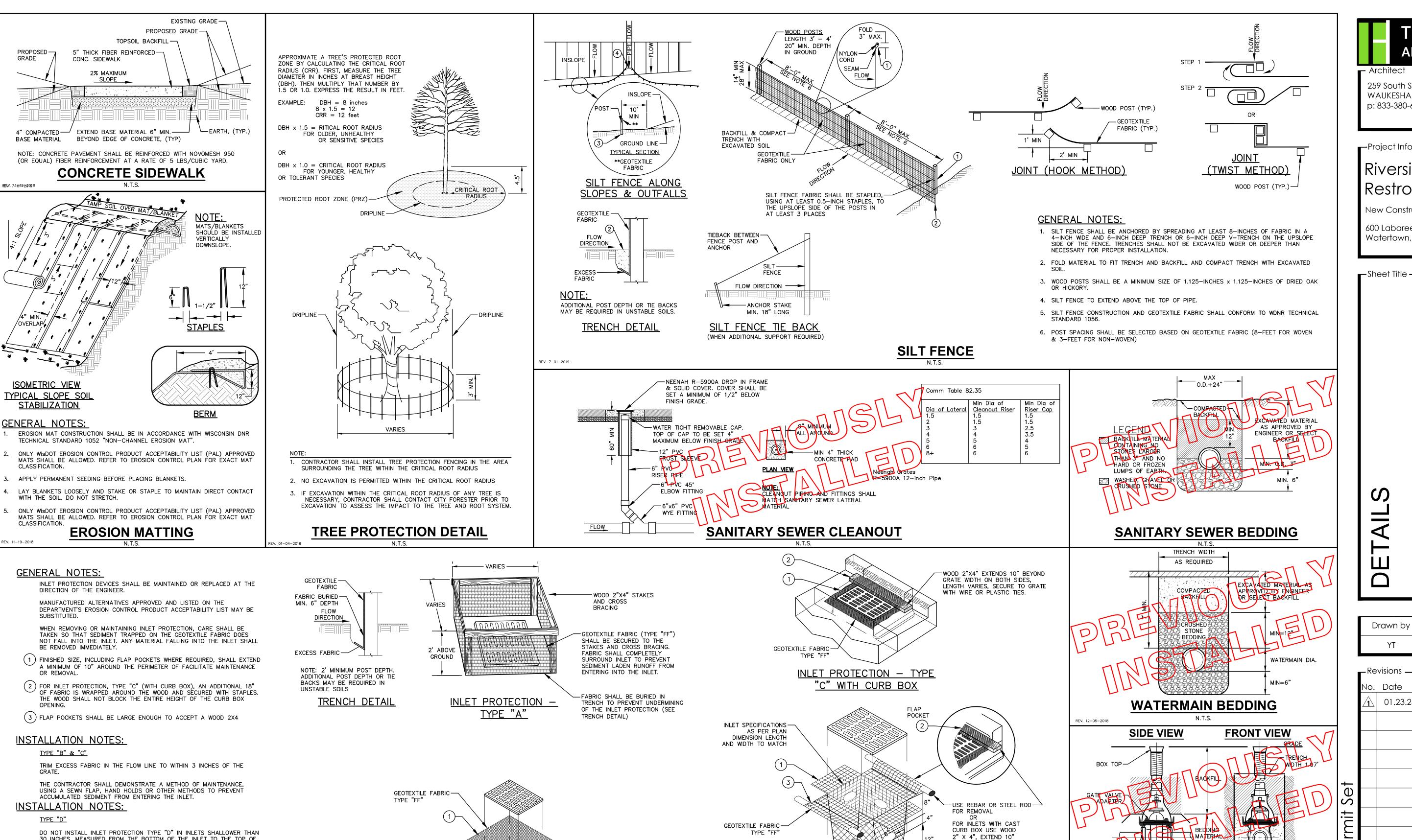
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FRONT, BACK, AND-

MADE FROM SINGLE

PIECE OF FABRIC.

MINIMUM DOUBLE

STITCHED SEAMS ALL AROUND SIDE

PIECES AND ON FLAP POCKETS.

<u>INLET PROTECTION - TYPE "D"</u>

INLET PROTECTION - TYPE "B" WITHOUT CURB BOX

INLET PROTECTION

BOTTOM TO BE

30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE

OVERFLOW HOLES, OF 3 INCHES. WHERE NECESSARY THE CONTRACTOR

SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCHES CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4

INCHES FROM THE BOTTOM OF THE BAG.



-POLYETHYLENE -

GATE VALVE BOX SETTING

ENCASEMENT

BEYOND GRATE WIDTH ON BOTH SIDES, LENGTH

-4" X 6" OVAL HOLE SHALL BE

HEAT CUT INTO ALL FOUR SIDE

VARIES. SECURE TO GRATE

WITH WIRE OR PLASTIC TIES

Architect

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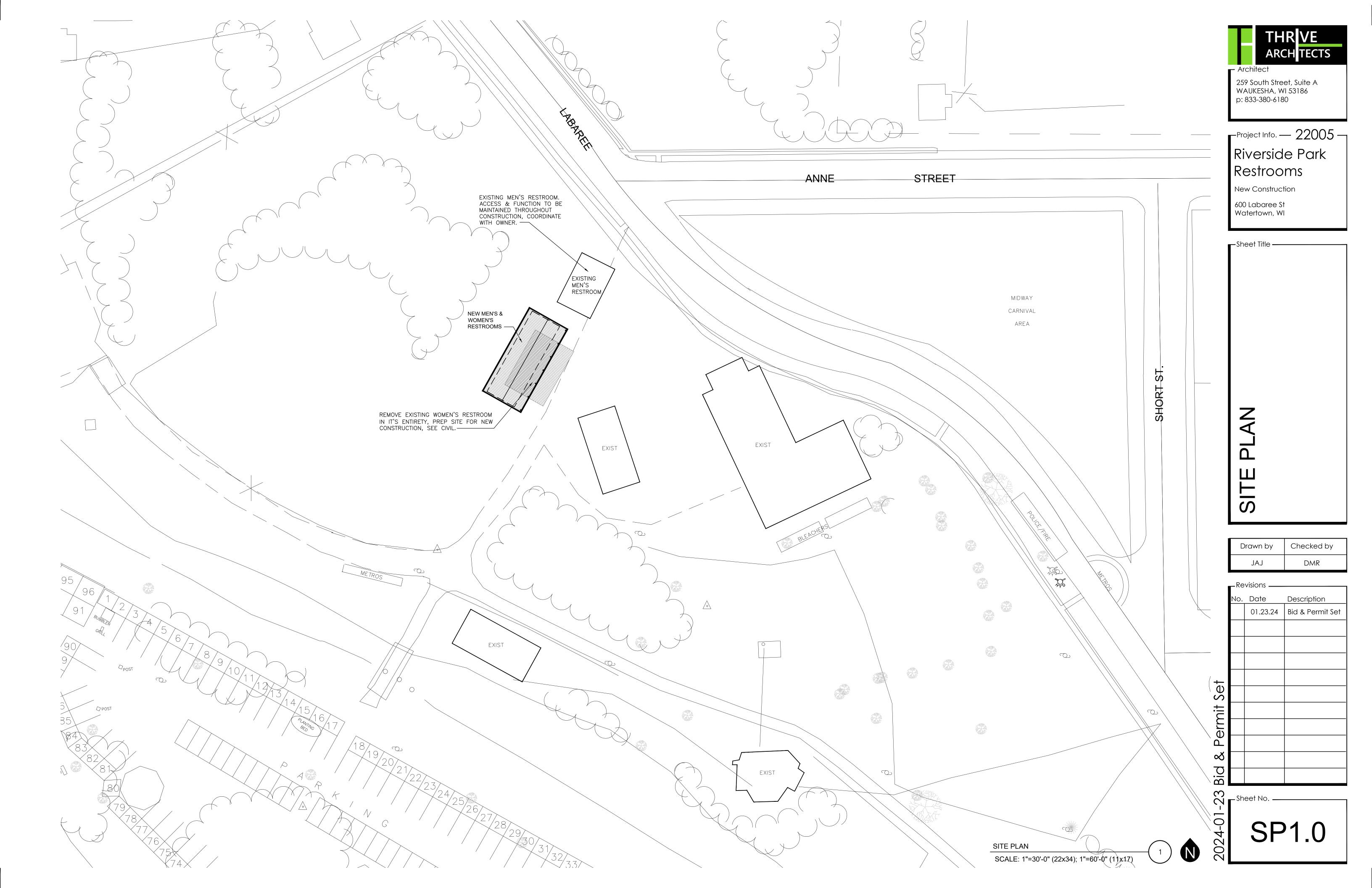
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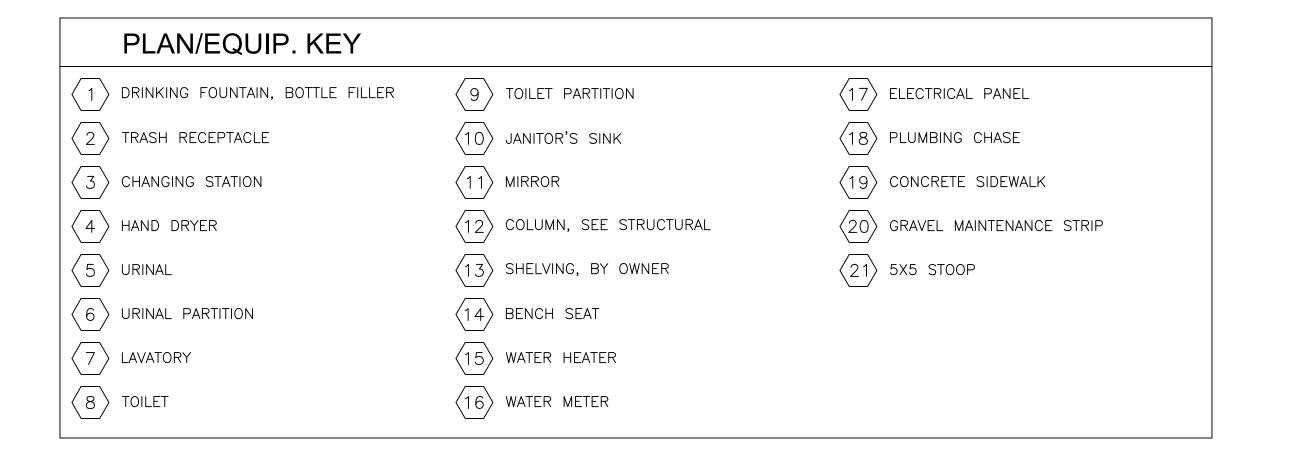
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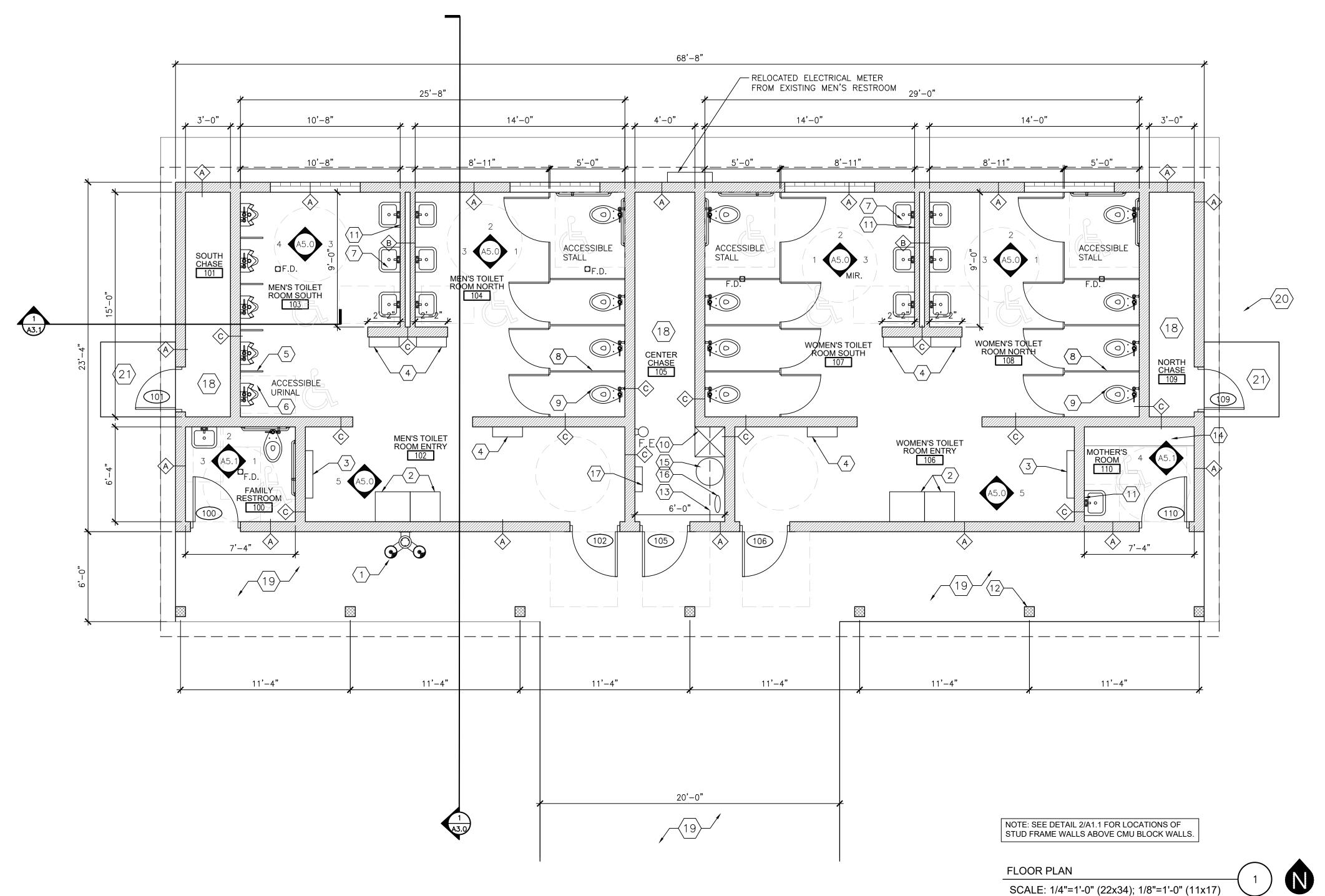
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Riverside Park Restrooms

New Construction

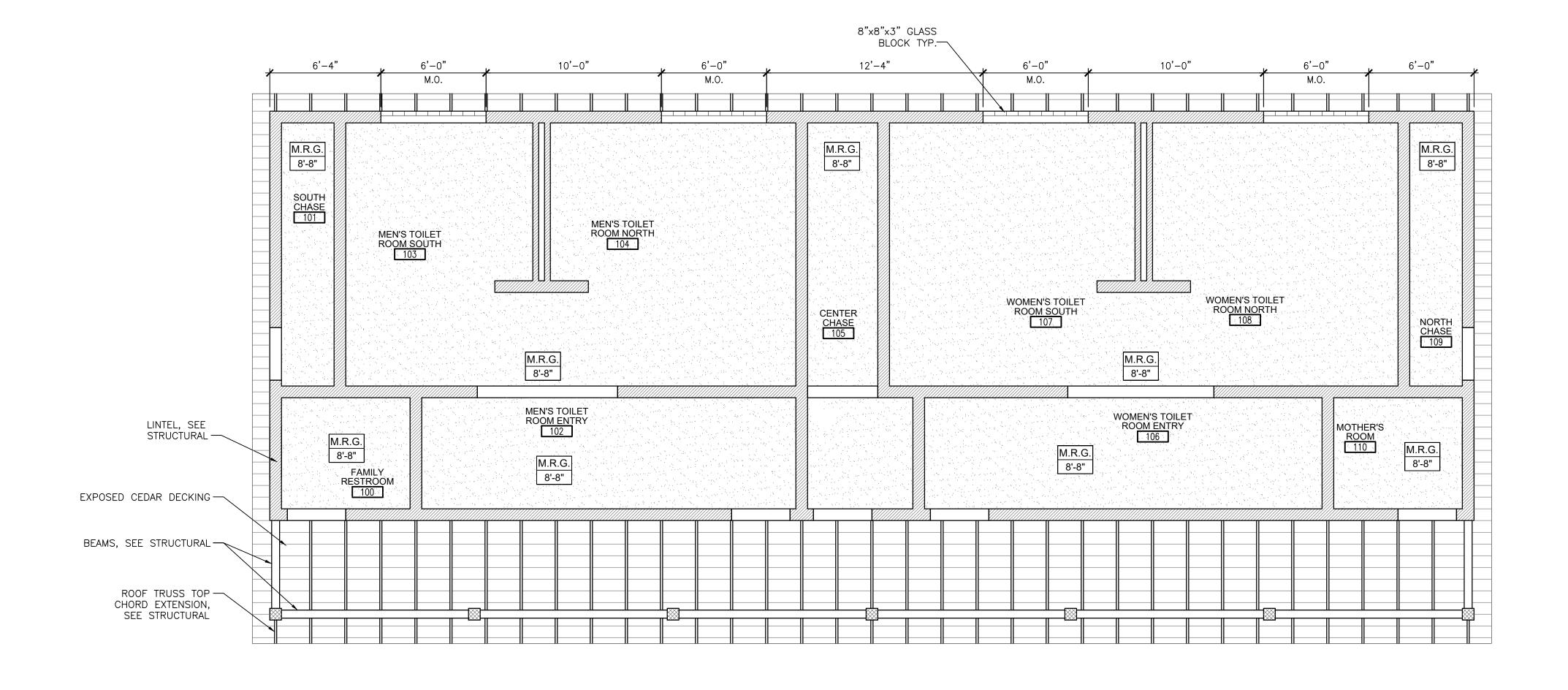
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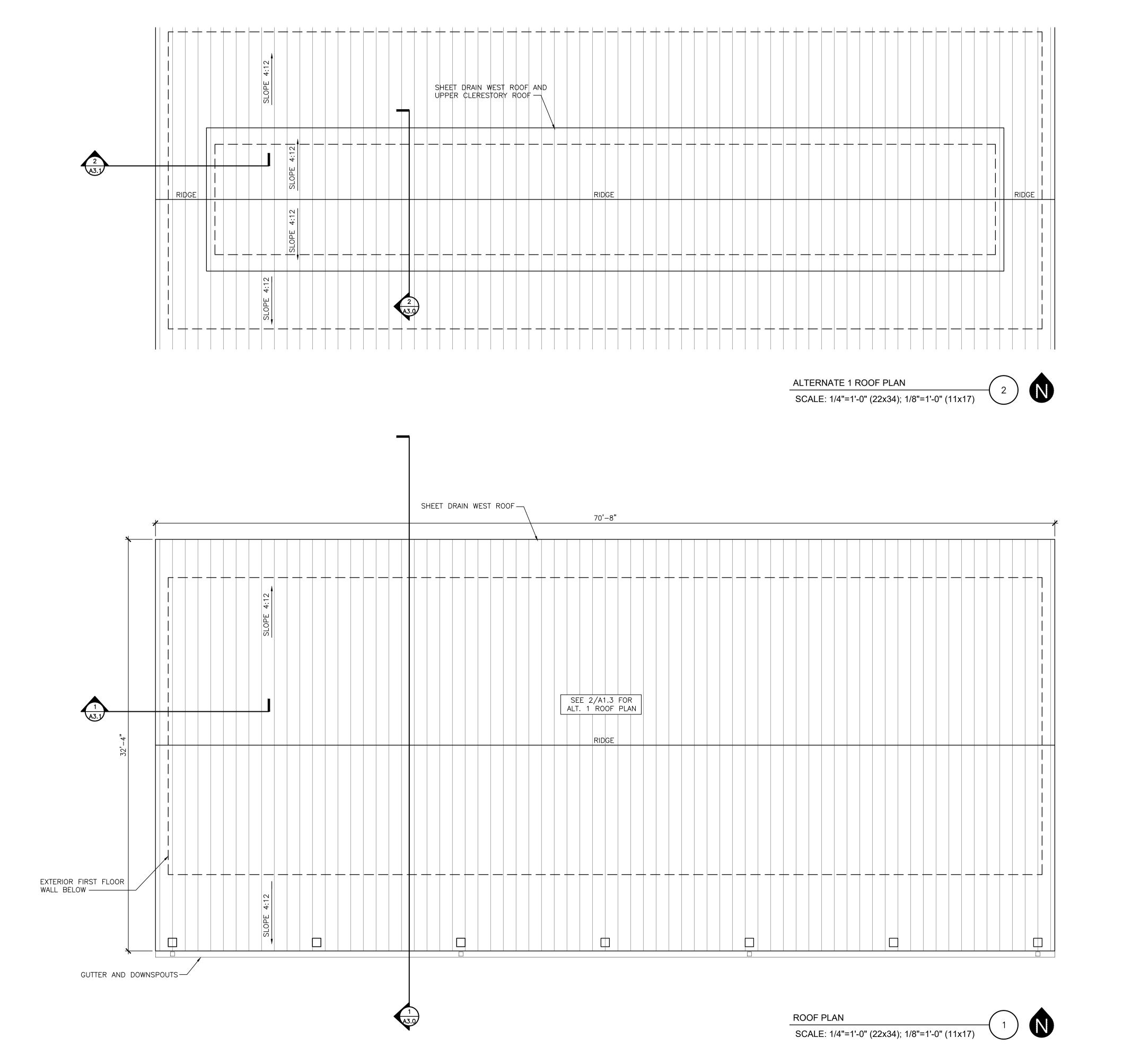
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ROOF PLAN

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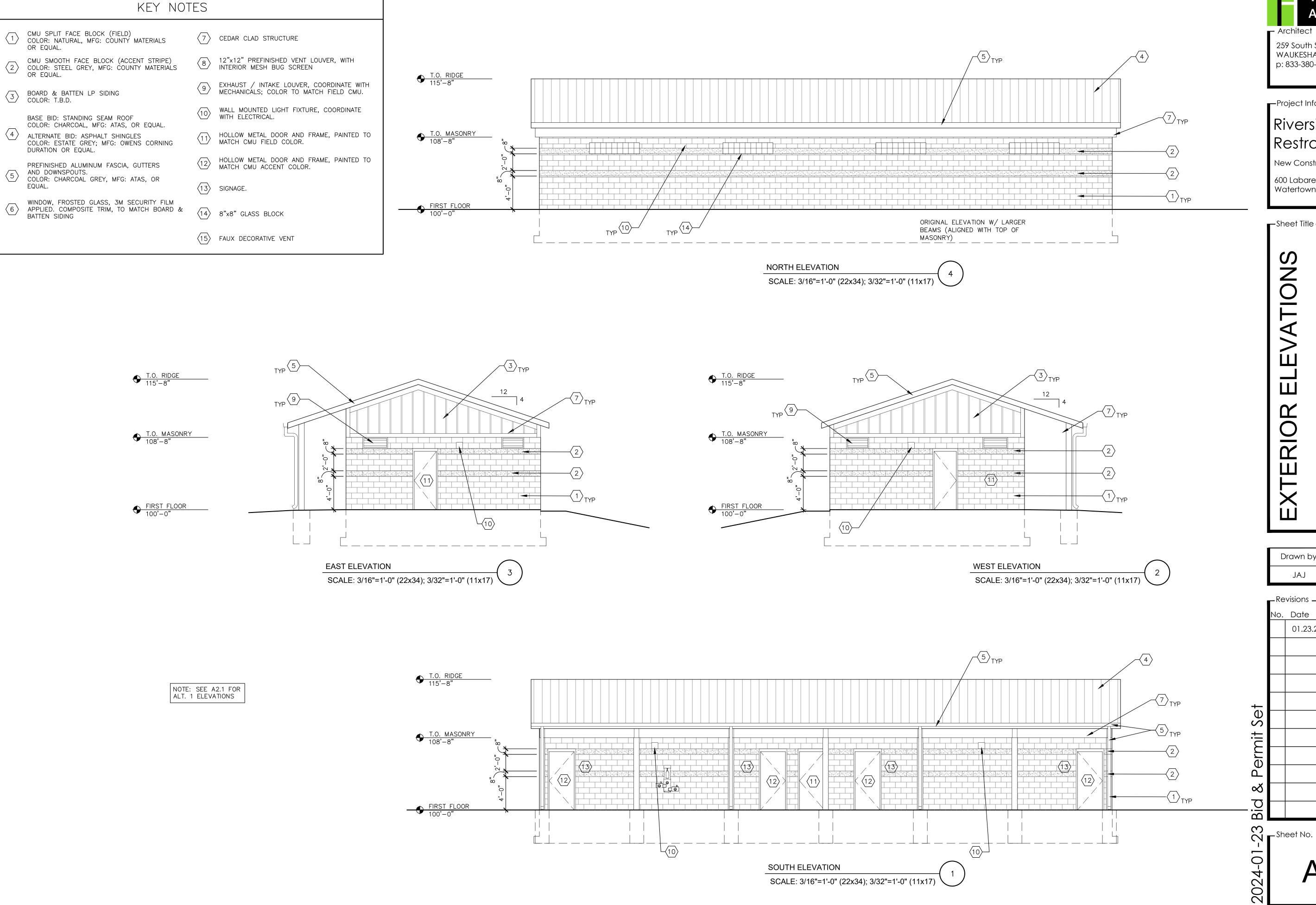
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SCALE: 3/16"=1'-0" (22x34); 3/32"=1'-0" (11x17)

THR VE ARCH TECTS

Architect

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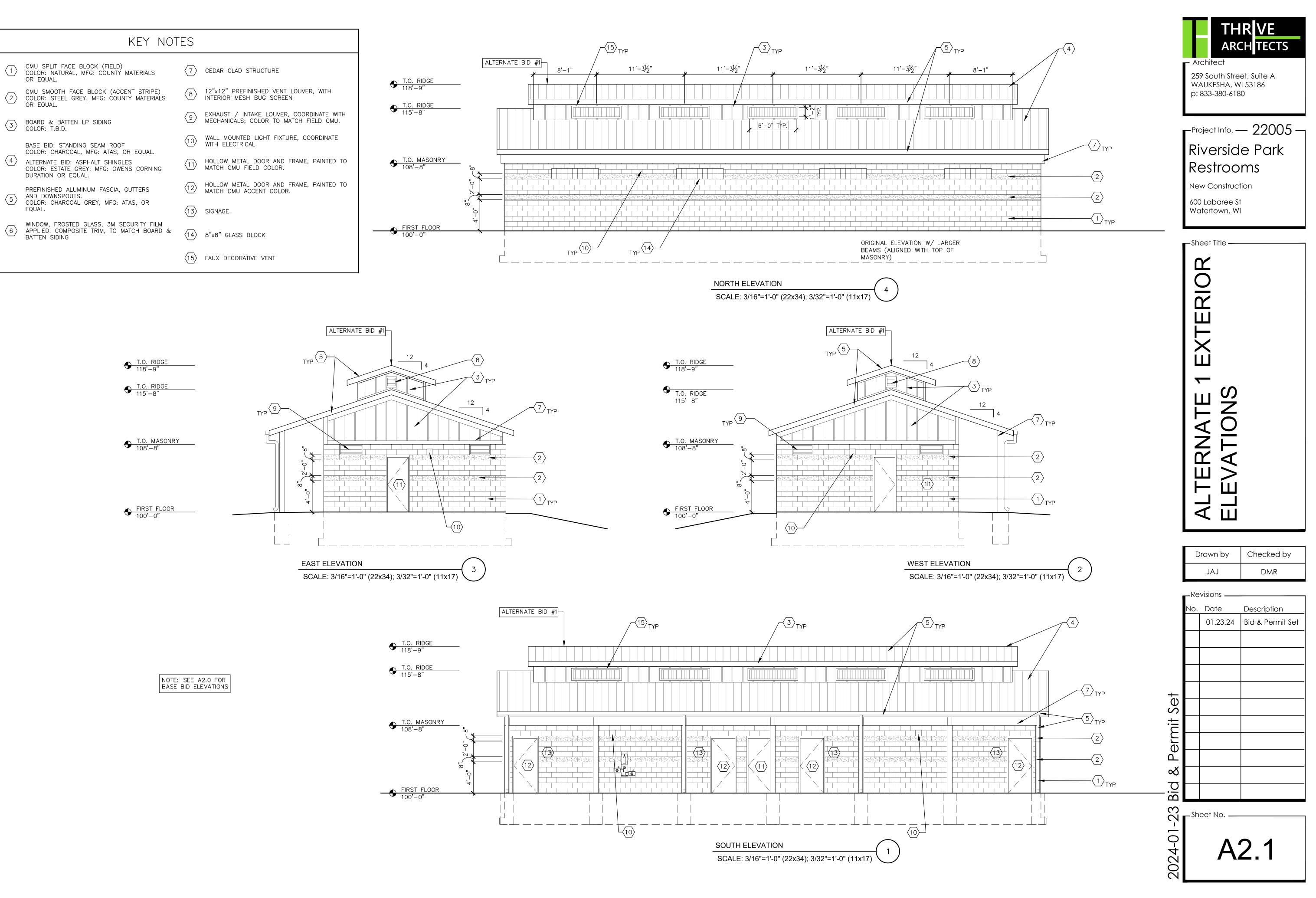
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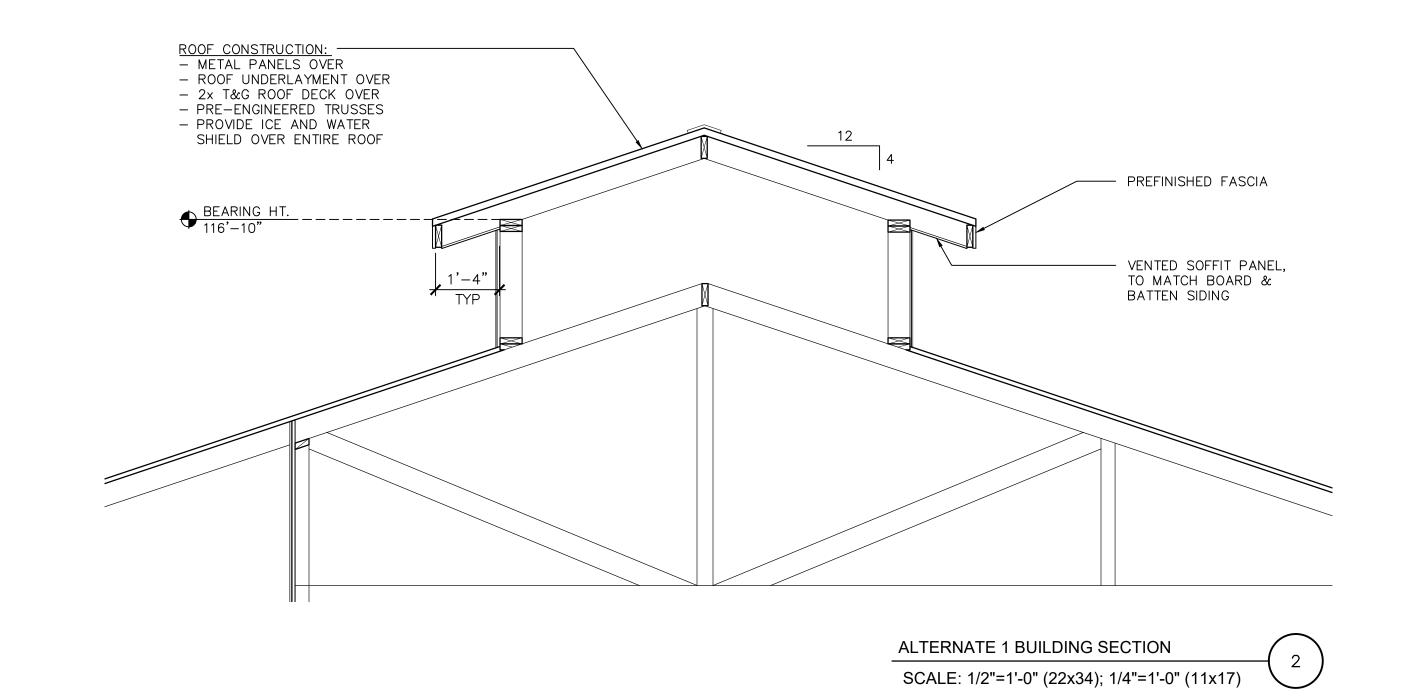
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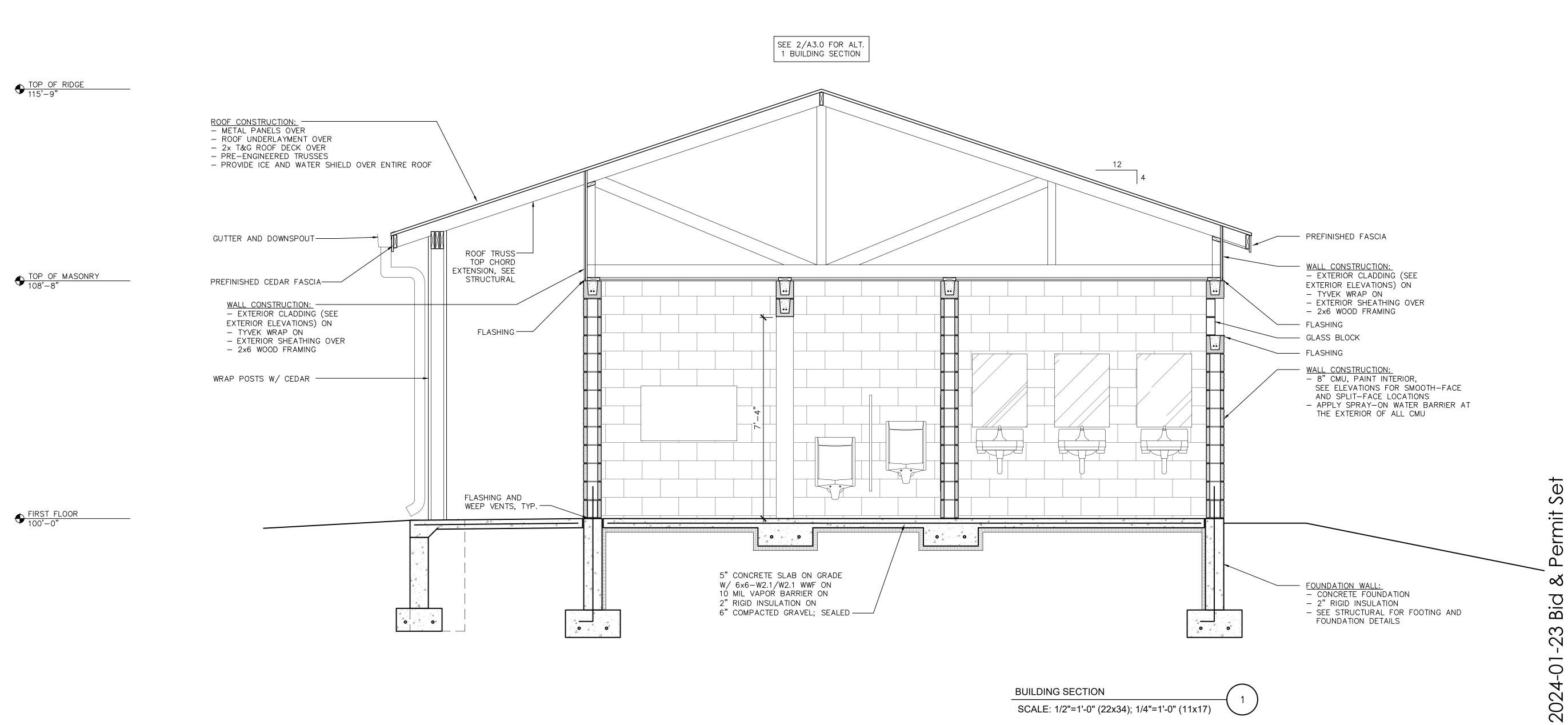
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BUILDING SECTION

SCALE: 1/2"=1'-0" (22x34); 1/4"=1'-0" (11x17)





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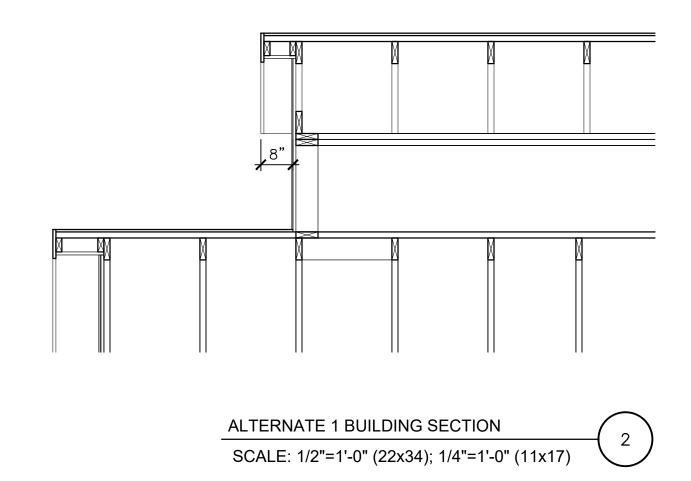
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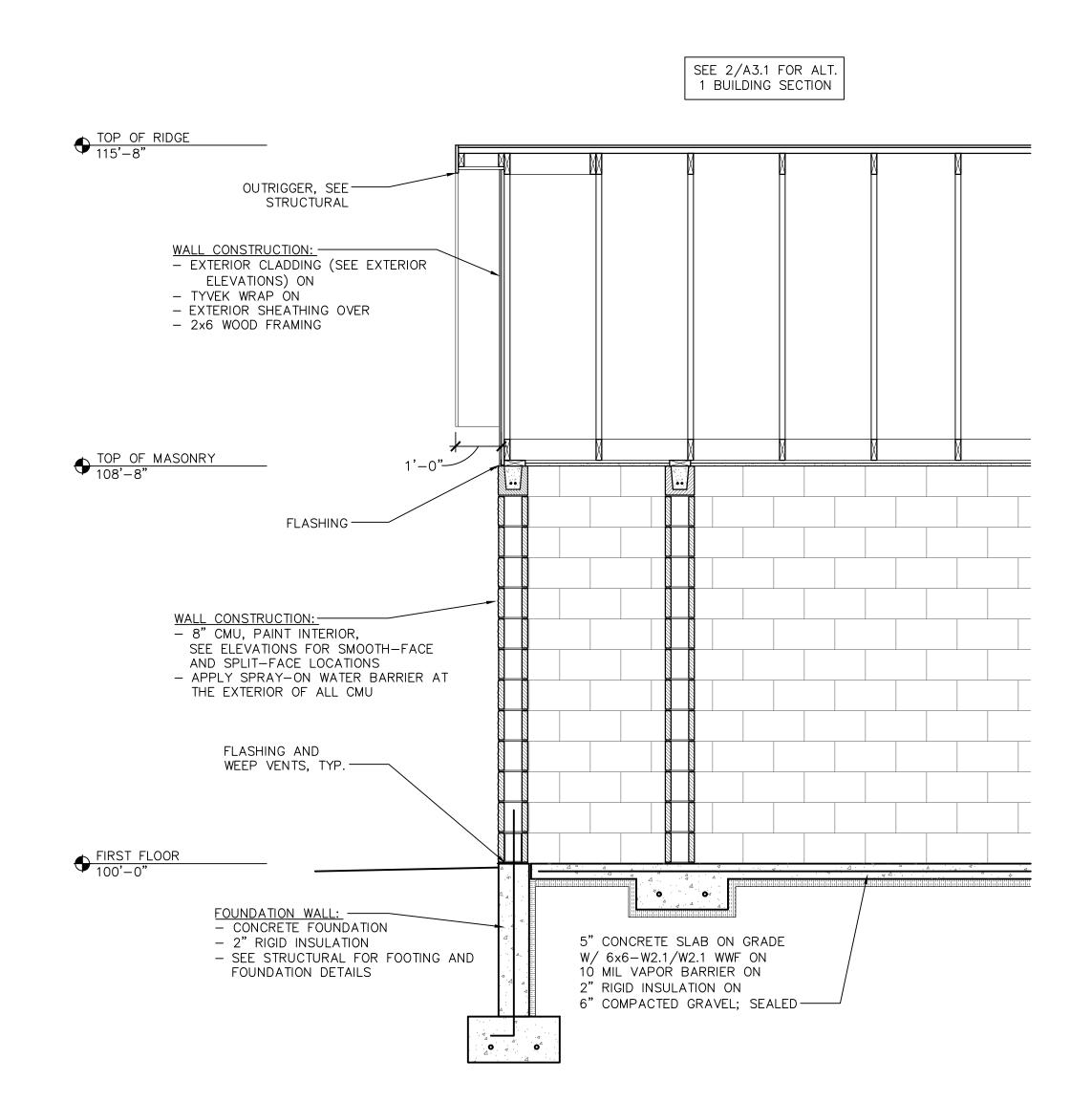
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BUILDING SECTIONS

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A3.

BUILDING SECTION

SCALE: 1/2"=1'-0" (22x34); 1/4"=1'-0" (11x17)

NOTES:
1. SEE THE SPECIFICATIONS FOR ACCESSORIES SELECTIONS. 2. SEE THE PLUMBING FIXTURE SCHEDULE FOR TOILET, URINAL, AND LAVATORY SELECTIONS.



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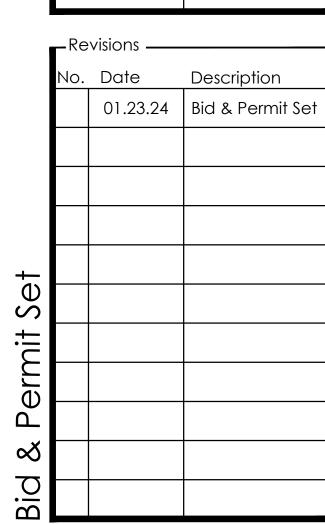
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—Sheet Title — ELEVATIONS INTERIOR

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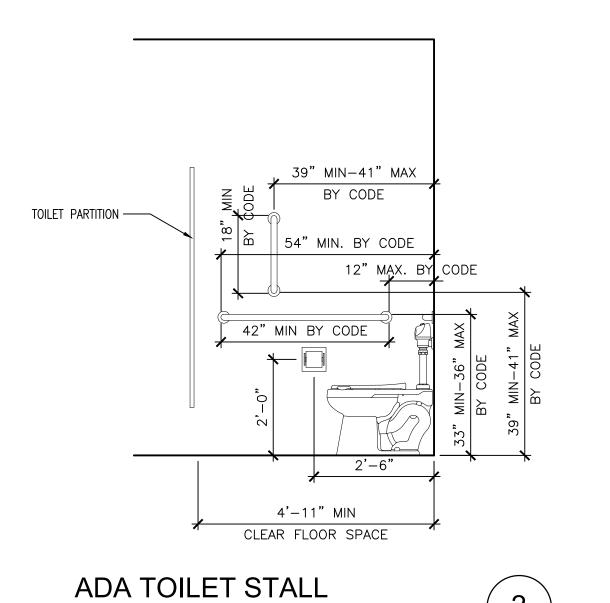
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WALL-MOUNTED ADA URINAL — 2'-6" MIN CLEAR FLOOR SPACE

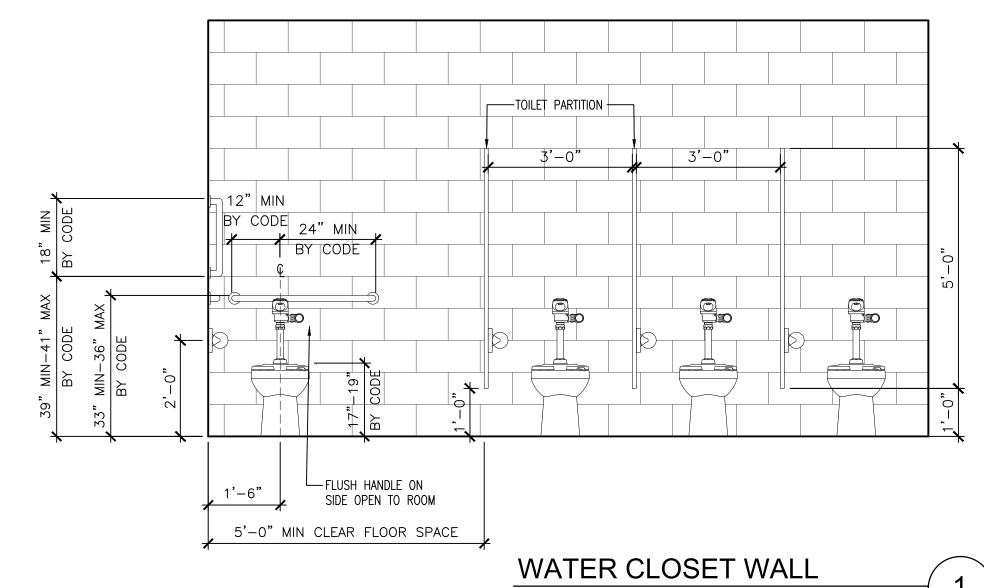
CHANGING STATION BY OWNER INSTALLED BY G.C.

CHANGING STATION

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



SCALE: 1/2"=1'0"



SCALE: 1/2"=1'0"

3'-0"

SCALE: 1/2"=1'0"

WATER CLOSET WALL

BY CODE) 2'-6" CLEAR FLOOR SPACE O.C. LAVATORY WALL SCALE: 1/2"=1'0"

NOTES:

1. SEE THE SPECIFICATIONS FOR ACCESSORIES SELECTIONS. 2. SEE THE PLUMBING FIXTURE SCHEDULE FOR TOILET, URINAL, AND LAVATORY SELECTIONS.

LIGHT FIXTURE —

CHANNEL FRAMED MIRROR —

WALL HUNG LAV T

2'-6"

CLEAR FLOOR SPACE O.C.

MOTHER'S ROOM

SCALE: 1/2"=1'0"

ACCESSIBLE HAND DRYER

SCALE: 1/2"=1'-0" (22x34); 1/4"=1'-0" (11x17)

SCALE: 1/2"=1'-0" (22x34); 1/4"=1'-0" (11x17)

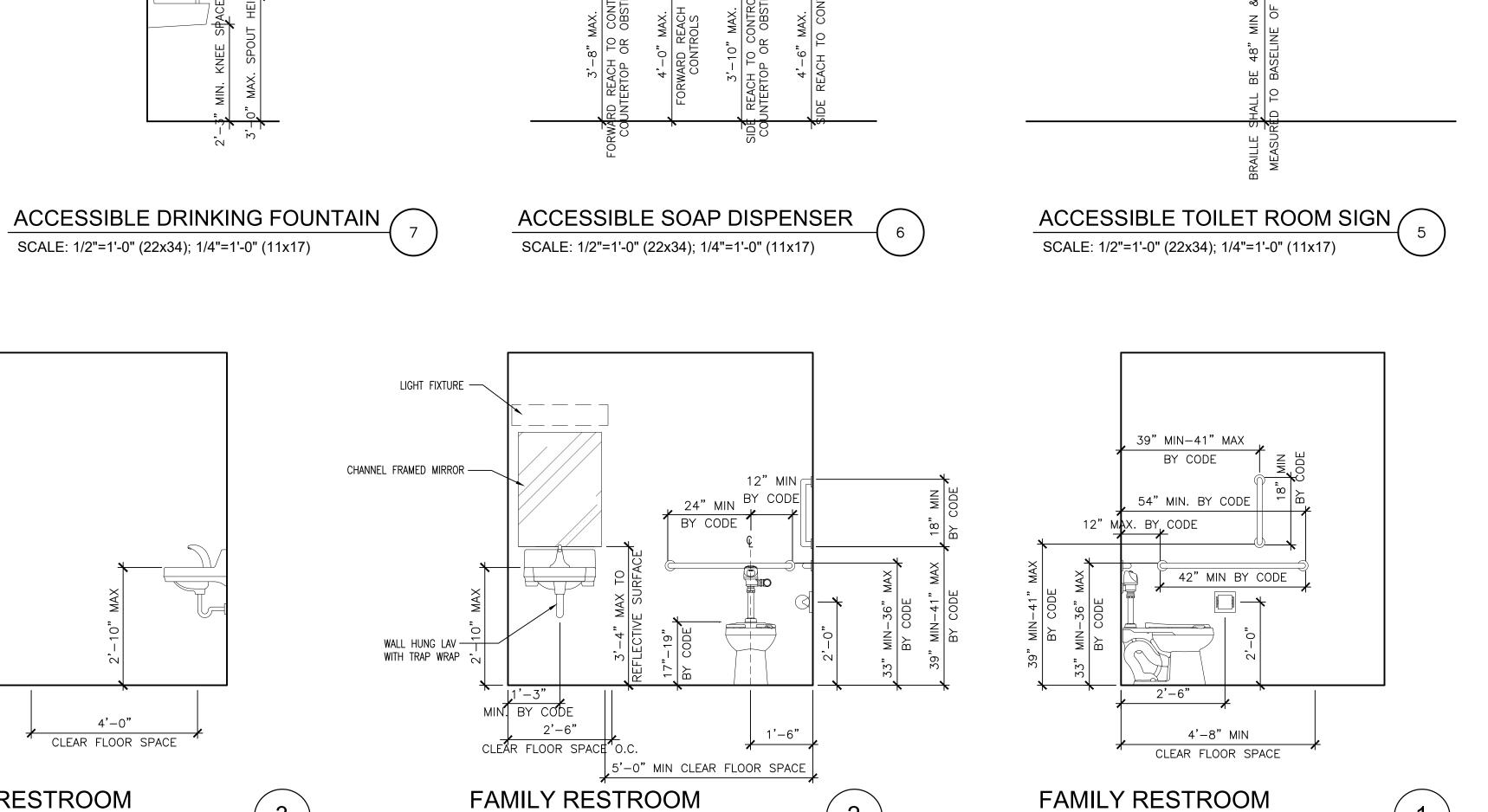
4'-0"

CLEAR FLOOR SPACE

SCALE: 1/2"=1'0"

FAMILY RESTROOM

SCALE: 1/2"=1'0"



SCALE: 1/2"=1'0"



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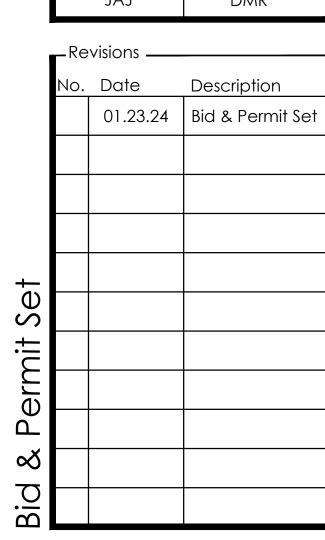
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New Construction

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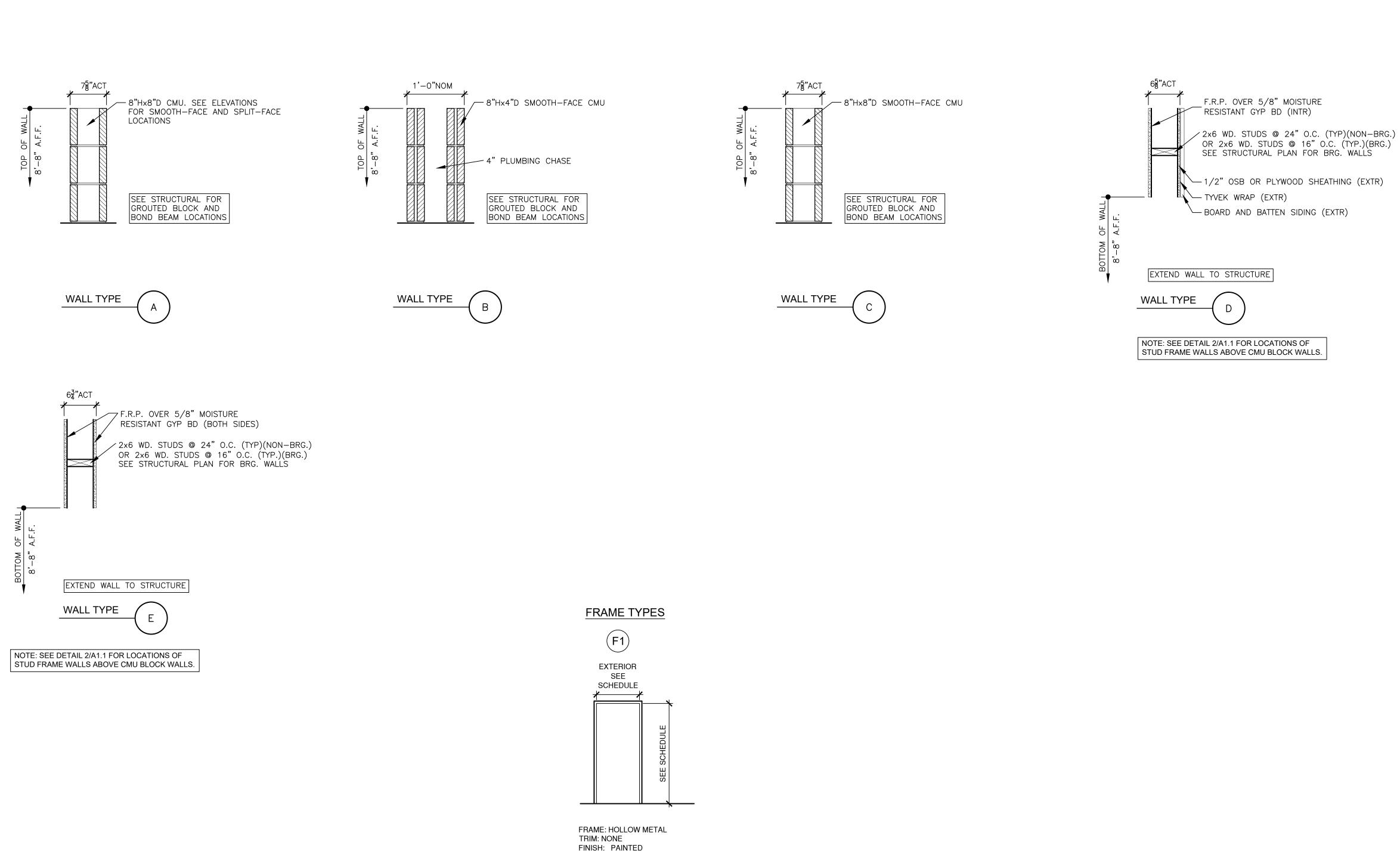
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DOOR TYPES

EXTERIOR

SEE SCHEDULE

THICKNESS: 1-3/4"

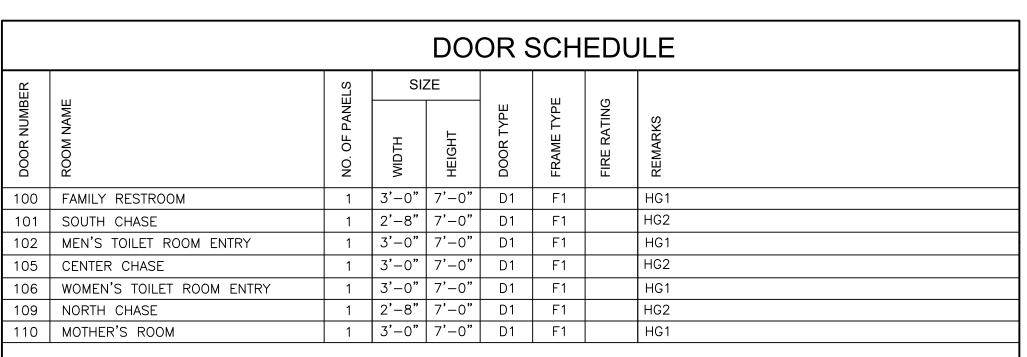
FINISH: PAINTED **GLAZING: NONE**

PANEL: FLUSH

MATERIAL: HOLLOW METAL

HARDWARE: SEE DOOR

SCHEDULE NOTES



- . G.C. TO SUPPLY ALL DOOR HARDWARE REQUIRED BY CODE.
- 2. DOOR HARDWARE SHALL COMPLY WITH ICC/ANSI A117.1 SEC 404.2.6 HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE HARDWARE SHALL BE PLACED AT LEAST 34 INCHES, BUT NOT MORE THAN 48 INCHES ABOVE THE FLOOR SURFACE.
- . COORDINATE REQUIREMENTS OF ELECTRONIC STRIKE WITH OWNER FOR REMOTE/TIMED ACCESS TO PUBLIC DOORS.



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	EXHAUST FANS (EF)																	
							MOTOR UNIT ELECTRICAL											
TYPE MARK	MARK	MANUFACTURER	MODEL	SERVICE	LOCATION	DRIVE	AIRFLOW ESP (IN WC) RPM	BACKDRAFT DAMPER	НР	ВНР	VOLTS / PH	STARTER	DISCONNECT	WEIGHT (LBS)	SONES	REMARKS		
EF	1	GREENHECK	SQ-100-VG	WOMENS RESTROOM	IN JOIST SPACE	DIRECT	600	0.25	985	MOTORIZED	1/4	0.04	120 / 1Ø	MANUAL	BY MANUFACTURER	45	4.3	1
EF	2	GREENHECK	SQ-100-VG	MENS RESTROOM	IN JOIST SPACE	DIRECT	675	0.25	1046	MOTORIZED	1/4	0.05	120 / 1Ø	MANUAL	BY MANUFACTURER	45	5.0	1
EF	3	GREENHECK	SP-80-VG	FAMILY RESTROOM	CEILING SUSPENDED	DIRECT	75	0.25	935	-	-	-	120 / 1Ø	MANUAL	BY MANUFACTURER	12	0.3	1
EF	4	GREENHECK	SP-80-VG	JANITOR'S CLOSET	CEILING SUSPENDED	DIRECT	75	0.25	935	-	-	-	120 / 1Ø	MANUAL	BY MANUFACTURER	12	0.3	1
EF	5	GREENHECK	SP-80-VG	MOTHER'S ROOM	CEILING SUSPENDED	DIRECT	75	0.25	935	_	-	-	120 / 1Ø	MANUAL	BY MANUFACTURER	12	0.3	1

1. FAN TO BE PROVIDED WITH ECM ADJUSTABLE SPEED MOTOR. PROVIDE ADJUSTABLE SPEED DIAL IN AN ACCESSIBLE LOCATION ON FAN.

	LOUVER																		
MADK	MANUEACTURED	MODEL	LOCATION	SEDVICE	CONSTRUCTION		CONSTRUCTION		CONSTRUCTION		CONSTRUCTION		UCTION		SIZE		MAX FREE AREA VELOCITY - FPM	MAX PRESSURE DROP - IN WC	REMARKS
MARK	MANUFACTURER	MODEL	LOCATION	SERVICE	TYPE	MATERIAL	CFIVI	LENGTH	WIDTH	DEPTH									
L-1	GREENHECK	ESD-403	SEE PLANS	WOMENS RESTROOM	FASTENED	ALUMINUM	750	26"	16"	6"	649	0.1	1, 2, 3						
L-2	GREENHECK	ESD-403	SEE PLANS	MENS RESTROOM	FASTENED	ALUMINUM	750	26"	16"	6"	649	0.1	1, 2, 3						
L-3	GREENHECK	ESD-202	SEE PLANS	WOMENS RESTROOM	FASTENED	ALUMINUM	625	26"	16"	6"	700	0.1	1, 2, 3						
L-4	GREENHECK	ESD-403	SEE PLANS	MENS RESTROOM	FASTENED	ALUMINUM	700	26"	16"	6"	606	0.1	1, 2, 3						

1. COORDINATE COLOR WITH ARCHITECT

2. PROVIDE WITH INSECT SCREEN

3. LOUVERS WILL BE PROVIDED BY THE GENERAL CONTRACTOR UNDER DIVISION 08 90 00. THE SELECTIONS ABOVE ARE FOR MECHANICAL PERFORMANCE CRITERIA ONLY.

	DIFFUSERS AND GRILLES									
							CONFIGUR	ATION		
MARK	MANUFACTURER	IUFACTURER MODEL TYPE SERVICE	CE MATERIAL	BLA	DES	MOUNTING /	FINISH	REMARKS		
						SPACING (IN)	ANGLE	FRAME		
S1	TITUS	TMR	ROUND CONICAL	SUPPLY	STEEL	-	-	LAY-IN	WHITE	1
E1	TITUS	350FL	SINGLE DEFLECTION	EXHAUST	STEEL	3/4"	35°	LAY-IN	WHITE	1
NOTE: SE	NOTE: SEE PLANS FOR NECK SIZES									

Sequence of Operation: Exhaust fans and motor operated control dampers

Note: All exhaust fans will take an occupancy input from the lighting system. In all cases the fan shall receive an occupied signal from the associated zone lighting occupancy sensor. The method of delivery of the occupancy status from the lighting system may vary slightly from zone to zone. If there is no occupancy sensor in a specific zone or space then the exhaust fan operation should be indexed to turn on and off in sequence with the manual light switch in that room or zone.

Lighting System Interface:

The lighting occupancy sensor shall send a signal from the auxiliary contact of the occupancy sensor to the HOA controller of inline exhaust fans EF-1 and EF-2. Fans should be programmed to run for 10 minutes after the lighting occupancy sensor has turned off the lights to facilitate adequate removal of odors. If communication is lost with the lighting system, the exhaust fan shall continue to operate until the programmed time out of 10 minutes after the room has switched to unoccupied mode.

The lighting occupancy sensor shall send a direct 0-10V signal from the auxiliary contact of the occupancy sensor directly to the ECM motor of ceiling mounted exhaust fans EF-3 and EF-5. Fans should operate when lighting is on and turn off when lighting occupancy sensors times out, switching the room to an unoccupied set point. This timeout shall be no longer than 30 minutes.

Ceiling mounted EF-4 shall be controlled directly by the manual light switch in the Janitor's Closet.

. ARCHITECT TO COMFIRM COLOR SELECTION

Occupancy Mode: The occupancy mode shall be communicated to each exhaust fan via a binary input. Valid Occupancy modes for the exhaust fans shall be:

Occupied: Normal operating mode for occupied spaces during normal operation. When the lighting sensor is in the occupied mode the associated exhaust fan shall be energized and shall maintain the scheduled space airflow. When a fan is energized the associated motorized dampers shall open.

Unoccupied Standby: Mode used for unoccupied spaces. The occupancy sensor integral to the lighting system shall be used to indicate that the space is occupied or unoccupied. In the standby mode the exhaust fan airflow setpoint will be reduced to the minimum CFM, scheduled for 0 CFM. When the fan enters unoccupied mode the motor shall shut off and the associated motorized dampers shall close.

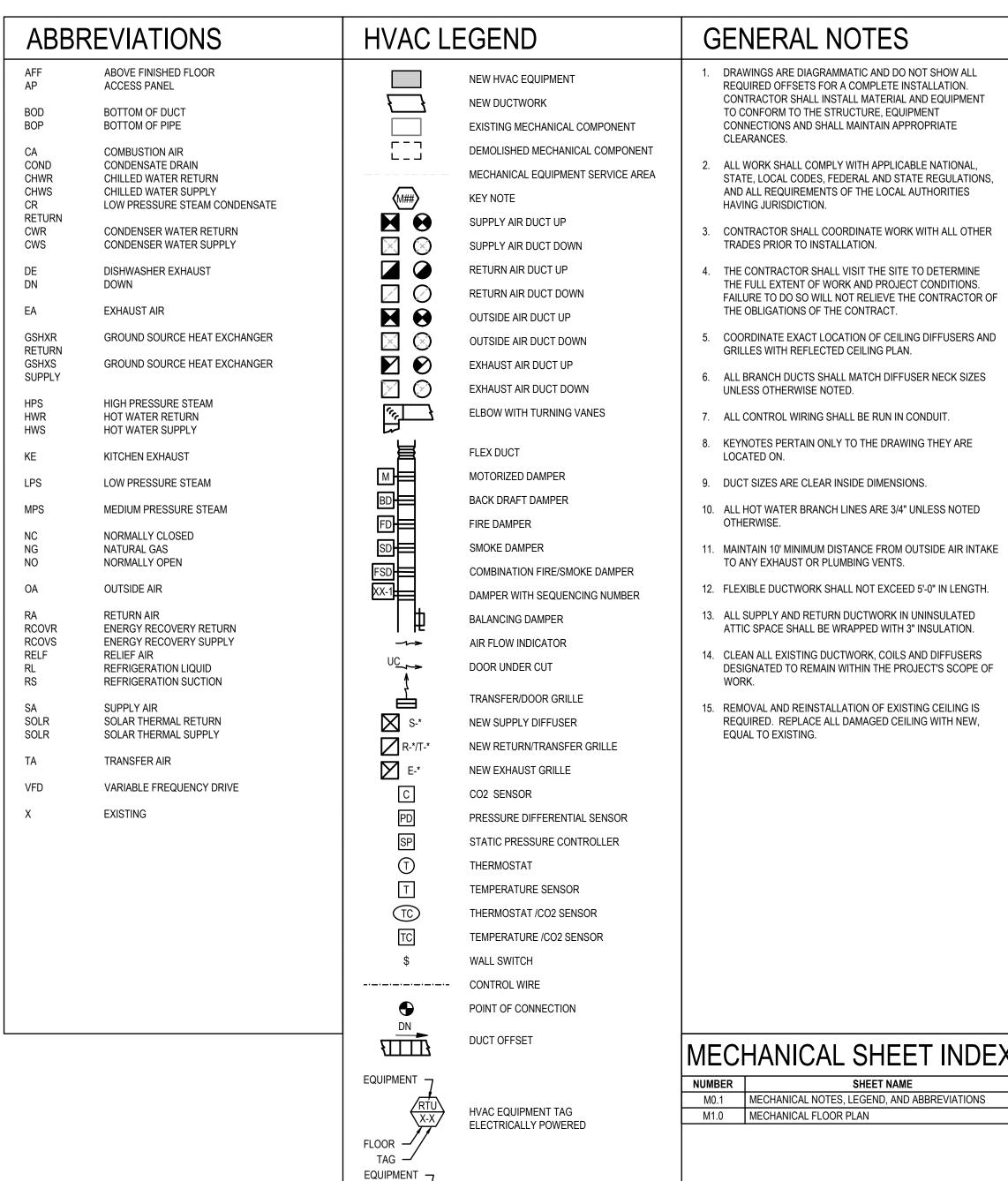
Motorized Dampers: Each fan shall be provided with a motorized control damper. Control dampers are intended to prevent backflow of outdoor air into the exhaust system when the system is de-energized.

Exhaust: Each exhaust fan will have an associated motorized control damper. When the fan is energized the associated motorized damper shall open. The damper shall close when the fan shuts off. Actuators shall be selected so that these motorized exhaust dampers fail open.

Intakes: Each outdoor air louver will have an associated motorized control damper. When any one of the associated exhaust fans are energized that the associated motorized damper at the intake louver shall open. The intake damper shall close when all associated exhaust dampers prove closed. Actuators shall be selected so that motorized intake dampers fail closed.

eating Control:

Heat is not provided by this system. The intent is that the domestic water systems will be shut off and drained in advance of freezing or sub-freezing conditions.



HVAC EQUIPMENT TAG
NOT ELECTRICALLY POWERED

DIFFUSER/GRILLE TAG

FLOOR

NECK SIZE —

TAG -

TYP.#

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Riverside Park

New Construction

600 Labaree St Watertown, WI

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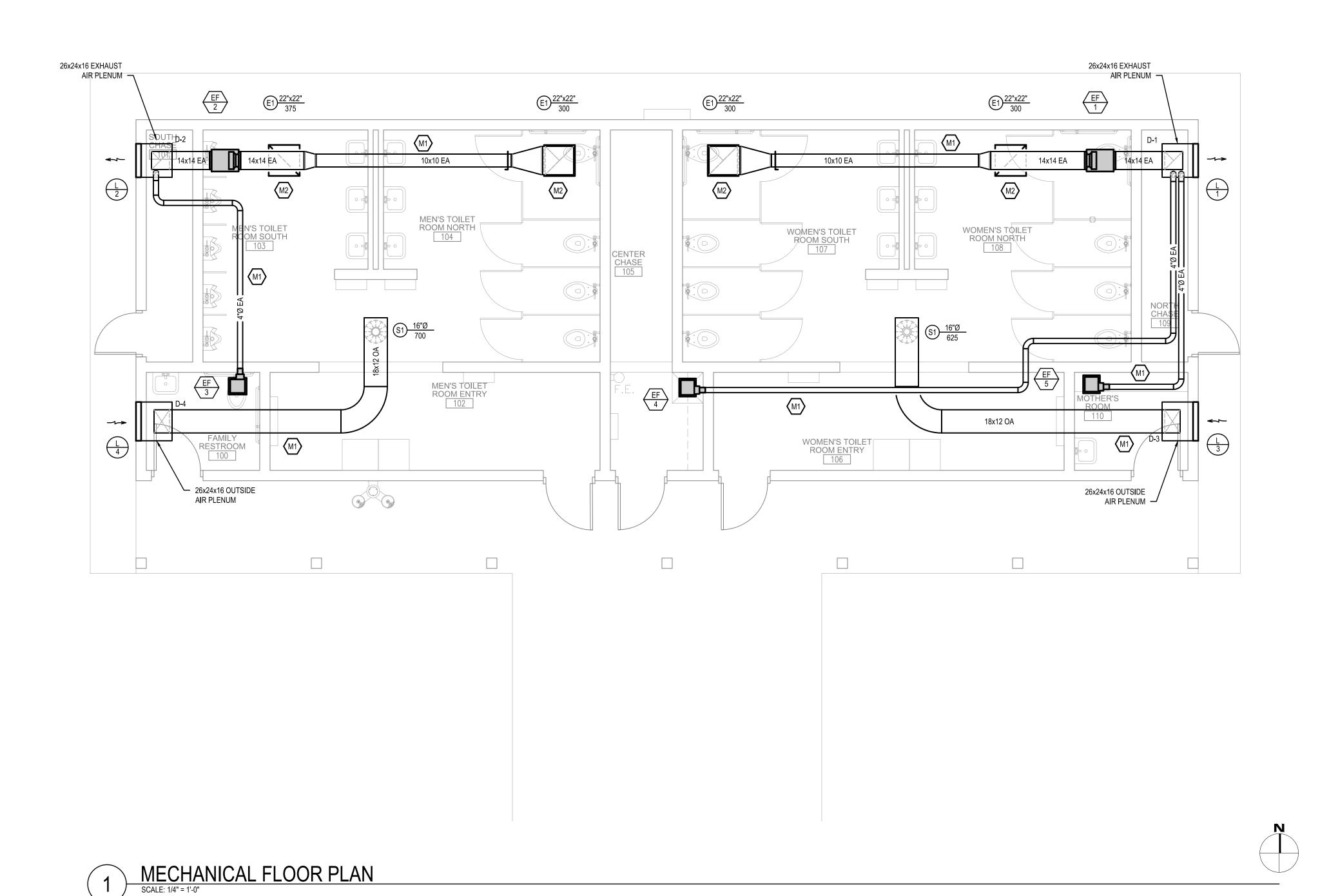
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KEY NOTES

M1 ROUTE DUCT UP AND INTO JOIST SPACE.

M2 CONTRACTOR TO ADD BALANCING DAMPERS FOR EACH

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MECHANICAL
FLOOR PLAN

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MECHANICAL SPECIFICATIONS

A. STATEMENT OF INTENT

- 1. IT IS THE INTENT OF THESE DOCUMENTS THAT THE MECHANICAL CONTRACTOR (MC) PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS NECESSARY FOR THE INSTALLATION OF ALL WORK SHOWN ON THE PLANS AND/OR DESCRIBED HEREIN, INCLUDING ALL APPURTENANCES REQUIRED TO SET RESPECTIVE SYSTEMS IN OPERATION. THE TERM "FURNISH AND INSTALL" WILL NOT BE USED, BUT IS INTENDED UNLESS SPECIFIC NOTATIONS ARE MADE TO THE
- ALL ITEMS OF WORK AND ALL SYSTEMS ARE TO BE COMPLETE IN ALL DETAILS, READY FOR SATISFACTORY OPERATION. PROVIDE ALL NECESSARY DEVICES AND RELATED APPARATUS FOR COMPLETE SYSTEMS EVEN THOUGH SUCH ITEMS MAY NOT BE SPECIFICALLY MENTIONED.

CODES: REGULATIONS

- 1. IF THE MC OBSERVES THAT ANY OF THE CONTRACT DOCUMENTS ARE AT VARIANCE WITH LAWS, ORDINANCES, RULES AND REGULATIONS OF ANY PUBLIC AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK THEY SHALL PROMPTLY NOTIFY THE ARCHITECT IN WRITING AND ANY NECESSARY CHANGES SHALL BE ADJUSTED BY APPROPRIATE MODIFICATIONS. IF THE MC PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO SUCH LAWS, ORDINANCES, RULES AND REGULATIONS, AND WITHOUT SUCH NOTICE TO THE ARCHITECT THEY SHALL ASSUME FULL RESPONSIBILITY THEREFORE AND SHALL BEAR ALL COSTS ATTRIBUTABLE THERETO.
- COMPLY WITH ALL APPLICABLE REGULATIONS OF UTILITY COMPANIES SERVING THE PROJECT.
- COMPLY WITH ALL APPLICABLE RECOMMENDATIONS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL ELECTRIC CODE, AMERICAN SOCIETY OF MECHANICAL ENGINEERS, FACTORY INSURANCE ASSOCIATION AND FACTORY MUTUAL INSURANCE COMPANIES.
- WHERE APPLICABLE, MATERIAL OR EQUIPMENT SHALL BEAR THE STAMP OF U.L., ASME, AGA AND NEMA.
- COMPLY WITH OWNER, ARCHITECT AND LANDLORD'S REQUIREMENTS.

C. DESIGN INTENT

- THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL EQUIPMENT. FOLLOW THE MECHANICAL PLANS AS CLOSELY AS POSSIBLE FOR INSTALLATION OF DUCTWORK AND EQUIPMENT. MECHANICAL DRAWINGS MAY NOT SHOW ALL OFFSETS, AND DETAIL EVERY POINT AT WHICH CONSTRUCTION MAY REQUIRE SPECIAL
- SHOULD CONDITIONS NECESSITATE GENERAL REARRANGEMENTS. OR IF DUCTWORK CAN BE RUN TO BETTER ADVANTAGE, PREPARE AND SUBMIT DRAWINGS SHOWING THE CHANGES BEFORE PROCEEDING WITH THE WORK. IF SUCH CHANGES ARE APPROVED. THEY SHALL BECOME A PART OF THE CONTRACT AFTER THEIR APPROVAL.
- ANY ADDITIONAL FITTINGS, VALVES, DUCTS, CONDUITS OR SPECIALTIES REQUIRED OR OTHER APPURTENANCES NECESSARY DUE TO FIELD CONDITIONS OR CODE REQUIREMENTS SHALL BE FURNISHED AND INSTALLED BY THE MC AT NO EXTRA COST TO THE OWNER.

D. CUTTING AND PATCHING

- CUTTING OF EXISTING WORK: CUTTING TO BE BY TRADE INSTALLING THE WORK.
- NO CUTTING OF STRUCTURAL ELEMENTS OR FIREWALLS WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.
- PATCHING: UNLESS NOTED OTHERWISE PATCHING IS TO BE BY TRADE THAT PROVIDED THE PENETRATION OR CUT. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PATCHING RELATED TO THE INSTALLATION OF MECHANICAL EQUIPMENT. SEE GENERAL CONDITIONS REGARDING CUTTING AND PATCHING AT CORRECTIVE WORK. PATCHING MATERIALS SHALL MATCH EXISTING.

E. CLEANING: REMOVAL OF RUBBISH

RUBBISH: EACH TRADE TO PROMPTLY REMOVE ALL DEBRIS, SURPLUS AND DISCARDED MATERIAL FROM THE PREMISES. THIS CONTRACTOR SHALL, IN FINISHING STAGES, COOPERATE WITH OTHER CONTRACTORS IN REMOVING RUBBISH. BEFORE COMPLETION OF THE WORK, REPLACE

F. TESTING, BALANCING AND ADJUSTING

- GENERAL CONTRACTOR SHALL CONTRACT DIRECTLY WITH A THIRD PARTY TO PERFORM THE TEST AND BALANCING OF THE HVAC SYSTEM. BALANCING CONTRACTOR SHALL BE AN INDEPENDENT CERTIFIED TEST AND BALANCING CONTRACTOR WITH NEBB OR AABC CERTIFICATION. THE BALANCING CONTRACTOR SHALL:
- 1.1. TEST AND ADJUST ALL MECHANICAL SYSTEMS AND EQUIPMENT TO ASSURE PROPER BALANCE AND OPERATION.
- PERFORM TESTS IN ACCORDANCE WITH AABC, NEBB OR ASHRAE STANDARDS.
- ELIMINATE UNNECESSARY NOISE AND VIBRATION.
- ASSURE PROPER FUNCTION OF CONTROLS. SUBMIT FINAL BALANCING REPORT TO OWNER AND GC AFTER
- WORK IS COMPLETED AND SYSTEM IS FUNCTIONAL AND OPERATING PER THE CONTRACT DOCUMENTS.
- BALANCING CONTRACTOR SHALL BALANCE SYSTEMS TO ACHIEVE THE AIR QUANTITIES INDICATED ON THE FLOOR PLAN WITHIN + 5%. MARK FINAL POSITION OF ALL VOLUME DAMPERS. REPORT ALL DEFICIENCIES TO MC FOR CORRECTION.

G. GUARANTEE

- MC SHALL BE RESPONSIBLE FOR ALL WORK INSTALLED UNDER THIS CONTRACT. THIS CONTRACTOR SHALL MAKE GOOD, REPAIR OR REPLACE AT THEIR OWN COST AND EXPENSE ANY DEFECTIVE WORK OR MATERIAL WHICH IS DISCOVERED WITHIN ONE YEAR AFTER DATE OF FINAL ACCEPTANCE OF THE WORK.
- THIS CONTRACTOR SHALL MAKE GOOD, REPAIR OR REPLACE MATERIAL OR WORKMANSHIP THAT IS IDENTIFIED AS A DEFECT IN THE OPINION OF THE ARCHITECT OR ENGINEER.
- ALL MATERIAL, WORKMANSHIP AND EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR AFTER SYSTEM ACCEPTANCE.
- 4. THE MECHANICAL SHALL PROVIDE PRIOR TO THE FINAL PAYMENT BEING RELEASED THE FOLLOWING:
- OPERATING INSTRUCTIONS FOR ALL SYSTEMS AND EQUIPMENT. CUT SHEETS FOR ALL EQUIPMENT AND SPECIALTIES INCLUDING
- EXHAUST FANS, UNIT HEATERS AND OCCUPANCY SENSORS AS APPLICABLE. WRITTEN OPERATING INSTRUCTIONS FOR ALL SYSTEMS AND
- EQUIPMENT INCLUDING FINAL WIRING AND CONTROL DIAGRAMS. EQUIPMENT WARRANTIES FOR ALL EQUIPMENT FOR NO LESS THAN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE.
- AS A PART OF THIS CONTRACT, THE MC SHALL PROVIDE A ONE YEAR SERVICE AND MAINTENANCE AGREEMENT WITH ALL PARTS AND LABOR INCLUDED FOR MECHANICAL REPAIRS AS NECESSARY.
- THIS CONTRACTOR SHALL INSTRUCT THE OWNER AND FACILITY STAFF IN SYSTEM OPERATION PRIOR TO SYSTEM TURNOVER.
- NOTIFY THE OWNER 48 HOURS PRIOR TO SYSTEM TURNOVER AND DEMOBILIZATION OF THE MC.

G. INSURANCE

THIS CONTRACTOR SHALL PURCHASE AND MAINTAIN SUCH INSURANCE AS WILL PROTECT THEM FROM CLAIMS INCLUDING WORKMAN'S COMPENSATION AND PUBLIC LIABILITY WHICH MAY ARISE OUT OF, OR RESULT FROM, THE CONTRACTOR'S OPERATIONS UNDER THE CONTRACT, WHETHER SUCH OPERATIONS BE BY THE MC OR BY ANY SUBCONTRACTOR OR BY ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR BY ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE.

COORDINATION AND INSTALLATION

- THE ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST- CLASS WORKMANLIKE MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIONAL AND ACCEPTANCE BY THE OWNER SHALL BE A CONDITION OF THE CONTRACT.
- 2. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCES, PRESERVE HEADROOM, AVOID OMISSIONS AND VERIFY EQUIPMENT LOCATIONS.
- 3. DUCTWORK AND PIPING SHALL BE CONCEALED WHERE POSSIBLE, RUN IN STRAIGHT LINES PARALLEL AND/OR PERPENDICULAR TO THE BUILDING CONSTRUCTION, AS HIGH AS POSSIBLE.
- ALL OUTSIDE AIR INTAKES SHALL BE INSTALLED A MINIMUM OF 10'-0" FROM ALL EXHAUST AS PER LOCAL CODES (VERIFY IN FIELD).
- COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER AND WITH THE CONSTRAINTS OF THE CONDITIONS OF THE PROJECT SITE.

J. DUCTWORK

- ALL DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL STATE AND LOCAL CODES. ASHRAE STANDARDS AND SMACNA STANDARDS.
- ALL CONCEALED OUTSIDE, RETURN AND SUPPLY DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL WITH 1-1/2" DUCT FIBERGLASS DUCT WRAP (MIN R-5) WITH FOIL FACED VAPOR BARRIER COMPLYING WITH ASTM 553, TYPE II. EXPOSED DUCTWORK WITHIN CONDITIONED SPACES SHALL NOT BE WRAPPED AND SHALL BE PROVIDED WITH PAINTABLE SURFACE. ALL PLAN DIMENSIONS SHALL BE FREE INSIDE
- ALL FLEXIBLE DUCTWORK ASSEMBLY SHALL BE CLASS 1 AIR DUCT UL 181 WITH MIN. R-5 FIBERGLASS INSULATION WITH FOIL FACED VAPOR BARRIER COMPLYING WITH ASTM 553, TYPE II. PROVIDE SCREW-OPERATED METAL ADJUSTABLE CLAMPING DEVICES. USE TWIST LOCK TAP COLLARS AT CONNECTIONS TO SHEET METAL DUCTWORK. FLEXIBLE DUCT SHALL NOT EXCEED 5FT.
- ALL DUCTWORK INSULATING MATERIALS SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25, SMOKE DEVELOPED RATING SHALL NOT EXCEED 50. ALL VALUES SHALL BE IN ACCORDANCE WITH ASTM TEST E84 "SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS".
- FURNISH AND INSTALL ALL STARTING COLLARS, MANUAL DAMPERS, SPLITTERS AND DEFLECTORS SHOWN ON THE DRAWINGS OR WHEREVER REQUIRED FOR THE PROPER AIR FLOW AND BALANCING OF THE ENTIRE AIR SYSTEM. ALL SQUARE (90 DEGREES) ELBOWS SHALL BE PROVIDED WITH TURNING VANES IN ACCORDANCE WITH SMACNA STANDARDS. ALL BLADES SHALL BE DOUBLE THICKNESS AIRFOIL TYPE.
- SHEET METAL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS FOR 1" W.G. PRESSURE CLASS, SEAL CLASS "A". DUCTWORK SHALL BE GALVANIZED OF LOCK FORMING QUALITY, ASTM A653 AND A924. SEAL ALL SEAMS TRANSVERSE AND LONGITUDINAL
- ROUND GALVANIZED SHEET METAL DUCTWORK SHALL SPIRAL SEAM OR SNAP LOCK FOR DUCTS UP TO 10"Ø. DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS. SPIRAL SEAM DUCTWORK SHALL HAVE SMACNA SEAM TYPE RL-1.
- RECTANGULAR VOLUME DAMPERS SHALL BE MIN. 16 GAUGE GALVANIZED STEEL FRAME AND BLADES, MIN. 3/8" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS WITH LOCKING POSITION REGULATOR. WHERE POSITION REGULATOR IS NOT ACCESSIBLE PROVIDE COUPLING AND EXTENSION ROD FOR CEILING OR WALL INSTALLATION.
- ROUND VOLUME DAMPERS SHALL BE MIN. 20 GAUGE GALVANIZED STEEL FRAME AND BLADES, MIN. 3/4" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS WITH LOCKING POSITION REGULATOR, WHERE POSITION REGULATOR IS NOT ACCESSIBLE PROVIDE COUPLING AND EXTENSION ROD FOR CEILING OR WALL INSTALLATION.

- 10. FIRE DAMPERS SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES. PROVIDE AN ACCESS DOOR FOR FUSIBLE LINK REPLACEMENT. DAMPERS SHALL BE FOLDED BLADE TYPE, ARRANGED OUT OF THE AIRSTREAM.
- INSTALL AND PROVIDE HANGERS FOR ALL DUCTWORK PER SMACNA STANDARDS AND PER LOCAL CODE.
- 12. UNLESS NOTED OTHERWISE, DUCT DIMENSIONS ON THE PLANS ARE INSIDE CLEAR DIMENSIONS.
- 13. TRAPEZE HANGERS SHALL BE MIN. 1"X2"X1"X18 GUAGE CHANNELS WITH MIN. 1"X18 GUAGE STRAPS TO STRUCTURAL SUPPORTS.
- 14. EXPOSED DUCTWORK SHALL BE CLEANED OF DEBRIS AND OIL, WIPED DOWN WITH VINEGAR OR OTHER SURFACE PREPARATION CHEMICAL TO PREPARE DUCT FOR PAINT.
- 15. PROVIDE POLYMERIC RUBBER DUCT SEALANT FOR USE ON BOTH INTERIOR LOCATED AND EXPOSED TO OUTDOOR DUCTWORK. SEALER SHALL HAVE HIGH BONDING STRENGTH FOR FIRST TIME SEALING OF JOINTS IN LOW, MEDIUM AND HIGH PRESSURE DUCT SYSTEMS. SEALER SHALL BE HIGH IN SOLID CONTENT. PROVIDE A TWO PART TAPE SEALING SYSTEM CONSISTING OF WOVEN FIBER TAPE IMPREGNATED WITH GYPSUM MINERAL COMPOUND AND A MODIFIED ACRYLIC/SILICONE ACTIVATOR THAT REACTS EXOTHERMICALLY WITH THE TAPE. TWO PART TAPE SEALING SYSTEM MUST BE RATED FOR BOTH INDOOR AND OUTDOOR APPLICATIONS. TAPE SHALL NOT CONTAIN

K. ELECTRICAL MOTORS

THIS CONTRACTOR SHALL FURNISH MOTORS, MOTOR STARTERS AND CONTROLS FOR ALL MECHANICAL EQUIPMENT PROVIDED HEREIN; INCLUDING SETTING OF ALL LOOSE MOTORS FURNISHED. MOUNTING OF STARTERS AND ALL POWER WIRING WILL BE BY ELECTRICAL TRADES.

M. TEMPERATURE CONTROL

- THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPERATURE CONTROL DEVICES, WIRING, PROGRAMMING, ETC.
- 2. ALL NEW TEMPERATURE CONTROL WIRING SHALL BE COMPATIBLE WITH NEW

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ABBF	REVIATIONS			LIGHTII	NG LEGEND	GENER	RAL LEGEND	GENERAL NOTES
AC AFF AFG AHJ AIC ALT AMP AORM AORR ATS AUTO AV BLDG BOT C CATV CD CKT CLGAX CP CT CU dB DB DEMO DISC DM DPST DS DW DPST DS DW DPST DS DW EC ELEV EM CL ER ER FAAP FC FLA FSS FVNR GGG GFI / GFCI HIDA HP IS IG K WK KWH LCP LF M SAN WACA MCA MCA	ALTERNATING CURRENT ABOVE FINISHED GRADE AUTHORITY HAVING JURISDICTION AMPERE INTERRUPTING CAPACITY ALTERNATE AMPERE AREA OF REFUGE MASTER STATION AREA OF REFUGE MASTER STATION AUTOMATIC AUTOMATIC AUTOMATIC CONDUIT CABINET COMMUNITY ANTENNA TELEVISION CIRCUIT BREAKER CLOSED CIRCUIT TELEVISION CANDELA OR CONSTRUCTION DOCUMENT CIRCUIT CEILING COAXIAL CABLE CONTROL PANEL CURRENT TRANSFORMER COPPER DECIBEL DIRECT BURIAL DEMOLITION DISSIONECT DISTRIBUTION DIMMING DOWN DOUBLE POLE, DOUBLE THROW DOUBLE POLE, SINGLE THROW DAYLIGHT SENSOR DRAWING EMERGENCY BATTERY UNIT ELECTRICAL CONTRACTOR ELEVATOR ELEVATOR EMERGENCY ENCLOSURE ELEVATOR RECALL EXISTING TO BE RELOCATED ELECTRIC STRIKE EXISTING TO REMAIN FIRE ALARM ANNUNCIATOR PANEL FIRE ALARM CONTROL PANEL FIRE PROTECTION FUSED SAFETY SWITCH FULL VOLTAGE ROVERSING GENERATOR GROUND GENERAL CONTRACTOR GROUND FAULT CIRCUIT INTERRUPTER HIGH INTENSITY DISCHARGE HAND-OFF-AUTO HORSE POWER HERTZ INSOLATED GROUND KEY OPERATED JUNCTION BOX KILOVOLT KILOVOLT AMPERE KILOWATT HOUR LIGHTING CONTROL PANEL LIGHT EMITTING DIODE LINEAR FOOT (FEET) LUMEN LOW PRESSURE SODIUM LOCKED ROTOR AMPERAGE LICH HONTING LOW PRESSURE SODIUM LOCKED ROTOR AMPERAGE LICH HONTING LOW PRESSURE SODIUM LOCKED ROTOR AMPERAGE LICH HONTING DIODE LINEAR FOOT (FEET) LUMEN LOW PRESSURE SODIUM LOCKED ROTOR AMPERAGE LICHING CONTRACTOR MINIMUMIC CIRCUIT AMPACITY MINIMUMIC CIRCUIT AMPACITY MINIMUMIC CIRCUIT AMPACITY MINIMUMIC CIRCUIT AMPACITY	NIC NLO NTS OCOOLS PABPC PEDD PFH PNR RCC SFPD SPST SSW TC TV SSP UUNS VACD WAP X-XFMR	NOT INCLUDED IN CONTRACT MIGHT LIGHT NORMALLY OPEN NOT TO SCALE ON CENTER OUTSIDE DIAMETER OVERLOAD OPTIONAL STANDBY POLE PUBLIC ADDRESS PUSHBUTTON PLUMBING CONTRACTOR PHOTOELECTRIC CELL, PHOTOEYE PEDESTAL PENDANT POWER FACTOR PHASE PILOT LIGHT PANEL POWER REMOTE CONTROL REFLECTED CELLING PLAN RECESSED RECEPTACLE SHORT CIRCUIT CAPACITY SQUARE FOOT (FEET) SURGE PROTECTION DEVICE SPECIFICATION SINGLE POLE, SINGLE THROW SWITCH STATION SWITCH TAMPERPROOF TIMECLOCK TELEVISION TRANSIENT VOLTAGE SURGE SUPPRESSION TYPICAL UNDERWITTERS LABORATORY UNIVERSAL UNINTERRUPTIBLE POWER SUPPLY VOLT VOLT AMPERE VIRELESS ACCESS POINT WEATHER PROOF EXISTING TRANSFER TRANSFORMER		SWITCH SWITCH STATION SWITCH-BOX OCCUPANCY SENSOR CEILING MOUNT OCCUPANCY SENSOR CEILING MOUNT DAYLIGHT SENSOR SWITCH-BOX VACANCY SENSOR CEILING MOUNT VACANCY SENSOR CEILING MOUNT VACANCY SENSOR EXTERIOR PHOTOELECTRIC SWITCH SURFACE MOUNT LIGHT FIXTURE SURFACE MOUNT LIGHT FIXTURE LINEAR WALL BRACKET WALL MOUNTED FIXTURE CEILING MOUNTED FIXTURE CEILING MOUNTED FIXTURE POLE MOUNT LUMINAIRE BOLLARD FLOOD LIGHT CEILING OR WALL MOUNTED EXIT, SINGLE FACE EMERGENCY WALL PACK (EBU) EMERGENCY WALL PACK REMOTE HEAD		RAL LEGEND NEW ELECTRICAL COMPONENT EXISTING ELECTRICAL COMPONENT DEMOLISHED ELECTRICAL COMPONENT KEY NOTE TYPICAL CIRCUIT UNSWITCHED CIRCUIT SINGLE RECEPTACLE DUPLEX RECEPTACLE DUPLEX RECEPTACLE DUPLEX RECEPTACLE SPECIAL PURPOSE OUTLET DUBLE DUPLEX FLOOR OUTLET DUBLE DUPLEX FLOOR OUTLET PUSH BUTTON JUNCTION BOX CIRCUIT BREAKER GROUND TRANSOCKET SURFACE MOUNT PANEL RECESSED PANEL METER NON-FUSED DISCONNECT FUSED DISCONNECT MAGNETIC STARTER COMBINATION STARTER MOTOR POWER ASSIST OPERATOR PUSH PLATE	GENERAL NOTES 1. DRAWINGS ARE DUGGRAMMATIC AND DO NOT SHOW ALL REQUIRED COMPONENTS FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL FUNNISH AND INSTALL AM TERM. EQUIRED TO EVECES, FUTURES. SERVICE REQUIRED ENTRY DEVICES, FUTURES. SERVICE AND FUNCTIONAL INSTALLATION AND SHALL MAINTAIN APPROPRIATE CLEARANCES. 2. ALL WORK SHALL COMPLY WITH APPLICABLE NATIONAL. STATE, LOCAL CODES, FEEDERAL AND STATE REGULATIONS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION. 3. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION. 4. THE CONTRACTOR SHALL WIST THE SITE TO DETERMINE THE FULL EXTENT OF WORK AND PROJECT CONDITIONS, FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACTOR. 5. THE CONTRACTOR SHALL CHECK ALL DRAWINGS AND SPECIFICATIONS OF THE CONTRACT. 6. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL LIGHT SWITCHES, POWER, AND COMMUNICATIONS OUTLETS ALL OUTLETS SHALL BE MOUNTED VERTICALLY NULSESS OTHERWISE NOTED. COORDINATE ALL FINAL DEVICE REQUIREMENTS WITH ARCHITECT PRIOR TO INSTALLATION. 7. ALL CONDUITS SHOULD BE SUPPORTED IN COMPLIANCE WITH CODE REQUIREMENTS AND INSTALLED IN A MANNER AS TO AFFORD MINIMUM INTERFERENCE WITH OTHER TRADES. ALL CONDUITS ABOVE CELLURES OTHERWISE NOTED. COORDINATE ALL FINAL DEVICE NOTE THAT ARCHITECT PRIOR TO INSTALLATION. THE STRUCTURAL SAD BECK OF TRANINGS HALD BE REGIOLY SUPPORTED BY SUITABLE HANGERS FROM THE STRUCTURAL SAD BECK OF TRANINGS HALD BE REGIOLY SUPPORTED BY SUITABLE HANGERS FROM THE STRUCTURAL SAD BECK OF TRANINGS HALD BE PRIOR TO STATE ALL SHALL SPREVE SHOWN ARE FOR PEFERENCE ONLY TO COMMUNICATE DESIGN INTERCT. FOR DAMPINGS OF LESS AND 75°C COPPER CONDUCTOR TO THE CONTRACTOR SHALL CONDUITS SHALL BE PROVED BY SUITABLE AND PEFER AND SERVE AND SECRED AND ASSECRATIONS.
MATV MC	MASTER ANTENNA TELEVISION SYSTEM MECHANICAL CONTRACTOR							E4.0 ELECTRICAL RISER & SCHEDULES

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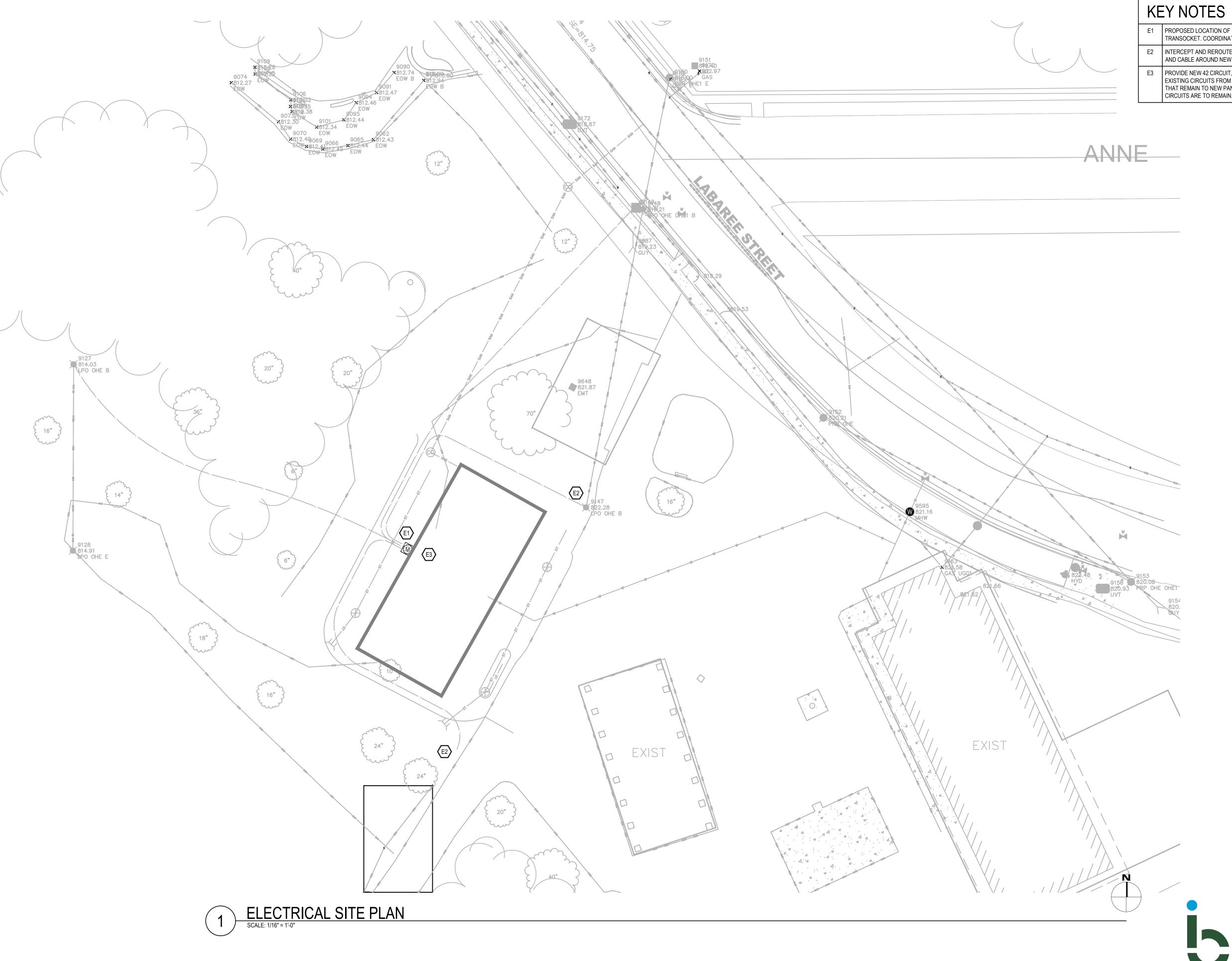
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- E1 PROPOSED LOCATION OF NEW 240V/120V, 100A SERVICE TRANSOCKET. COORDINATE WITH UTILITY.
- E2 INTERCEPT AND REROUTE EXISTING ELECTRICAL CONDUIT AND CABLE AROUND NEW BUILDING.
- PROVIDE NEW 42 CIRCUIT, 240/120V PANELBOARD. EXTEND EXISTING CIRCUITS FROM EXISTING PANEL BEING REMOVED THAT REMAIN TO NEW PANEL. VERIFY IN FIELD WHICH CIRCUITS ARE TO REMAIN.

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 \blacksquare Project Info. — 22005 —

Riverside Park Restrooms

New Construction

600 Labaree St Watertown, WI

Sheet Title —

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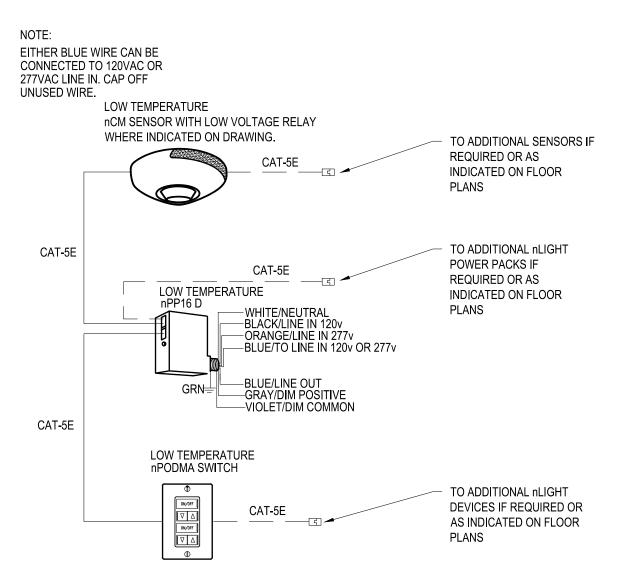
Description

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E1.0



TYPICAL nLIGHT 0-10V DIMMING WIRING DIAGRAM

MEN'S TOILE ROOM NORTI ROOM SOUTH €BU EX1 RR:3 O €BU WOMEN'S TOLLET ROOM NORTH WOMEN'S TOILET ROOM SOUTH CENTER CHASE 105 B RR:3 MEN'S TOILET ROOM ENTRY 102 RR:1 OS) FAMILY RESTROOM EBU RR:3 De EX1 €BU E8 RR:2 EX1

SHEET NOTES **KEY NOTES**

 EMERGENCY BATTERY UNITS SHALL BE CIRCUITED TO THE UNSWITCHED PORTION OF THE NEAREST LIGHTING BRANCH CIRCUIT SERVING THE IMMEDIATE AREA.

E4 MANUAL SWITCH IS TO SERVE LOCAL ELECTRICAL/MECHANICAL ROOM. SS6 IS TO OVERRIDE INTERIOR TOILET LIGHTS AND THE OTHER MANUAL PILOT SWITCH IS TO OVERRIDE EXTERIOR LIGHTS. SWITCHES SHALL BE LABELED INTERIOR LIGHTING AND EXTERIOR LIGHTING. SS6 SHALL BE 4 ZONE DIMMING SWITCH.

LIGHT FIXTURE TYPE A TO BE MOUNTED TO BOTTOM OF CEILING UNLESS INDICATED OTHERWISE. PROVIDE AUXILIARY CONTACT FOR FAN CONTROL. SWITCH DOES NOT CONTROL FAN.

E7 ZONE LOW VOLTAGE SWITCH, ONE CONTROL FOR EACH TOILET ROOM.

E8 BOTTOM OF FIXTURE SHALL BE 80" AFF.

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E2.0

ELECTRICAL LIGHTING FLOOR PLAN

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

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R-R:8 TP GFI SOUTH CHASE 101 *O*′ 1 MEN'S TOILET ROOM SOUTH WOMEN'S TOILET ROOM NORTH WOMEN'S TOILET ROOM SOUTH 48" TP GF R-R:2 **P** 48" TP GFI P R-R:2 CENTER CHASE 105 GFI 48" R-R:4 NORTH CHASE MEN'S TOILE B ROOM ENTRY E3 RR I (E10) FAMILY RESTROOM WOMEN'S TOILET ROOM ENTRY 106 48" TP GFI R-R:6 48" ΤΡ GFI R-R:4 Φ GFI R-R:8 TP WP ⊕ GFI R-R:8 TP WP

ELECTRICAL POWER & SYSTEMS FLOOR PLAN

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

KEY NOTES

- E3 PROVIDE NEW 42 CIRCUIT, 240/120V PANELBOARD. EXTEND EXISTING CIRCUITS FROM EXISTING PANEL BEING REMOVED THAT REMAIN TO NEW PANEL. VERIFY IN FIELD WHICH CIRCUITS ARE TO REMAIN.
- E10 PROPOSED LOCATION OF GROUND BAR LOCATED ABOVE PANEL.

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ELECTRICAL POWER & SYSTEMS FLOOR PLAN

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E3.0

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PAN	EL NA	ME:	R-R										
	LO	CATION:	ELECTRICAL			VOLTS:	120/240		AIC RATING:		10,000		
	SUPPL	Y FROM:	UTILITY			PHASES:	1		MAINS TYPE:		MCB		
	MO	UNTING:	SURFACE			WIRES:	3		BUS RATING:		200A		
	ENCL	LOSURE:	NEMA 250 TYPE 4						MCB RATING:		150A		
POLE NO.	POLES	AMP	DESCRIPTION	NOTES	A		В		DESRIPTION	NOTES	AMP	POLES	POLE NO.
1	1	20	LIGHTS		920	540			RECPT - RR		20	1	2
3	1	20	EXHAUST FAN 4 AND LIGHTS				531	540	RECPT - ELECTRICAL ROOM/PLUMBING CHASE		20	1	4
5	1	20	RECPT - RR		410	360			RECPT - FAMILY RR/MOTHERS ROOM		20	1	6
7	1	20	EXHAUST FAN 1,5				700	540	RECPT - OUTSIDE		20	1	8
9	1	20	EXHAUST FAN 2,3		700	2400			HAND DRYER	1	25	1	10
11	1	20	SPARE					2400	HAND DRYER	1	25	1	12
13	1	20	RECIRCULATION PUMP		55	2400			HAND DRYER	1	25	1	14
15	2	50	WATER HEATER				4800	2400	HAND DRYER	1	25	1	16
17	=	H	-		4800	2400			HAND DRYER	1	25	1	18
19	1	20	SPARE					2400	HAND DRYER	1	25	1	20
21	1	20	SPARE						SPARE		20	1	22
23	1	20	SPARE						SPARE		20	1	24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41			PULLET TOTAL			1005							42
			PHASE TOTAL:		14	1985	143	11					
			TOTAL LOAD:			29	296						
NOTES:													

 GFI BREAKER 2. SHUNT TRIP BREAKER

	MOTOR WIRING SCHEDULE											
NO.	LOAD DESCRIPTION	LOC.	HP	FLA	VOLT	PH.	FEED FROM		BREAKER		SEE NOTE	
							PANEL	CIRCUIT	SIZE	POLE		
1	EF-1	WOMEN	1/4	3.8	120	1	RR	7	20	1	1,3	
2	EF-2	MEN	1/4	3.8	120	1	RR	9	20	1	1,3	
3	EF-3	FAMILY		0.1	120	1	RR	9	20	1	1.3	
4	EF-4	JANITOR		0.1	120	1	RR	3	20	1	2,3	
5	EF-5	MOTHER		0.1	120	1	RR	7	20	1	1,3	

- A. ELECTRICAL CONTRACTOR TO PROVIDE PROPERLY RATED FUSED DISCONNECT FUSED PER EQUIPMENT NAMEPLATE WITHIN SIGHT OF EQUIPMENT, UNLESS OTHERWISE NOTED IN THE MECHANICAL DRAWINGS.
- B. REFER TO MECHANICAL SHEETS FOR TYPE OF CONTROLLERS PROVIDED WITH THE HVAC EQUIPMETNT. CONTROLLER TO BE WIRED BY EC UNLESS INDICATED OTHERWISE.
- 1. EXHAUST FANS ARE CONTROLLED VIA CONTACT IN COMBINATION OCCUPANCY/DAYLIGHT SENSOR.
- 2. EXHAUST FANS ARE CONTROLLED ON/OFF WITH LIGHT SWITCH
- 3. PROVIDE NON FUSED DISCONNECT SWITCH

	SPECIAL PURPOSE OUTLET SCHEDULE											
NO.	LOAD DESCRIPTION	LOCATION	KW	FLA	VOLT	PH	FEED F	ROM	BREA	KER	OUTLET	SEE
							PANEL	CKT	SIZE	POLE	0011221	NOTE
1	HAND DRYER	MENS	2.4	20	120	1	RR	10	25	1	DIRECT	
2	HAND DRYER	MENS	2.4	20	120	1	RR	12	25	1	DIRECT	
3	HAND DRYER	MENS	2.4	20	120	1	RR	14	25	1	DIRECT	
4	HAND DRYER	WOMENS	2.4	20	120	1	RR	16	25	1	DIRECT	
5	HAND DRYER	WOMENS	2.4	20	120	1	RR	18	25	1	DIRECT	
6	HAND DRYER	WOMENS	2.4	20	120	1	RR	20	25	1	DIRECT	
7	RECIRCULATION PUMP	ELEC/MECH	0.055	-	120	1	RR	13	20	1	DIRECT	2
8	WATER HEATER	ELEC/MECH	9.5		240	1	RR	15,17	50	2	DIRECT	1

- A. REFER TO EQUIPMENT DATA SHEET FOR ADDITIONAL INFORMATION. B. COORDINATE WITH EQUIPMENT SUPPLIER FOR INSTALLATION REQUIREMENTS.
- C. FOR DIRECT CONNECTED EQUIPMENT, TERMINATE EQUIPMENT WIRING IN A JUNCTION BOX WITH PROPERLY RATED WIRE NUTS.

1. PROVIDE A FUSED DISCONNECT FUSED PER EQUIPMENT NAME PLATE.

2. PROVIDE A PILOT LIGHT DISCONNECT TO ILLUMINATE WHEN PUMP IS ENERGIZED.

	LIGHTING FIXTURE SCHEDULE											
FIXT.	T. DESCRIPTION		LAMPING		VOLT	MANUFACTURER	CATALOG NUMBER	MOUNTING	SEE NOTE			
		NO.	TYPE	INPUT	1							
Α	SURFACE MOUNT STRIP LIGHT		2923 LUMEN, 4000K LED	44.5	120	COOPER	FVS4-P-4-LD4-1-HI-40-120-OPL-EDD1	SURFACE				
В	WALL MOUNT STRIP LIGHT		2923 LUMEN, 4000K LED	44.5	120	COOPER	FVS4-WP-4-LD4-1-HI-40-120-OPL-EDD1	SURFACE				
EX1	EXTERIOR WALL MOUNT		3500 LUMEN, 4000K LED	25	UNV	HUBBELL	RWL1-48L-25-4K7-3-PC	SURFACE				
EBU	EMERGENCY BATTERY UNIT		LED W/ UNIT	3	UNV	LITHONIA	AFO-W-MVOLT-N-SD-CW	SURFACE				

- A. CONTRACTOR SHALL CONFIRM CEILING TYPE REQUIREMENTS PRIOR TO THE RELEASE OF THE ORDER.
- B. CATALOG NUMBERS ARE TO PROVIDE GUIDANCE ONLY AND MAY NOT BE COMPLETE.
- C. FIXTURES SPECIFIED TO MEET DESIGN INTENT. EQUALS MAY BE SUBSTITUTED SUBJECT TO DESIGN TEAM'S APPROVAL.
- D. PROVIDE ALL PARTS AND PIECES NECESSARY FOR A COMPLETE AND FUNCTIONAL INSTALLATION. E. ARCHITECT TO DETERMINE ALL FINISHES.
- F. VERIFY DIMMING CONTROLS ARE COMPATIBLE WITH DIMMING DRIVER SELECTED FOR FIXTURE.

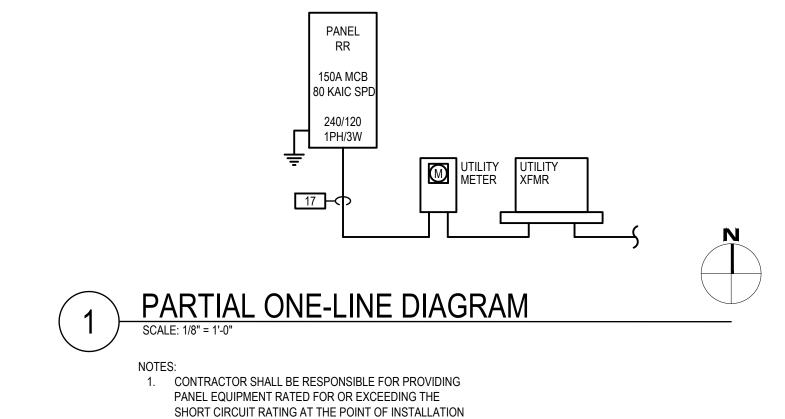
		SINGLE	PHASE, 2 WIRE	1 OR 3	THREE	PHASE, 4 WIRE	ALL	
id#	AMPS T	CND	PHASE	CND	PHASE	CND	PHASE	EQUIP. GRD.
		SIZE	CONDUCTORS	SIZE	CONDUCTORS	SIZE	CONDUCTORS	CONDUCTOR
1	10	3/4"	(2) #12	3/4"	(3) #12	3/4"	(4) #12	#12
2	15	3/4"	(2) #12	3/4"	(3) #12	3/4"	(4) #12	#12
3	20	3/4"	(2) #12	3/4"	(3) #12	3/4"	(4) #12	#12
4	25	3/4"	(2) #10	3/4"	(3) #10	3/4"	(4) #10	#10
5	30	3/4"	(2) #10	3/4"	(3) #10	3/4"	(4) #10	#10
6	35	3/4"	(2) #8	3/4"	(3) #8	1"	(4) #8	#10
7	40	3/4"	(2) #8	3/4"	(3) #8	1"	(4) #8	#10
8	45	3/4"	(2) #6	1"	(3) #6	1"	(4) #6	#10
9	50	3/4"	(2) #6	1"	(3) #6	1"	(4) #6	#10
10	60	1"	(2) #4	1"	(3) #4	1-1/4"	(4) #4	#10
11	70	1"	(2) #4	1-1/4"	(3) #4	1-1/4"	(4) #4	#8
12	80	1"	(2) #3	1-1/4"	(3) #3	1-1/4"	(4) #3	#8
13	90	1-1/4"	(2) #2	1-1/4"	(3) #2	1-1/2"	(4) #2	#8
14	100	1-1/4"	(2) #1	1-1/2"	(3) #1	1-1/2"	(4) #1	#8
15	110	1"	(2) #2	1-1/4"	(3) #2	1-1/2"	(4) #2	#6
16	125	1-1/4"	(2) #1	1-1/2"	(3) #1	1-1/2"	(4) #1	#6
17	150	1-1/4"	(2) #1/0	1-1/2"	(3) #1/0	2"	(4) #1/0	#6
18	175	N/A	N/A	2"	(3) #2/0	2"	(4) #2/0	#6
19	200	N/A	N/A	2"	(3) #3/0	2"	(4) #3/0	#6
20	225	N/A	N/A	2"	(3) #4/0	2-1/2"	(4) #4/0	#4
21	250	N/A	N/A	2-1/2"	(3) 250 kcmil	3"	(4) 250 kcmil	#4
22	300	N/A	N/A	3"	(3) 350 kcmil	3"	(4) 350 kcmil	#4
23	350	N/A	N/A	3"	(3) 500 kcmil	3-1/2"	(4) 500 kcmil	#3
24	400	N/A	N/A	(2) 2"	2 SETS OF (3) #3/0	(2) 2"	2 SETS OF (4) #3/0	#3
25	450	N/A	N/A	(2) 2"	2 SETS OF (3) #4/0	(2) 2-1/2"	2 SETS OF (4) #4/0	#2
26	500	N / A	N/A	(2) 2-1/2"	2 SETS OF (3) 250 kcmil	(2) 3"	2 SETS OF (4) 250 kcmil	#2
27	600	N/A	N/A	(2) 3"	2 SETS OF (3) 350 kcmil	(2) 3"	2 SETS OF (4) 350 kcmil	#1
28	700	N/A	N/A	(2) 3"	2 SETS OF (3) 500 kcmil	(2) 3-1/2"	2 SETS OF (4) 500 kcmil	#1/0
29	800	N/A	N/A	(3) 2-1/2"	3 SETS OF (3) 300 kcmil	(3) 3"	3 SETS OF (4) 300 kcmil	#1/0
30	900	N / A	N/A	(3) 3"	3 SETS OF (3) 350 kcmil	(3) 3"	3 SETS OF (4) 350 kcmil	#2/0
31	1000	N/A	N/A	(4) 2-1/2"	4 SETS OF (3) 250 kcmil	(4) 3"	4 SETS OF (4) 250 kcmil	#2/0
32	1200	N / A	N/A	(4) 3"	4 SETS OF (3) 350 kcmil	(4) 3"	4 SETS OF (4) 350 kcmil	#3/0
33	1600	N / A	N/A	(5) 3"	5 SETS OF (3) 400 kcmil	(5) 3"	5 SETS OF (4) 400 kcmil	#4/0
34	1800	N / A	N/A	(6) 3"	6 SETS OF (3) 350 kcmil	(6) 3"	6 SETS OF (4) 350 kcmil	250 kcmil
35	2000	N / A	N/A	(6) 3"	6 SETS OF (3) 500 kcmil	(6) 3-1/2"	6 SETS OF (4) 500 kcmil	250 kcmil
36	2500	N / A	N/A	(8) 3"	8 SETS OF (3) 400 kcmil	(8) 3"	8 SETS OF (4) 400 kcmil	350 kcmil

SCHEDULE BASED ON NEC TABLE 310.15(B)(16), 60 DEGREE CELSIUS CONDUCTOR 100 AMPS OR LESS AND 75 DEGREE CELSIUS CONDUCTOR GREATER THAN 100 AMPS. SIZES REFERENCED ARE MINIMUM. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CONDUCTOR SIZES TO ACCOMMODATE VOLTAGE DROP.

- SINGLE-PHASE, TWO-WIRE FEEDER, NUMBER IS THE FEEDER ID #

- SINGLE OR THREE-PHASE, THREE-WIRE FEEDER, NUMBER IS THE FEEDER ID #

- THREE PHASE, FOUR-WIRE FEEDER, NUMBER IS THE FEEDER ID#



AND PROVIDING ARC FLASH LABELS PER NEC.



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ELECTRICAL	RISER &	SCHEDULES	

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ELECTRICAL SPECIFICATIONS

SCOPE

APPLICABLE REQUIREMENTS OF CONDITIONS OF CONTRACT AND OF SECTIONS LISTED UNDER GENERAL REQUIREMENTS APPLY TO WORK OF THIS SECTION.

GENERAL PROVISIONS

- 2.1. IN GENERAL, THE WORK INCLUDES: ELECTRICAL WORK AND THE KINDRED MATERIALS AND OPERATIONS AS INDICATED ON THE DRAWINGS AND AS SPECIFIED IN THE FOLLOWING ARTICLES.
- JOB INFORMATION: OBTAIN AT BUILDING INCLUDING: CONDITIONS AFFECTING THIS SECTION OF THE WORK.
- 2.2.2. ACCESSIBILITY 2.2.3. STORAGE SPACE

GENERAL REQUIREMENTS

THIS SECTION OF THE SPECIFICATIONS APPLIES TO ALL ELECTRICAL WORK. THE FRONT END DOCUMENTS AND DIVISION 1 FORM A PART OF THESE SPECIFICATIONS AND THE CONTRACTOR SHALL CONSULT THEM IN DETAIL. ELECTRICAL WORK INDICATED IN OTHER SECTIONS OF THE SPECIFICATIONS TO BE DONE BY THE ELECTRICAL CONTRACTOR SHALL BE INCLUDED IN THE WORK OF THIS SECTION.

DEFINITIONS

- 4.1. CERTAIN TERMS USED HEREIN: ON THE DRAWINGS: AND IN THE CONTRACT DOCUMENTS, SHALL BE DEFINED AS FOLLOWS:
- PROVIDE: FURNISH AND INSTALL COMPLETE AND READY FOR SERVICE. 4.1.2. EXPOSED: EXPOSED TO VIEW IN ANY ROOM, HALLWAY, PASSAGEWAY, OR
- 4.1.3. APPROVAL: THE APPROVAL OF THE ARCHITECT IN WRITING OR BY SIGNED RUBBER STAMP APPLIED TO DRAWINGS, ILLUSTRATIONS, ETC.

INTENT OF DRAWINGS AND SPECIFICATIONS

OUTSIDE

THESE SPECIFICATIONS AND ATTENDANT DRAWINGS ARE INTENDED TO COVER A COMPLETE INSTALLATION OF SYSTEMS. THE OMISSION OF EXPRESSED REFERENCE TO ANY ITEM OF LABOR OR MATERIAL NECESSARY FOR THE PROPER EXECUTION OF THE WORK IN ACCORDANCE WITH PRESENT PRACTICES OF THE TRADE SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH ADDITIONAL LABOR AND MATERIALS.

DRAWINGS

- THE ELECTRICAL DRAWINGS DO NOT ATTEMPT TO SHOW THE COMPLETE DETAILS OF BUILDING CONSTRUCTION WHICH AFFECT THE ELECTRICAL INSTALLATION. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, CIVIL, STRUCTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL DETAILS WHICH AFFECT THE PROPER INSTALLATION OF THIS WORK.
- BRING ANY DISCREPANCIES TO THE ATTENTION OF THE A/E FOR RESOLUTION. THE CONTRACTOR IS CAUTIONED THAT DIAGRAMS SHOWING ELECTRICAL CONNECTIONS AND/OR CIRCUITING ARE DIAGRAMMATIC ONLY AND MUST NOT BE USED FOR OBTAINING LINEAL RUNS OF WIRE TO CONDUIT. WIRING DIAGRAMS DO NOT NECESSARILY SHOW THE EXACT PHYSICAL ARRANGEMENT OF THE EQUIPMENT.

MATERIAL AND EQUIPMENT

7.1. ALL MATERIAL AND EQUIPMENT SHALL BE NEW AND OF THE QUALITY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE, AND SHALL BE STANDARD PRODUCT OF REPUTABLE MANUFACTURERS. EACH MAJOR COMPONENT OF EQUIPMENT SHALL HAVE THE MANUFACTURER'S NAME, CATALOG NUMBER, AND CAPACITY OR RATING ON A NAMEPLATE, SECURELY AFFIXED ON THE EQUIPMENT IN A CONSPICUOUS PLACE.

SUBSTITUTION AND APPROVAL OF MATERIAL

SUCH REQUESTS SHALL BE ACCOMPANIED BY THREE COPIES OF ALL NECESSARY ILLUSTRATIONS, CUTS, DRAWINGS AND DESCRIPTIONS OF MATERIAL PROPOSED FOR SUBSTITUTION AND SHALL FULLY DESCRIBE ALL POINTS IN WHICH IT DIFFERS FROM THE ARTICLES SPECIFIED. TWO COPIES WILL BE RETAINED BY THE ARCHITECT AND ONE COPY RETURNED TO THE CONTRACTOR WITH APPROVAL OR REVISIONS INDICATED THEREON.

DAMAGE TO OTHER WORK

8.1. THE ELECTRICAL CONTRACTOR WILL BE HELD RIGIDLY RESPONSIBLE FOR ALL DAMAGES TO THE WORK OF HIS OWN OR ANY OTHER TRADE RESULTING FROM THE EXECUTION OF HIS WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ADEQUATELY PROTECT HIS WORK AT ALL TIMES. ALL DAMAGES RESULTING FROM HIS OPERATIONS SHALL BE REPAIRED OR THE DAMAGED PORTIONS REPLACED BY THE PARTY ORIGINALLY PERFORMING THE WORK, (TO THE ENTIRE SATISFACTION OF THE ARCHITECT), AND ALL COST THEREOF SHALL BE BORNE BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.

COOPERATION WITH OTHER TRADES

THIS CONTRACTOR SHALL COMPLETELY COOPERATE WITH ALL OTHER TRADES IN THE MATTER OF PLANNING AND EXECUTING OF THE WORK. EVERY REASONABLE EFFORT SHALL BE MADE TO PREVENT CONFLICT AND INTERFERENCES AS TO SPACE REQUIREMENTS, DIMENSIONS, LOCATIONS, OPENINGS, SLEEVING OR OTHER MATTERS WHICH TEND TO DELAY OR OBSTRUCT THE WORK OF ANY TRADE.

NEGLIGENCE

10.1. SHOULD THE CONTRACTOR FAIL TO PROVIDE MATERIALS, TEMPLATES, ETC., OR OTHER NECESSARY INFORMATION CAUSING DELAY OR EXPENSE TO ANOTHER PARTY, HE SHALL PAY THE ACTUAL AMOUNT OF THE DAMAGES TO THE PARTY WHO SUSTAINED THE LOSS.

FIELD CHANGES

SHOULD ANY CHANGE IN DRAWINGS OR SPECIFICATIONS BE REQUIRED TO COMPLY WITH LOCAL REGULATIONS AND/OR FIELD CONDITIONS, THE CONTRACTOR SHALL REFER SAME TO ARCHITECT FOR APPROVAL BEFORE ANY WORK WHICH DEVIATES FROM THE ORIGINAL REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS IS STARTED. IN THE EVENT OF DISAGREEMENTS AS TO THE NECESSITY OF SUCH CHANGES, THE DECISION OF THE ARCHITECT SHALL BE

2. CUTTING AND PATCHING

12.1. AS NECESSARY AND WITH APPROVAL TO PERMIT THE INSTALLATION OF CONDUIT OR ANY PART OF THE WORK UNDER THIS BRANCH. ANY COST CAUSED BY DEFECTIVE OR ILL-TIMED WORK SHALL BE BY THE PARTY RESPONSIBLE THEREFOR. PATCHING OF HOLES, OPENINGS, ETC. RESULTING FROM THE WORK OF THIS BRANCH SHALL BE FURNISHED BY THIS CONTRACTOR.

12.2. 1.1DEMOLITION, RENOVATION AND DISPOSITION OF EXISTING EQUIPMENT.

THIS CONTRACTOR SHALL NOTE THAT THE EXISTING BUILDING WILL REMAIN IN SERVICE DURING PORTIONS OF THE CONSTRUCTION PERIOD. AREAS OF THE BUILDING WILL BE VACATED AS REQUIRED TO FACILITATE CONSTRUCTION. THIS CONTRACTOR SHALL PROCEED WITH THE

COMPLETION OF HIS WORK IN SUCH A MANNER AS TO CAUSE THE LEAST POSSIBLE INTERFERENCE WITH THE OWNER'S OPERATION. ALL WORK REQUIRED IN THE EXISTING BUILDING SHALL BE DONE IN A MANNER AND TIME ACCEPTABLE TO THE OWNER. OUTAGES AND OTHER WORK RENDERING EXISTING EQUIPMENT INOPERATIVE SHALL BE HELD TO A MINIMUM - PRIOR ARRANGEMENTS FOR EACH SHALL BE MADE WITH THE OWNER AND SHALL BE ACCEPTABLE AS TO TIME AND DURATION

ELECTRICAL EQUIPMENT IN CONFLICT WITH CONSTRUCTION SHALL BE REMOVED AND/OR RELOCATED AS INDICATED ON THE DRAWINGS. AS DIRECTED OR REQUIRED. THIS CONTRACTOR SHALL REMOVE ALL ELECTRICAL EQUIPMENT RELEASED FROM SERVICE AS A RESULT OF CONSTRUCTION, AND NO EQUIPMENT REMOVED SHALL BE REUSED, EXCEPT AS SPECIFICALLY DIRECTED ON THE DRAWINGS OR ELSEWHERE HEREIN. THE OWNER SHALL HAVE THE PRIVILEGE TO RETAIN OWNERSHIP OF ANY ELECTRICAL EQUIPMENT THAT HAS BEEN REMOVED. AND ALL SUCH EQUIPMENT SHALL BE RELOCATED TO A DESIGNATED TEMPORARY LOCATION FOR STORAGE UNTIL REMOVED BY THE OWNER. ALL OTHER EQUIPMENT, CONDUIT, CONDUCTORS, AND MISCELLANEOUS HARDWARE REMOVED SHALL BECOME THE PROPERTY OF THIS CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORK OF OTHER TRADES AS MAY BE NECESSARY TO FACILITATE THE INSTALLATION OF ELECTRICAL WORK IN THE EXISTING BUILDING. SUCH WORK NECESSARY THAT IS NORMALLY DONE BY OTHER TRADES AND IS NOT COVERED AS A PART OF OTHER DIVISIONS OF THE WORK SHALL BE DONE UNDER THE DIRECTION AND AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.

THIS WORK SHALL INCLUDE BUT IS NOT LIMITED TO, CUTTING, PATCHING, AND REFINISHING AND ALL NECESSARY AND REQUIRED TO LEAVE EXISTING BUILDING IN ACCEPTABLLE CONDITION.

13. COMPLETION DATES

THIS CONTRACTOR SHALL BE IN A POSITION TO MEET ALL COMPLETION DATES ESTABLISHED BY THE ARCHITECT AND SHALL FURNISH ALL LABOR OF ALL CLASSES REQUIRED TO MEET SUCH SCHEDULES AND COMPLETION DATES.

14. STANDARDS, CODES AND PERMITS

- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH NATIONAL, STATE AND LOCAL ELECTRICAL CODES, LAWS, ORDINANCES AND REGULATIONS. COMPLY WITH ALL APPLICABLE OSHA REGULATIONS AND ALL REQUIREMENTS IMPOSED BY THE AUTHORITY HAVING JURISDICTION.
- ALL MATERIALS SHALL HAVE A U.L. LABEL WHERE A U.L. STANDARD AND/OR TEST
- PREPARE AND SUBMIT TO ALL AUTHORITIES HAVING JURISDICTION, FOR THEIR APPROVAL, ALL APPLICATIONS AND WORKING DRAWINGS REQUIRED BY THEM. SECURE AND PAY FOR ALL PERMITS AND LICENSES REQUIRED.

15.1. THIS CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM EXCESSIVE ACCUMULATION OF WASTE MATERIAL OR RUBBISH RESULTING FROM HIS WORK, INCLUDING TOOLS, SCAFFOLDING AND SURPLUS MATERIALS, AND HE SHALL LEAVE HIS WORK BROOM-CLEAN OR ITS EQUIVALENT. IN CASE OF DISPUTES, THE ARCHITECT MAY ORDER THE REMOVAL OF SUCH RUBBISH AND CHARGE THE COST TO THE RESPONSIBLE CONTRACTOR AS DETERMINED BY THE ARCHITECT. AT THE TIME OF FINAL CLEAN-UP ALL FIXTURES AND EQUIPMENT SHALL BE THOROUGHLY CLEANED AND LEFT IN PROPER CONDITION FOR THEIR INTENDED USE.

16. TESTS

GENERAL: THE CONTRACTOR SHALL PROVIDE ALL INSTRUMENTATION, LABOR AND CONDUCT ALL TESTS REQUIRED BY THE ARCHITECT AND ENGINEER. ALL TESTS SHALL BE MADE BEFORE ANY CIRCUIT OR ITEM OF EQUIPMENT IS PERMANENTLY ENERGIZED. CIRCUITS SHALL BE PHASED OUT AND LOADS SHALL BE DISTRIBUTED AS EVENLY AS POSSIBLE ON ALL PHASES. ALL PHASE CONDUCTORS SHALL BE ENTIRELY FREE FROM GROUNDS AND SHORT CIRCUITS. ALL INSTRUMENTATION AND PERSONNEL REQUIRED FOR TESTING SHALL BE PROVIDED BY THE CONTRACTOR AND ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE ARCHITECT OR HIS AUTHORIZED REPRESENTATIVE.

SYSTEM TESTS:

THE FOLLOWING TESTS ARE REQUIRED PRIOR TO ENERGIZATION OF THE **ELECTRICAL SYSTEM**

SERVICE AND BUILDING GROUND TESTS.

SECONDARY FEEDERS SHALL HAVE AN INSULATION RESISTANCE TEST

UTILIZING A MEGGER APPLYING A TEST POTENTIAL OF 500 VOLTS DC 16.1.1.3.

ESTABLISH SECONDARY PHASE TO GROUND VOLTAGES. 16.1.1.4. SET TRANSFORMER TAPS TO DELIVER NOMINAL RATED VOLTAGE.

ESTABLISH PROPER PHASE RELATIONSHIP AND MOTOR ROTATION. 16.1.1.5. 16.2. THE FOLLOWING TESTS ARE REQUIRED UNDER NORMAL LOAD CONDITION:

RECORD SECONDARY PHASE TO PHASE AND PHASE TO GROUND VOLTAGES AND PHASE CURRENTS AT ALL MAJOR EQUIPMENT, APPARATUS, AND ON ALL SECONDARY FEEDERS. VOLTAGE READINGS SHALL BE TAKEN AT LINE SIDE

TERMINALS OF DISTRIBUTION CENTERS AND PANELBOARDS. CONFIRM PROPER PHASE RELATIONSHIP AND MOTOR ROTATION. 16.2.2. CONFIRM LOAD BALANCE AT DISTRIBUTION CENTERS AND PANELS. REBALANCE LOAD IF NECESSARY SUCH THAT THE MINIMUM UNBALANCE

BETWEEN PHASES SHALL NOT EXCEED 7-1/2%. RESET TRANSFORMER TAPS IF NECESSARY TO DELIVER NOMINAL RATED VOLTAGE. IDENTIFY FINAL TAP SETTINGS ON TRANSFORMERS NAMEPLATES.

CONFIRM OPERATION OF ALL ELECTRICALLY OPERATED APPARATUS, SUCH AS CIRCUIT BREAKERS, TRANSFER SWITCHES, ETC., BY EXERCISING SAME UNDER LOAD.

CONFIRM VOLTAGE DROP DOES NOT EXCEED NEC STANDARDS.

RECORD ALL SETTINGS AND CALIBRATIONS OF CIRCUIT BREAKERS, TRANSFER SWITCHES, TRANSFORMERS, METERS, TIMING DEVICES, ETC.

RECORDS: ALL TEST DATA OBTAINED BY THE PEC OR MANUFACTURER/SUPPLIER SHALL BE RECORDED AND FILED WITH THE MAINTENANCE MANUAL AS PART OF PERMANENT JOB RECORDS. TEST DATA SHALL INCLUDE IDENTIFICATION OF INSTRUMENTS EMPLOYED, (FIELD TEST ONLY) CONDITION OF TEST (TIME, DATE, WEATHER, ETC.), PARAMETERS OF TEST, PERSONNEL CONDUCTING TEST, AND ANY PERTINENT INFORMATION OR CONDITIONS NOTED DURING THE TEST.

17. SHOP DRAWINGS

SUBMIT TO ENGINEER FOR REVIEW, COPIES OF MANUFACTURER'S SHOP

DRAWINGS AND/OR EQUIPMENT BROCHURE DEPICTING: LIGHTING FIXTURES AND CONTROLS

PANELBOARDS

ENCLOSED CONTROLLERS, STARTERS AND DISCONNECTS

OVERCURRENT PROTECTION, BREAKERS AND FUSES 17.4.5. LIGHTING CONTROL PANEL

17.4.6. OTHER MATERIALS AS SELECTED BY THE ENGINEER.

17.5. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP INDICATING APPROVAL ANY EQUIPMENT FABRICATION PRIOR TO SHOP DRAWING REVIEW SHALL BE AT THE CONTRACTOR'S RISK.

WORKMANSHIP

THE INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS WILL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION, AND SHALL BE LEFT WITH ALL EQUIPMENT PROPERLY ADJUSTED AND IN WORKING ORDER. THE WORK SHALL BE EXECUTED IN CONFORMITY WITH THE BEST ACCEPTED STANDARD PRACTICE OF THE TRADE SO AS TO CONTRIBUTE TO EFFICIENCY AND APPEARANCE. IT SHALL ALSO BE EXECUTED SO THAT THE INSTALLATION WILL CONFORM AND ADJUST ITSELF TO THE BUILDING STRUCTURE, ITS EQUIPMENT AND ITS USAGE.

19. DRAWINGS OF OTHER TRADES

THE CONTRACTOR SHALL CONSULT THE DRAWINGS OF THE WORK FOR THE VARIOUS OTHER TRADES; FIELD LAYOUTS OF THE PARTIES PERFORMING THE WORK OF THE OTHER TRADES: THEIR SHOP DRAWINGS, AND HE SHALL BE GOVERNED ACCORDINGLY IN LAYING OUT HIS WORK

SPECIFICALLY EXAMINE SHOP DRAWINGS TO CONFIRM VOLTAGE, CURRENT CHARACTERISTICS, AND OTHER WIRING REQUIREMENTS FOR UTILIZATION EQUIPMENT. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE A/E.

20. FIELD MEASUREMENTS

THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY FOR HIS WORK AND SHALL ASSUME THE FULL RESPONSIBILITY FOR THEIR ACCURACY.

21. STRUCTURAL INTERFERENCES

21.1. SHOULD ANY STRUCTURAL INTERFERENCES PREVENT THE INSTALLATION OF THE OUTLETS, RUNNING OF CONDUITS, ETC., AT POINTS SHOWN ON DRAWINGS, THE NECESSARY MINOR DEVIATIONS THEREFROM, AS DETERMINED BY THE ARCHITECT, MAY BE PERMITTED. MINOR CHANGES IN THE POSITION OF THE OUTLETS OR EQUIPMENT IF DECIDED UPON BEFORE ANY WORK HAS BEEN DONE BY THE CONTRACTOR SHALL BE MADE WITHOUT ADDITIONAL CHARGE.

22. EXAMINATION OF PLANS, SPECIFICATIONS AND SITE

22.1. BEFORE SUBMITTING A BID, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL FEATURES OF THE BUILDING AND SITE WHICH MAY AFFECT THE EXECUTION OF HIS WORK, NO EXTRA PAYMENT WILL BE ALLOWED FOR THE FAILURE TO OBTAIN THIS INFORMATION. IF IN THE OPINION OF THE CONTRACTOR THERE ARE OMISSIONS OR ERRORS IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CLARIFY THESE POINTS WITH THE ARCHITECT BEFORE SUBMITTING HIS BID. IN LIEU OF WRITTEN CLARIFICATION BY ADDENDUM, RESOLVE ALL CONFLICTS IN FAVOR OF THE GREATER QUANTITY OR BETTER QUALITY.

23. GUARANTEE

THE CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE HIS WORK AND ALL COMPONENTS THEREOF, EXCLUDING LAMPS, FOR A PERIOD OF ONE YEAR FROM THE DATE OF HIS FINAL PAYMENT. HE SHALL REMEDY ANY DEFECTS IN WORKMANSHIP AND REPAIR OR REPLACE ANY FAULTY EQUIPMENT WHICH SHALL APPEAR WITHIN THE GUARANTEE PERIOD TO THE ENTIRE SATISFACTION OF THE ARCHITECT AT NO ADDITIONAL CHARGE.

24. ELECTRICAL SYSTEM

PROVIDE ELECTRICAL DISTRIBUTION SYSTEMS AS INDICATED ON THE DRAWINGS WITH ALL NECESSARY BRANCH CIRCUIT WIRING AND ASSOCIATED EQUIPMENT AS SPECIFIED HEREINAFTER OR ON INSTALLATION.

PROVIDE ALL CIRCUIT WIRING FOR COOLING AND VENTILATING EQUIPMENT INCLUDING THE FINAL ELECTRICAL CONNECTION TO ALL LINE VOLTAGE

PROVIDE LIGHTING FIXTURES AND LAMPS AS DESCRIBED IN LIGHTING FIXTURE SCHEDULE. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A COMPLETE AND

25. CONDUIT

25.1. PROVIDE A COMPLETE CONDUIT SYSTEM AS REQUIRED TO PROVIDE CIRCUITING AND SWITCH ARRANGEMENTS AS SHOWN ON THE PLANS.

CONDUIT SIZES SHALL BE AS REQUIRED BY CODE. 25.3. CONDUITS SHALL BE CONCEALED EXCEPT IN MECHANICAL OR STORAGE ROOMS.

ANY EXCEPTIONS ARE NOTED ON THE DRAWINGS. 25.4. CONDUITS EXPOSED TO THE EXTERIOR SHALL BE RIGID HEAVY WALL GALVANIZED STEEL OR I.M.C. ALL CONDUIT IN CONCRETE OR UNDERGROUND SHALL BE RIGID STEEL. I.M.C., OR SCHEDULE 40 PVC CONTAINING A GREEN GROUND WIRE SIZED

FLEXIBLE METAL CONDUIT SHALL BE 1/2" MINIMUM NOMINAL TRADE SIZE. LENGTH SHALL NOT EXCEED 24" FOR CONNECTION TO MOTORIZED EQUIPMENT. GROUNDED LIQUID TIGHT WHERE EXPOSED TO WATER. ADD GREEN GROUND WIRE TO JUMP FLEXIBLE CONDUIT FOR ALL MOTORS. FLEXIBLE METAL CONDUIT MAY ONLY BE USED FOR FINAL CONNECTION TO MOTORS AND LIGHTING FIXTURES ABOVE SUSPENDED CEILINGS.

26. COUPLINGS, CONNECTORS AND FITTINGS

OPERATIONAL SYSTEM.

26.1. USE STANDARD STEEL ITEMS TO PROPERLY ATTACH CONDUITS, OUTLET BOXES, PULL BOXES, CABINETS, ETC., TO PROVIDE A COMPLETE RACEWAY SYSTEM, USE COMPRESSION OR SET SCREWS TYPE FITTINGS. ALL CONNECTORS SHALL HAVE INSULATED THROATS; INDENTATION TYPE, DIECAST, AND PUSH-ON TYPE FITTINGS ARE NOT ACCEPTABLE. BUSHING FOR RIGID H.W. CONDUIT SHALL BE REINFORCED INSULATED TYPE USED WITH DOUBLE LOCKNUTS.

27. OUTLET BOXES

27.1. PROVIDE OUTLET BOXES BY APPLETON, STEEL CITY, OR EQUAL AS REQUIRED TO ACCOMMODATE THE DEVICE INDICATED BY SYMBOL ON THE DRAWINGS, SIZED IN ACCORDANCE WITH CODE, WITH THE FOLLOWING MINIMUM REQUIREMENTS.

OUTLET BOXES SHALL BE DIE FORMED, GALVANIZED AND SECURELY FASTENED IN

PLACE PLUMB AND LEVEL WITH ADJACENT CONSTRUCTION NOT DEPENDENT UPON MULTI-GANG DIE FORMED BOXES SHALL BE PROVIDED FOR ALL DEVICES INDICATED ADJACENT TO ONE ANOTHER ON THE PLANS.

28. PULL BOXES AND JUNCTION BOXES

28.1. PROVIDE AS REQUIRED BY CODE, OF CODE GAUGE STEEL IN SIZES AS REQUIRED BY THE CODE. COVERS SHALL BE OF THE SAME MATERIAL FASTENED WITH BRASS MACHINE SCREWS. BOXES AND COVERS SHALL HAVE GALVANIZED FINISH AND THEY SHALL BE SECURELY FASTENED TO STRUCTURAL MEMBERS.

29. CONDUCTORS

29.1. CONDUCTORS SHALL BE NEW SOFT DRAWN COPPER. NO. 8 AND LARGER SHALL BE STRANDED; NO. 12 SHALL BE MINIMUM SIZE UNLESS OTHERWISE INDICATED, WITH 600 VOLT INSULATION, COLOR-CODED AS REQUIRED BY CODE. WIRE MUST BE DELIVERED TO JOB SITE IN ORIGINAL CARTONS.

WIRE AND CABLE FOR GENERAL INTERIOR USE SHALL HAVE 600 VOLT INSULATION. SIZES SMALLER THAN NO. 8 SHALL COMPLY WITH CODE FOR TYPE THHN/THWN. SIZE NO. 8 AND LARGER SHALL COMPLY WITH CODE FOR TYPE THW.

30. WIRE JOINTS, SPLICES AND CONNECTORS

BRANCH LIGHTING CIRCUITS NO. 10 AND SMALLER SHALL BE SCOTCHLOCK TYPE H SPRING COMPRESSION CONNECTOR AS MANUFACTURED BY MINNESOTA MINING AND MANUFACTURING CO. OR PIGGY PIGTAILS AS MANUFACTURED BY THOMAS AND BETTS MANUFACTURING CO.

30.2. FEEDER AND POWER WIRING: MECHANICAL TYPE LUGS AND CONNECTORS ON

SIZES NO. 8 AND LARGER. INSULATION: USE ONE HALF-LAPPED OKONITE RUBBER TAPE OR SCOTCH #33 AND COMPLY WITH ALL CODE REQUIREMENTS.

31. ELECTRICAL SERVICE

PROVIDE (2) NEW ELECTRICAL SERVICE AT 120/208V, 3 PHASE, 4 WIRE AS

INDICATED ON CONSTRUCTION DOCUMENTS. MARKERS AS MANUFACTURED BY BRADY CO COORDINATE ALL ASPECTS OF THE SERVICE WITH THE ELECTRIC UTILITY AND THIS IDENTIFICATION SHALL INCLUDE BRANCH CIRCUIT NUMBER, CONTROL COMPLY WITH ALL THEIR REQUIREMENTS.

31.3. COST OF SERVICE BY OWNER.

32. GROUNDING

33. BRANCH CIRCUIT WIRING

COMPLETE RACEWAY SYSTEM SHALL BE GROUNDED SO GROUND WILL BE ELECTRICALLY CONTINUOUS FROM SOURCE TO ALL OUTLET BOXES AND

PROVIDE BONDING CONDUCTORS AS REQUIRED TO SECURELY GROUND ALL ELECTRICAL EQUIPMENT ENCLOSURES, INCLUDING LIGHTING FIXTURES IF THEY HAVE METALLIC HOUSING AND ARE CORD CONNECTED.

FLEXIBLE METAL CONDUIT MUST BE JUMPERED WITH A GREEN GROUNDING

GROUND SERVICE PER CODE.

SEE PLANS FOR GENERAL ARRANGEMENT OF CIRCUITS, CONDUIT RUNS, AND RATINGS OF BRANCH CIRCUITS AND SPECIAL CIRCUITS.

PROVIDE EVERYTHING NECESSARY TO COMPLY WITH THE GENERAL SCHEME SHOWN, INCLUDING ALL TYPES OF CONTROL. CIRCUIT NUMBERS AS SHOWN ON PLANS ARE FOR CONTRACTOR TO PLAN HIS WIRING AND FOR ESTIMATING PURPOSES. THESE NUMBERS ARE NOT NECESSARILY CONSECUTIVE NUMBERS OF THE PANELBOARD BREAKERS.

OF CIRCUITS. BALANCE LOADING TO WITHIN 7 1/2%. MINIMUM SIZE OF LIGHTING SYSTEM BRANCH CIRCUIT CONDUCTORS TO BE #12

BALANCED LOAD ON BUS IS TO BE THE DETERMINING FACTOR IN ARRANGEMENT

CONDUCTORS TERMINATING AT WIRED OUTLETS SHALL EXTEND AT LEAST EIGHT (8) INCHES BEYOND OUTLET BOX CONDUIT FITTING.

120 VOLT CIRCUIT HOME RUNS GREATER THAN 100 FEET IN LENGTH SHALL HAVE 33.6. #10 AWG MINIMUM SIZE BETWEEN PANEL AND FIRST RECEPTACLE OR FIXTURE OUTLET.

33.7. CIRCUIT BREAKERS:

33.7.1. PANEL-MOUNTED CIRCUIT BREAKERS SHALL BE SINGLE-POLE AND MULTI-POLE COMMON TRIP, QUICK-MAKE AND QUICK-BREAK OVER CENTER TOGGLE TYPE SWITCHING MECHANISM ARRANGED FOR MANUAL AND AUTOMATIC OPERATION WITH THERMAL MAGNETIC TRIP ELEMENT FREE FROM HANDLE WITH AMPERE RATING AND BREAKER POSITIONS, I.E., ON, OFF, AND TRIP CLEARLY VISIBLE, MINIMUM 10,000 A,I,C, OR AS OTHERWISE INDICATED ON DRAWINGS OR REQUIRED TO MEET THE MAXIMUM FAULT CURRENT WHERE INSTALLED IN THE ELECTRICAL SYSTEM. PLUG-ON BREAKERS SHALL BE ACCEPTABLE.

CIRCUIT BREAKERS SHALL BE U.L. LISTED AND SHALL CONFORM WITH THE LATEST APPLICABLE NEMA STANDARDS.

CIRCUIT DIRECTORIES: FURNISH AND INSTALL IN DIRECTORY FRAME ON INSIDE OF DOOR OF EACH PANEL CABINET A TYPEWRITTEN DIRECTORY IDENTIFYING EACH

34. DISCONNECT SWITCHES

PROVIDE HEAVY DUTY FUSIBLE TYPE DISCONNECT SWITCHES OF TYPES SCHEDULES AT LOCATIONS SHOWN ON THE DRAWINGS.

IN ADDITION, PROVIDE OTHER DISCONNECT SWITCHES AS NECESSARY AND REQUIRED WITH POLES AND VOLTAGE RATINGS AS REQUIRED FOR THE APPLICATION DISCONNECT SWITCHES SHALL BE HEAVY DUTY SWITCH OPERATED TYPE WITH

COVER INTERLOCK AND ENCLOSED ARC CHAMBER, QUICK-MAKE AND QUICK-BREAK AND PROVISION FOR PADLOCKING IN EITHER THE OPEN OR CLOSED POSITION. ALL HEAVY DUTY, SAFETY SWITCHES 30-600A, SHALL BE PROVIDED WITH CLASS R REJECTION STYLE FUSE CLIPS. THE COMBINATION RATING OF THE HEAVY DUTY SWITCH AND R FUSE_SHALL BE 200.000 SYMMETRICAL AMPS AND LABELED AS SUCH. APPROVED MANUFACTURERS: SQUARE D AND EATON/CUTLER-HAMMER.

SEE "MOTOR WIRING" OF THESE SPECIFICATIONS AS TO REQUIREMENTS PERTAINING TO MOTOR DISCONNECT SWITCHES AND FURNISH AND INSTALL SAME IN ACCORDANCE WITH REQUIREMENTS THEREIN.

35. LIGHTING FIXTURES, LAMPS AND BALLASTS

35.1. GENERAL: 35.1.1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL LIGHT FIXTURES AS SHOWN ON THE DRAWINGS.

THE APPROXIMATE LOCATION OF LIGHTING FIXTURES IS SHOWN ON THE

DRAWINGS. THE EXACT LOCATION SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD. THE FIXTURE TYPES THAT SHALL BE INSTALLED ARE DEPICTED ON THE DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL FURTHER EXAMINE ALL CONSTRUCTION AND SUPPLY ALL REQUIRED ACCESSORIES TO HANG THE

THE CONTRACTOR SHALL VERIFY CEILING TYPES AND PROVIDE COMPATIBLE FIXTURES. CONFIRM LOCATION WITH ARCHITECTURAL REFLECTED CEILING

ALL FIXTURES IN LAY-IN CEILING SHALL RECEIVE THEIR FINAL CONNECTION VIA A 6'-0" LENGTH OF FLEXIBLE METALLIC CONDUIT TO PERMIT RELOCATION.

ALL OUTDOOR DRIVERS SHALL BE DESIGNED FOR OPERATION DOWN TO MINUS 20

36. IDENTIFICATION 36.1. GENERAL:

36.1.1.

37.2.2

MATERIALS AND EQUIPMENT INSTALLED UNDER THIS SECTION SHALL BE CLEARLY IDENTIFIED AS LISTED BELOW.

LOCATE IDENTIFICATION CONSPICUOUSLY.

TERMINOLOGY IS TO BE APPROVED BY ARCHITECT. 36.1.3.

36.1.4. SEE PLANS FOR ANY ADDITIONAL ITEMS TO BE IDENTIFIED. 36.1.5. LOADS SUCH AS MOTORS SHALL BE DESCRIBED BY FUNCTION RATHER THAN BY THE SYSTEM OR BY ARBITRARY NUMBER AS SHOWN ON ELECTRICAL

SECURELY FASTENED TO THE FOLLOWING EQUIPMENT. SIZE 1" X 4" WITH 3/8" HIGH

EACH END OF EMPTY CONDUIT RUNS TO INDICATE THE INTENDED USE OF

THE CONDUIT AND THE LOCATION OF OPPOSITE END. USE ROOM NUMBERS

36.1.6. USE ABBREVIATIONS SPARINGLY 36.2. LAMINATED BAKELITE PLATES: ENGRAVED PLASTIC NAMEPLATE SHALL BE

THAT ARE PERMANENTLY ASSIGNED.

LETTERS; UNLESS SPACE AVAILABLE DICTATES DIFFERENTLY. EACH PANELBOARD, CONTACTOR, TIME SWITCH, STARTER OR DISCONNECT SWITCH. LOCATE ON INSIDE COVER OF PANELS. EACH FEEDER AT ALL ACCESSIBLE LOCATIONS.

TYPEWRITTEN DIRECTORY: EACH PANELBOARD SHALL BE PROVIDED WITH A TYPEWRITTEN DIRECTORY ATTACHED TO THE INSIDE OF PANEL DOOR AND COVERED WITH CLEAR PLASTIC INDICATING LOAD SERVED AND ROOMS SERVED BY EACH PROTECTIVE DEVICE IN THE RESPECTIVE PANEL.

37.4. SWITCH STATION:

37.4.1. ALL SWITCHES SHALL BE ENGRAVED INDICATING CONTROLLED ITEM. 37.4.2. ALL REMOTE SWITCHES SHALL BE ENGRAVED INDICATING CONTROLLED

37.5. CONDUCTOR IDENTIFICATION:

IDENTIFY EACH CONDUCTOR AT EACH WIRING DEVICE, CONNECTOR OR SPLICE POINT WITH PERMANENTLY ATTACHED WRAP-AROUND ADHESIVE

CIRCUIT, OR ANY OTHER APPROPRIATE NUMBER OR LETTERING THAT WILL EXPEDITE FUTURE TRACING AND TROUBLE SHOOTING. MARK THE PANEL AND CIRCUIT NUMBER SERVING THE DEVICE ON THE BACK OF THE DEVICE COVERPLATE USING A PERMANENT MARKING SYSTEM THAT

DOES NOT SHOW THROUGH THE FRONT OF THE PLATE.

38. WIRING DEVICES

38.1. GENERAL AT EACH LOCATION SHOWN ON THE DRAWINGS, FURNISH AND INSTALL 38.1.1.

WIRING DEVICE AS INDICATED BY SYMBOL ON THE DRAWINGS. UNLESS OTHERWISE INDICATED, ALL WIRING DEVICES SHALL BE BY THE SAME MANUFACTURER, EITHER ARROW-HART-HEGEMAN, HUBBELL, PASS AND SEYMOUR, EAGLE, LEVITON, BRYANT OR SLATER. PASS AND SEYMOUR CATALOG NUMBERS ARE USED HEREIN TO DESIGNATE TYPE OF DEVICE REQUESTED. ALL WIRING DEVICES SHALL BE FEDERAL SPECIFICATION GRADE. IVORY DEVICES SHOWN - PROVIDE COLOR SELECTED BY ARCHITECT.

WRAP WIRING DEVICES WITH INSULATING TAPE BEFORE INSTALLING.

FOUR WAY - PASS AND SEYMOUR 20AC 4-I

38.2. LOCAL SWITCHES:

38.2.1.4.

38.2.1. IN GENERAL: SINGLE POLE - PASS AND SEYMOUR 20AC 1-I 38.2.1.1 38.2.1.2. DOUBLE POLE - PASS AND SEYMOUR 20AC 2-I 38.2.1.3. THREE WAY - PASS AND SEYMOUR 20AC 3-I

LOCK TYPE AS INDICATED BY SYMBOL ON THE DRAWINGS. 38.2.1.5. 38.2.1.6. ALL LOCAL SWITCHES CONTROLLING LIGHTS OR EQUIPMENT AT LOCATIONS OTHER THAN THE ROOM IN WHICH THE SWITCH IS LOCATED SHALL BE COMPLETE WITH RED NEON PILOT LAMP TO INDICATE THE ENERGIZED POSITION OF THE LIGHTS OR EQUIPMENT IN QUESTION. IN ADDITION, SWITCH PLATE SHALL BE ENGRAVED TO

IDENTIFY LIGHTS OR EQUIPMENT CONTROLLED. WALL SWITCH OCCUPANCY SENSOR SHALL BE nLIGHT 38.2.1.7 "WSX-PDT-LT-SSW" WITH PHOTO SENSOR OR EQUAL. NETWORK CEILING OCCUPANCY/DAYLIGHT SENSOR SYSTEM SHALL BE nLIGHT

SENSOR "nCM-PDT-10-RJB-ADCX-AR(WHERE INDICATED ON DRAWINGS)-LT":

SWITCH "nPODMA-4P-LT-SSW"; POWER PACK "nPP16-D-EFP-LT" OR EQUAL.

RECEPTACLES: ALL RECEPTACLES SHALL BE RATED FOR CAPACITY AND CHARACTERISTICS OF THE EQUIPMENT SERVICED AND SHALL BE COMPLETE WITH ONE ADDITIONAL POLE FOR GROUNDING. SELF-GROUNDING RECEPTACLES ARE NOT ACCEPTABLE. IVORY DEVICES ARE INDICATED. VERIFY COLOR DESIRED WITH

EACH ROOM SHALL HAVE A POWER PACK..

38.3.1. IN GENERAL 38.3.1.1 20 AMPERE, 125 VOLT DUPLEX - PASS AND SEYMOUR HBL 5352I 38.3.1.2 20 AMPERE, 125 VOLT DUPLEX, GFI - PASS AND SEYMOUR GFR 5352IL 38.3.1.3. 20 AMPERE, 125 VOLT DUPLEX, GFI, TAMPER RESISTANCE - PASS AND

SFYMOUR PT2097TRW 20 AMPERE, 125 VOLT DUPLEX, GFI, TAMPER RESISTANCE, WEATHER 38.3.1.4 RESISTANCE - PASS AND SEYMOUR 2097TRWRW PROVIDE WEATHER RESISTANT GFI RECEPTACLES AS INDICATED BY SYMBOL

ON DRAWINGS MOUNTED WITH CAST GASKETED WEATHERPROOF WHILE

"IN-USE". NON-METALLIC COVERS NOT ACCEPTABLE.

ARCHITECT.

COVER PLATES: 38.4. COVER PLATES SHALL BE SMOOTH THERMOSET PLASTIC IN COLOR AS

SELECTED BY ARCHITECT SEE IDENTIFICATION REQUIREMENTS OF THESE SPECIFICATIONS. SURFACE MOUNTED OUTLET BOXES - GALVANIZED STEEL SURFACE COVER WITH ROUNDED EDGES DESIGNED TO FIT FLUSH WITH OUTLET BOX.

39. LOCATIONS OF OUTLETS AND WIRING DEVICES

WIRING DEVICES: THE APPROXIMATE LOCATION OF WIRING DEVICES ARE INDICATED ON THE DRAWINGS; THE SPECIFIC LOCATIONS SHALL BE DETERMINED IN ACCORDANCE WITH "LOCATION OF OUTLETS" OF THESE SPECIFICATIONS

AND AS FOLLOWS. THIS SECTION IS REFERRED TO EQUIPMENT PLANS, EQUIPMENT SHOP DRAWINGS, ELEVATION DRAWINGS AND OTHER DETAIL OR DIMENSIONAL DRAWINGS. AND HE SHALL CONSULT WITH THE ARCHITECT BEFORE INSTALLATION OF OUTLET BOXES FOR WIRING DEVICES OR BEFORE PROCEEDING WITH ANY WORK DEPENDENT UPON THIS INFORMATION.

39.1.3. GENERALLY, WIRING DEVICES SHALL BE LOCATED AS FOLLOWS: WALL RECEPTACLES SHALL GENERALLY BE LOCATED 18" ABOVE THE 39.1.3.1. FINISHED FLOOR TO THE BOTTOM OF THE BOX AND 6" ABOVE SURFACE OF BUILT-IN COUNTERS AND TABLES WHERE SAME ABUTS WALL AND 4" ABOVE BACKSPLASHES IF COUNTERS ARE SO EQUIPPED.

SPECIAL PURPOSE RECEPTACLES SHALL BE LOCATED AS REQUIRED BY EQUIPMENT SERVED. SWITCHES SHALL BE LOCATED 48" ABOVE FINISHED FLOOR TO THE TOP OF THE BOX ON LATCH SIDE OF DOOR OPENING WITH EDGE OF PLATE NOT MORE THAN 12" FROM DOOR FRAME, EXCEPT AS NOTED ON

40. RECORD DOCUMENTS

OR DIGITAL COPY.

THE DRAWINGS.

CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN AS-BUILT RED-LINE DRAWINGS THROUGHOUT CONSTRUCTION TO DOCUMENT MODIFICATIONS MADE TO THE DESIGN INTENT REFLECTING INSTALLED CONDITIONS.

WITH DIGITAL RECORD DRAWINGS TO THE ARCHITECT AND ENGINEER AT

SUBSTANTIAL COMPLETION. DIGITAL RECORD DRAWINGS SHALL BE PROVIDED IN **AUTOCAD 2011 FILE FORMAT** CONTRACTOR SHALL ASSEMBLE DOCUMENTATION, INCLUDING BUT NOT LIMITED TO, APPROVED SUBMITTALS, MAINTENANCE MANUALS, INSTALLATION MANUALS, WARRANTIES. AND WIRING DIAGRAMS FOR THE SYSTEMS INSTALLED TO COMPILE AN OPERATIONS AND MAINTENANCE MANUAL. THE OPERATIONS AND MAINTENANCE MANUAL SHALL BE ASSEMBLED IN A THREE-RING HARD COVER BINDER, TABBED BY SYSTEM FOR EASY USE. CONTRACTOR SHALL PROVIDE ONE

COPY TO THE OWNER, ONE COPY TO THE ARCHITECT, AND ONE COPY TO THE

ENGINEER. IT IS THE OPTION OF EACH RECIPIENT TO BE PROVIDED HARD COPY

CONTRACTOR SHALL PROVIDE COLOR COPIES TO SCALE OF AS-BUILT DRAWINGS

41.1. CONTRACTOR SHALL PROVIDE TRAINING ON THE OPERATION AND MAINTENANCE REQUIRED OF EACH SYSTEM INSTALLED. TRAINING PROVIDED SHALL NOT BE LESS THAN FOUR HOURS FOR EACH SYSTEM, AND SHALL BE SCHEDULED AFTER SUBSTANTIAL COMPLETION. INDIVIDUAL RESPONSIBLE FOR TRAINING SHALL ALLOW FOR A MINIMUM OF TWO WEEKS NOTICE AND SHALL PROVIDE AN AGENDA. Architect 259 South Street, Suite A WAUKESHA, WI 53186

p: 833-380-6180

 \blacksquare Project Info. -22005 -

Riverside Park

New Construction

600 Labaree St Watertown, WI

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Revisions — No. Date Description 01.23.2024 | Bid & Permit Set

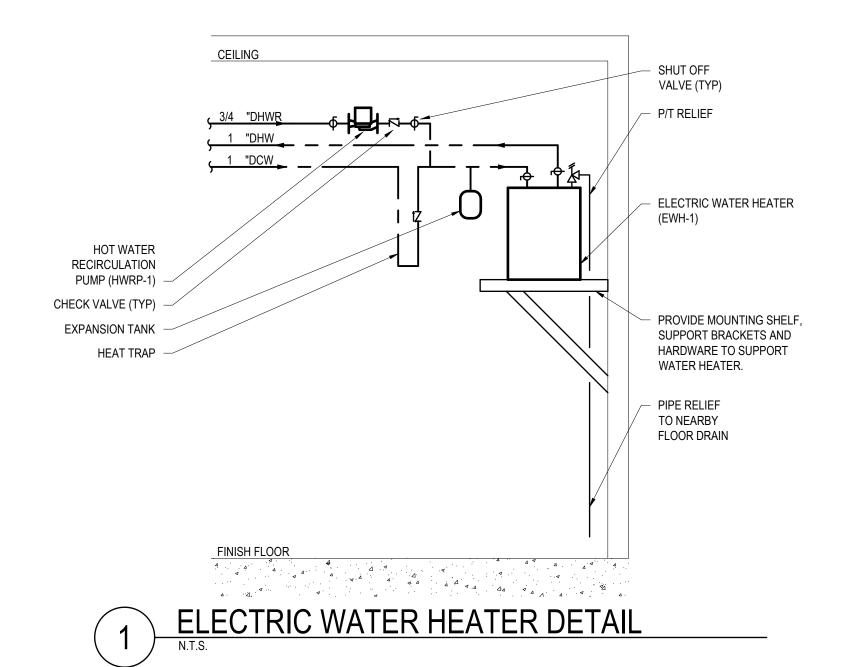
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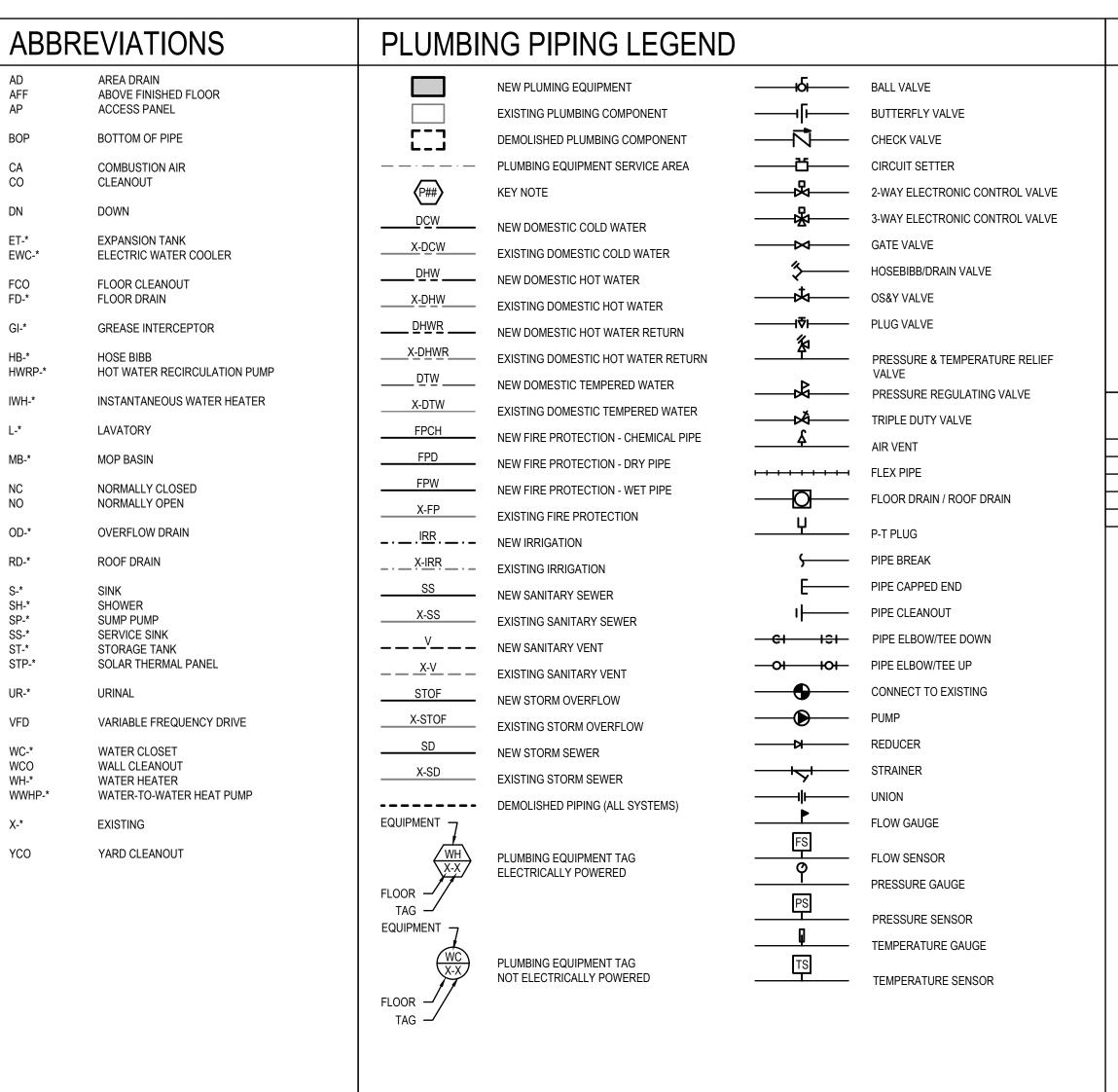
			PLUMBING FIXTURE SCHEDULE				
MARK MANUFACTURER MODE			DESCRIPTION		DFU		
WANN	MANUFACTURER	MODEL	DESCRIPTION	HW	CW	TOTAL	VALUE
DF-1	ELKAY	LK4409BFGRY	OUTDOOR, WALL MOUNTED BI-LEVEL DRINKING FOUNTAIN WITH BOTTLE FILLING STATION, HEAVY DUTY, STAINLESS STEEL, VANDAL RESISTANT, PUSH BUTTON ACTIVATED, GRAY FINISH.	-	0.25	0.25	0.5
FD-1	ZURN	Z415S	SQUARE CAST IRON FLOOR DRAIN, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE SLOTS. POLISHED NICKLE BRONZE, HEEL-PROOF TOP, LIGHT DUTY STRAINER.	-	-	-	4.0
HB-1	WOODFORD	B65	HOSE BIBB IN CONCEALED, LOCKABLE BOX, NON-FREEZE, LOOSE KEY, AUTOMATIC DRAINING WITH ANTI- SIPHON VACUUM BREAKER, CHROME FINISH	-	4.0	4.0	-
L-1	KOHLER	K-2031	WALL HUNG, WHITE, VITREOUS CHINA, ADA LAVATORY WITH OVERFLOW AND BACKSPLASH. OVERALL DIMENSIONS: 20-3/4"X18-1/4"X12-7/8". FAUCET: CHICAGO FAUCETS 116.606.AB.1 BATTERY POWERED, SENSOR ACTIVATED, SINGLE HOLE WITH 0.5 GPM NON-AERATING LAMINAR FLOW, VANDAL PROOF. PROVIDE WITH KOHLER K-7129-A GRID DRAIN, P-TRAP, AND LOOSE KEY STOPS. PROVIDE "HANDY-SHIELD MAXX" INSULATION ON P-TRAP, WATER VALVES AND EXPOSED SUPPLY PIPING.	0.5	0.5	1.0	1.0
MB-1	MUSTEE	63M	FLOOR MOUNTED, MOLDED STONE MOP BASIN WITH OVERALL DIMENSIONS: 24"X24"X10". FAUCET: MUSTEE 63.300A HEAVY DUTY, CHROME PLATED BRASS WITH TOP REINFORCING BAR AND PAIL HOOK. PROVIDE WITH HOSE CONNECTION VACUUM BREAKER EQUAL TO WATTS 8FR. PROVIDE WITH MUSTEE 65.700 HOSE AND HOSE HOLDER AND MUSTEE 65.600 MOP HANGER.	2.0	2.0	3.0	3.0
UR-1	KOHLER	K-4991-ET	VITREOUS CHINA WALL-MOUNT ADA WASHOUT URINAL WITH 3/4" TOP SPUD. OVERALL DIMENSIONS: 26 7/8" X 18" X 14 1/8". FLUSHOMETER: SLOAN G2 8186 BATTERY POWERED, SENSOR ACTIVATED, 0.5 GPF. FIXTURE SUPPORT: JAY R. SMITH 0637.	-	2.0	2.0	2.0
WC-1	KOHLER	K-96057	VITREOUS CHINA, FLOOR MOUNT, SIPHON JET, ADA WATER CLOSET WITH 1-1/2" TOP SPUD. OVERALL DIMENSIONS: 21-7/8"X14-5/8"X16-5/8". FLUSHOMETER: SLOAN G2 8111 BATTERY POWERED, SENSOR ACTIVATED, 1.28 GPF.	-	6.5	6.5	6.0

NOTES: CONTRACTOR IS RESPONSIBLE FOR COORDINATING NECESSARY ELECTRICAL PROVISION WITH DIVISION 26 CONTRACTOR. DIVISION 22 CONTRACTOR IS RESPONSIBLE FOR ALL LOW VOLTAGE (24V) WIRING FOR ALL PLUMBING FIXTURES AND EQUIPMENT. PROVIDE ALL NECESSARY TRANSFORMERS TO ACCOMMODATE POWER SUPPLIES INDICATED ON ELECTRICAL DRAWINGS. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ANY POWER SUPPLY PROVISIONS BEYOND WHAT IS INDICATED ON THE ELECTRICAL DRAWINGS.

	PUMPS										
MARK	MANUFACT	MODEL	TYPE	SERVICE	GPM MIN.	HEAD FT WC	MOTOR (WATTS)	RPM	VOLTS	PHASE	REMARKS
HWRP -1	BELL & GOSSETT	NBF-12	INLINE	BRONZE	2	10	55	2,800	120	1	1,2

	ELECTRIC WATER HEATER								
MARK	MANUFACTURER	MODEL	MODEL GALLON DATA HEIGHT DIAMETER REMARKS						
WAIXIX	MANOTACTORER	MODEL	CAPACITY	KW	VOLT	PHASE	HEIOH	DIAMILILIX	KLIMAKKO
EWH-1	A.O. SMITH	DSE-20A-9	20	9	240	1	31.75"	22"	1,2
1	INCLUDE TEMPERATURE	CONTROL, PRE	SSURE RELIEF VAL	/E, DRAIN VA	LVE				
2	SINGLE ELEMENT WATER HEATER								
3	PROVIDE WITH EXPANSION	N TANK EQUAL	TO B&G PTA-5						





GENERAL NOTES

- DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL REQUIRED OFFSETS FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL INSTALL MATERIAL AND EQUIPMENT TO CONFORM TO THE STRUCTURE, EQUIPMENT CONNECTIONS AND SHALL MAINTAIN APPROPRIATE CLEARANCES.
- . ALL WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE, LOCAL CODES, FEDERAL AND STATE REGULATIONS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
- CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
- 4. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE FULL EXTENT OF WORK AND PROJECT CONDITIONS. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT.

PLUMBING SHEET INDEX

I LOWDING OFFICE INDEX					
NUMBER	SHEET NAME				
P0.1	PLUMBING NOTES, LEGEND, AND ABBREVIATIONS				
P1.0	PLUMBING UNDERGROUND PLAN				
P2.0	PLUMBING FLOOR PLAN				
P3.0	PLUMBING ISOMETRICS				

Architect

259 South Street, Suite A WAUKESHA, WI 53186 p: 833-380-6180

hoProject Info. — 22005 — Riverside Park

Restrooms

600 Labaree St Watertown, WI

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New Construction

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Drawn by	Checked by
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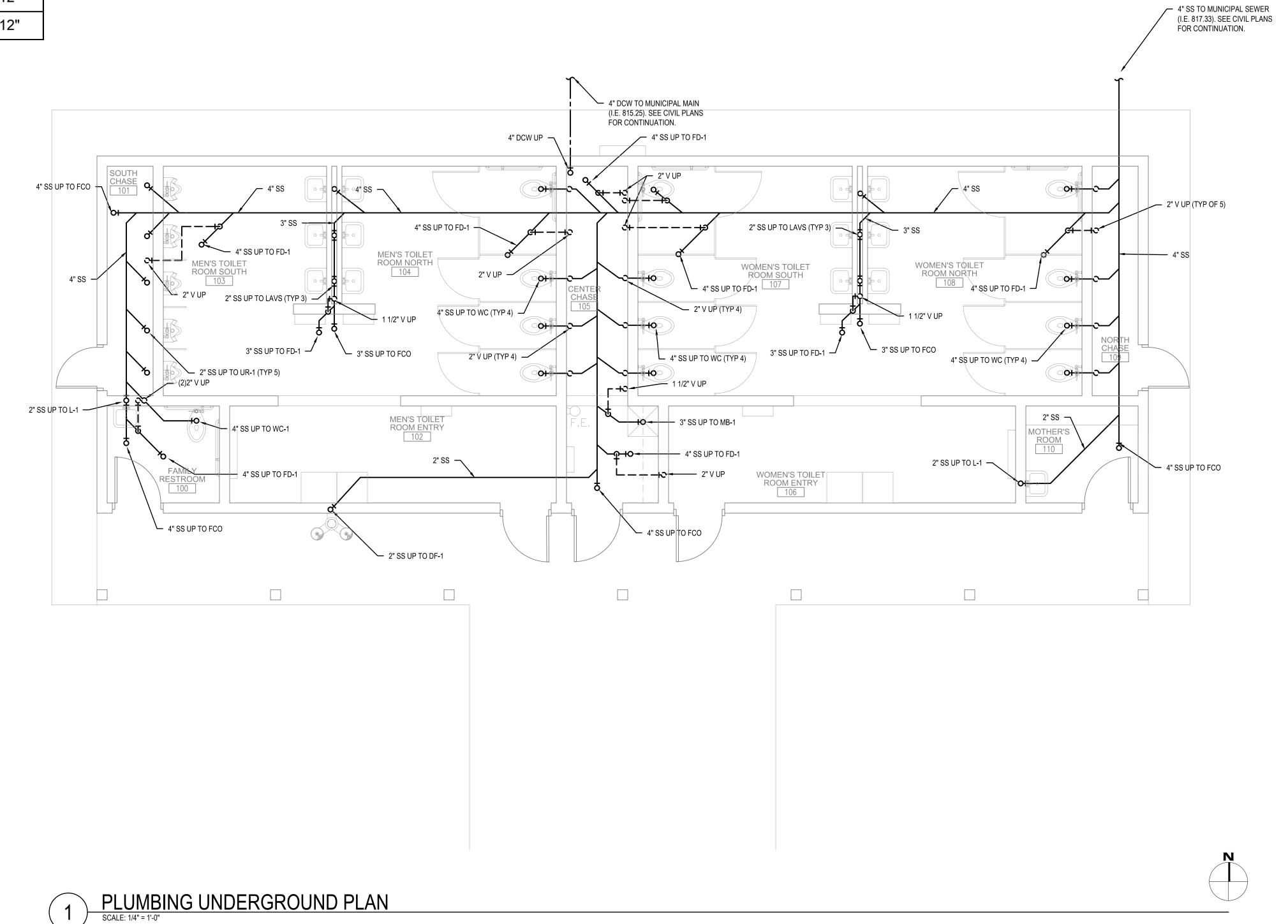
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WATER CALCULATION WORKSHEET

	NFORMATION NEEDED FOR WATER SERVICE SIZING		
1	Demand of building in water supply fixture units:	124.75	WSFU
1a	Demand of building in WSFU converted to Gallons per Minute.	75	GPM
2	Elevation difference from main or external pressure tank to building control valve:	8	FEET
3	Size of water meter (if applicable):	2	
4	Developed length from main or external pressure tank to building control valve	175	FEET
5	Low pressure at main in street or external pressure tank:	75	PSI
C	CALCULATE WATER SERVICE PRESSURE LOSS		
6	Low pressure at main in street or external pressure tank. (value of # 5 above)	75	PSI
7	Determine pressure loss due to friction in 4 inch diameter water service.		
	Water service piping is COPPER		
	Pressure loss per 100 ft = 0.3 x 1.75	0.525	
	Subtotal	74.5	PSI
8	Determine pressure loss or gain due to elevation (multiply the value of # 2 above by 0.434):	3.5	PSI
9	Available pressure after the bldg. control valve:	71.0	PSI
_	CALCULATE THE PRESSURE AVAILABLE FOR UNIFORM LOSS (VALUE OF "A")		
_			
	$A = [B - (C + D + E + F + G)] / H \times 100$	····	
В	Available pressure after the bldg. control valve. (from #9 above):	71.0	PSI
С	Pressure loss of water meter (when meter is required)	3	PSI
D	Pressure required at controlling fixture	35	PSI
	(Controlling fixture is: WATER CLOSET)		
	Difference in elevation between building control valve and the controlling fixture in feet 1 x 0.434	0.4	
E	Pressure loss due to water treatment devices and backflow preventors which serve the controlling fixture.	0	PSI
_			
F	Pressure loss through tankless water heaters, combination boiler / hot water heaters, heat exchangers which serve the		-
F	•	0	PSI
E F G	Pressure loss through tankless water heaters, combination boiler / hot water heaters, heat exchangers which serve the	0 135	PSI FT

services, inc.

SANITARY PIPING SLOPE				
PIPE SIZE	SLOPE			
< 2"	1/4" / 12"			
> 2"	1/8" / 12"			



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Riverside Park
Restrooms

New Construction

600 Labaree St Watertown, WI

JUNDERGROUND PLAN

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Sheet No. —

P1.0

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KEY NOTES

PIPE 1" DCW, 1" DHW, 3/4" DHWR TO EWH-1. REFER TO DETAIL 1 ON SHEET P0.1

Architect

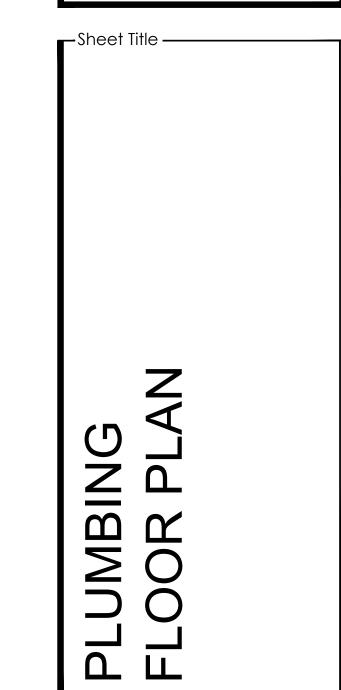
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P2.0

 FIXTURE CONNECTIONS

 MARK
 DCW
 DHW
 SS
 V

 DF-1
 1/2"
 1 1/2"
 1 1/2"

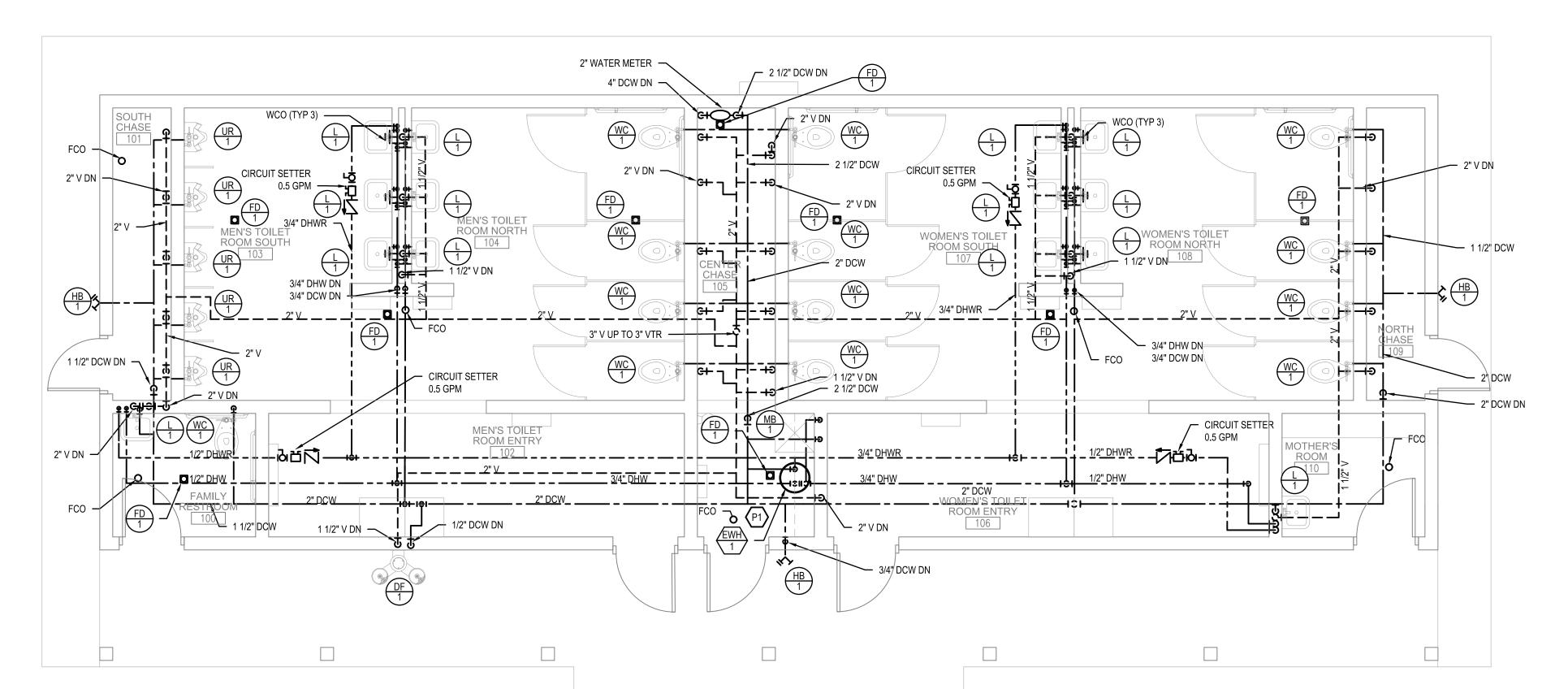
 HB-1
 3/4"

 L-1
 1/2"
 1/2"
 2"
 1 1/2"

 MB-1
 1/2"
 1/2"
 3"
 1 1/2"

 UR-1
 3/4"
 2"
 1 1/2"

 WC-1
 1 1/2"
 4"
 2"



1 PLUMBING FLOOR PLAN

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

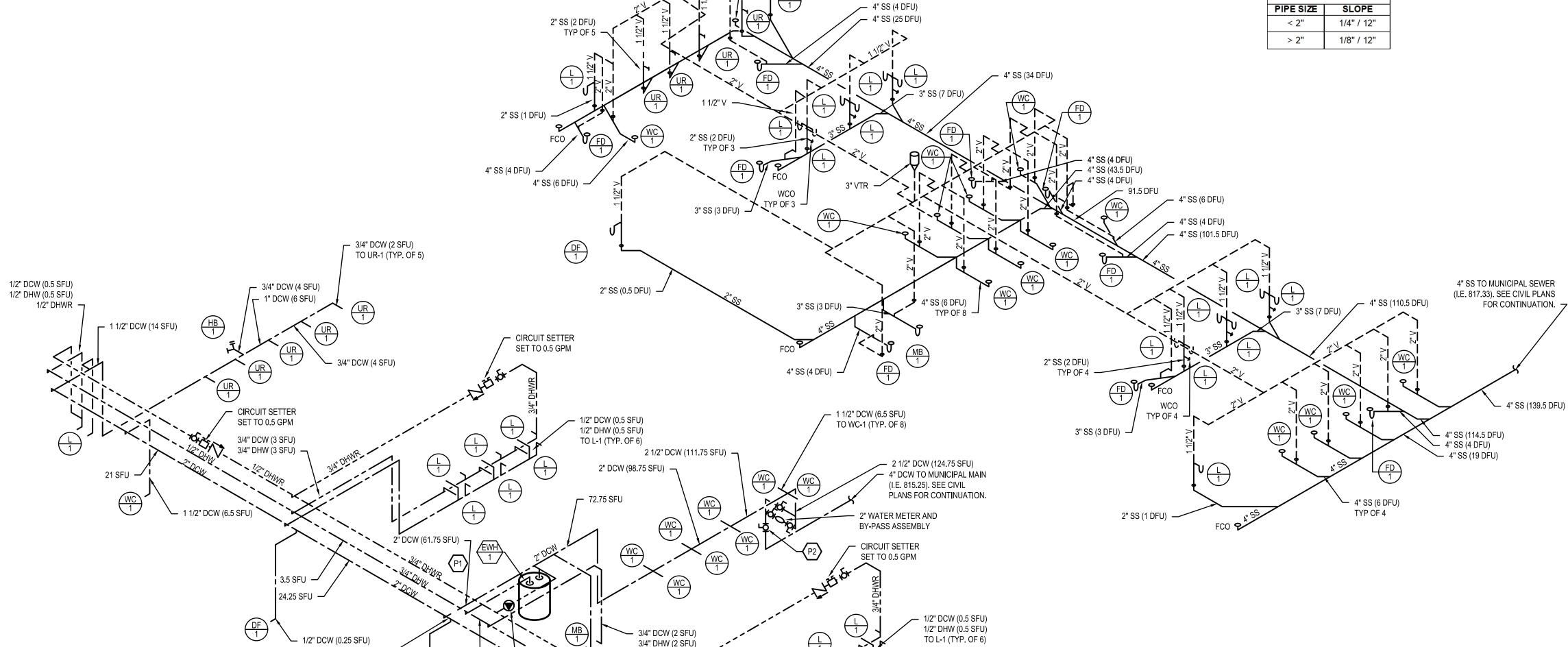
FIXTURE CONNECTIONS				
MARK	DCW	DHW	SS	٧
DF-1	1/2"	-	1 1/2"	1 1/2"
HB-1	3/4"	ī	ī	-
L-1	1/2"	1/2"	2"	1 1/2"
MB-1	1/2"	1/2"	3"	1 1/2"
UR-1	3/4"	ī	2"	1 1/2"
WC-1	1 1/2"	-	4"	2"



- PIPE 1" DCW (9 SFU), 1" DHW (9 SFU), 3/4" DHWR TO EWH-1.
- REFER TO DETAIL 1 ON SHEET P0.1

PROVIDE BLOWOUT VALVE AT BUILDING WATER METER FOR ADEQUATE WINTERIZATION OF TO FACILITY.

SANITARY PIPING SLOPE < 2" 1/4" / 12"



- 1 1/2" DCW (6.5 SFU) TO WC-1 (TYP. OF 4)

— 1 1/2" DCW (13 SFU)

3/4" DCW (4 SFU)

└ 2" DCW (30 SFU)

3/4" DCW (2 SFU) 3/4" DHW (2 SFU)

CIRCUIT SETTER SET TO 0.5 GPM -

Architect

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Project Info. — 22005 —

Riverside Park Restrooms

New Construction

600 Labaree St Watertown, WI

—Sheet Title —

ISOMETRIC -UMBING

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Revisions — Description 01.23.2024 Bid & Permit Set

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P3.0

PLUMBING ISOMETRICS

N.T.S.

► 1/2" DCW (0.25 SFU)

37.5 SFU

3/4" DCW (4 SFU)

HB 1

3/4" DHW (5.5 SFU)

HWRP 1

33.5 SFU —

DESIGN CRITERIA 1. BUILDING CODE - INTERNATIONAL BUILDING CODE (IBC) 2015 / ASCE7-10 2. DEAD LOADS ROOF 3. ROOF LIVE LOADS 20 PSF 4. FLOOR LIVE LOADS 100 PSF **PUBLIC AREAS** STORAGE 125 PSF 5. SNOW LOADS GROUND SNOW, Pg 30 PSF EXPOSURE FACTOR, Ce TEMPERATURE FACTOR, Ct 1.2 SLOPED ROOF FACTOR, Cs 1.0 IMPORTANCE FACTOR, Is FLAT ROOF SNOW, Pf 25.2 PSF SLOPED ROOF SNOW, Ps 25.2 PSF SLIDING & DRIFTING SNOW, IN ADDITION TO FLAT ROOF SNOW, SEE PLANS UNBALANCED SNOW PER ASCE 7 6. WIND LOADS ULTIMATE WIND SPEED, V 115 MPH RISK CATEGORY **EXPOSURE CATEGORY** INTERNAL PRESSURE COEFFICIENT, Gcpi ±0.18 COMPONENTS & CLADDING NOT DESIGNED BY THE ENGINEER OF RECORD SHALL BE DESIGNED FOR THE WIND PRESSURES SHOWN ON THE COMPONENTS AND CLADDING DIAGRAM. WIND PRESSURES FOR LARGER TRIBUTARY AREAS MAY BE USED BASED ON

	DELEGATED DESIGN CALCULATIONS.	
7.	SEISMIC LOADS	
	RISK CATEGORY	II
	IMPORTANCE FACTOR, le	1.0
	SITE CLASS	D
	MAPPED SPECTRAL RESPONSE	
	Ss	0.083 g
	S1	0.045 g
	SPECTRAL RESPONSE COEFFICIENTS	
	SDS	0.089 g
	SD1	0.072 g
	SEISMIC DESIGN CATEGORY	В
	SEISMIC FORCE RESISTING SYSTEM	ORDINARY REINFORCED MASONRY SHEAR WALLS
	RESPONSE MODIFICATION FACTOR, R	2

	DESIGN BASE SHEAR ANALYSIS PROCEDURE	Cs x (WEIGHT OF BUILDING EQUIVALENT LATERAL FORCE
3.	SOIL DESIGN VALUES	
	REFERENCE GEOTECHNICAL REPORT	
	PEPARED BY TERRACON CONSULATANTS, INC	DATED 06/23/2002

0.044

120 PCF

3,000 PSF

	SOIL UNIT WEIGHT (γ)
	ALLOWABLE SOIL BEARING PRESSURES
	VERTICAL (NET)
9.	COMPONENT DESIGN
	WOOD ROOF TRUSSES

RESPONSE COEFFICIENT, Cs

DEAD	
TOP CHORD	10.0 P
BOTTOM CHORD	5.0 P
LIVE	
BOTTOM CHORD	5.0 P
SNOW	
TOP CHORD	SEE NOTE 5
DEFLECTION CRITERIA	
LL	L/360
TL	L/240

GENERAL REQUIREMENTS

- 1. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INCLUDE THE METHOD OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO: BRACING. SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT. TEMPORARY STRUCTURES, AND PARTIALLY COMPLETED WORK. OBSERVATION VISITS TO THE SITE BY STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- GENERAL CONTRACTOR TO DISTRIBUTE ALL SHEETS IN THE SET TO
- 3. THE ARCHITECT AND/OR ENGINEER OF RECORD SHALL NOT HAVE CONTROL OVER OR BE IN CHARGE OF, AND SHALL NOT BE RESPONSIBLE IN ANY WAY FOR CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH ANY CONSTRUCTION ACTIVITIES, SINCE THESE ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.
- 4. SUBMITTALS PREPARED BY SUBCONTRACTORS SHALL BE REVIEWED BY
- CONTRACTOR PRIOR TO SUBMITTING TO ARCHITECT/ENGINEER 5. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS AT THE JOB SITE. ANY DISCREPANCIES BETWEEN THE CONDITIONS FOUND AND THOSE INDICATED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE
- ATTENTION OF ARCHITECT PRIOR TO PROCEEDING WITH THE WORK. SEE DOCUMENTS FROM OTHER DISCIPLINES FOR FLOOR, WALL, AND ROOF OPENINGS, TRENCHES, PITS, PIPE SLEEVES, EQUIPMENT PADS, METAL PAN STAIRS, MISCELLANEOUS IRON, ETC.
- DO NOT PLACE PIPES, DUCTS, CHASES, ETC. IN STRUCTURAL BEAM AND COLUMN MEMBERS. DO NOT CUT ANY STRUCTURAL MEMBER FOR PIPES, DUCTS, ETC., UNLESS NOTED OTHERWISE. NOTIFY STRUCTURAL ENGINEER WHEN DOCUMENTS BY OTHER DISCIPLINES SHOW OPENINGS, POCKETS, ETC. NOT INDICATED IN THE STRUCTURAL DRAWINGS BUT ARE LOCATED IN THE STRUCTURAL MEMBERS. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM STRUCTURAL ENGINEER FOR INSTALLATION OF SUCH PIPES, DUCTS, CHASES, ETC.
- DETAILS LABELED "TYPICAL" ON THE STRUCTURAL DRAWINGS APPLY TO ALL SITUATIONS OCCURRING ON PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE LOCATIONS SPECIFICALLY INDICATED. WHERE A DETAIL IS NOT INDICATED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR
- CONDITIONS. 9. CONTRACTOR DESIGNED ELEMENTS SHALL BE DESIGNED BY LICENSED PROFESSIONAL ENGINEERS REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, DESIGN LOAD DATA, SUPPORT REACTIONS, AND CERTIFICATION THAT ELEMENTS WERE DESIGNED FOR LOADS SPECIFIED IN THE CONTRACT DOCUMENTS OR IN THE BUILDING CODE. ALL DOCUMENTS NOTED SHALL BE SEALED BY THE LICENSED ENGINEER. IF CRITERIA INDICATED ARE NOT SUFFICIENT, SUBMIT A WRITTEN REQUEST FOR ADDITIONAL INFORMATION TO THE ARCHITECT. THE FOLLOWING ELEMENTS AND THEIR CONNECTIONS SHALL BE CONTRACTOR

DESIGNED: A. WOOD TRUSSES

CONCRETE

CODES:	
ACI 301	SPECIFICATION FOR STRUCTURAL CONCRETE
ACI MCP	MANUAL OF CONCRETE PRACTICE
ACI 318	BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
ACI 318.1	BUILDING CODE REQUIREMENTS FOR STRUCTURAL PLAIN CONCRETE

(200 DAV)	SSIVE STRENGTH).

MATERIALS (28 DAY COMPRESSIVE STRENGTH):	
FOOTINGS	f'c=3,000 PSI
INTERIOR SLAB ON GRADE	f'c=4,000 PSI
EXTERIOR SLAB ON GRADE (EXCLUDING SIDEWALKS)	f'c=5,000 PSI
FOUNDATION WALLS / GRADE BEAMS / PIERS	f'c=4,500 PSI
BEAMS / COLUMNS	f'c=4,000 PSI
CONCRETE ON METAL DECK	f'c=4,000 PSI
CONCRETE TOPPING	f'c=4,000 PSI

- 1. CONCRETE MIX DESIGN (INCLUDING AGGREGATE SIZE, WATER CEMENT RATIO, AIR ENTRAINMENT, ADMIXTURES, SLUMP AND HISTORY OF BREAK TESTS) SHALL BE SUBMITTED TO THE EOR FOR APPROVAL PRIOR TO THE COMMENCEMENT OF ANY WORK. CONCRETE SHALL BE NORMAL WEIGHT
- MAXIMUM WATER/CEMENT RATIO PERMITTED SHALL BE 0.50 FOR INTERIOR SLABS ON GRADE, 0.45 FOR BELOW GRADE CONCRETE AND 0.40 FOR CONCRETE EXPOSED TO WATER AND DEICING CHEMICALS.
- CONCRETE WHICH WILL BE EXPOSED TO THE WEATHER (INCLUDING FOUNDATION WALLS) SHALL HAVE AIR-ENTRAINING ADMIXTURE AS REQUIRED TO PROVIDE 6% ± 1% AIR ENTRAINMENT.
- MAXIMUM AGGREGATE SIZE SHALL BE 3/4" FOR SLABS ON GRADE, WALLS, BEAMS & COLUMNS, 1" FOR FOOTINGS AND 3/8" FOR TOPPING SLABS. NORMAL WEIGHT AGGREGATE TO CONFORM TO ASTM C33. LIGHTWEIGHT AGGREGATE TO CONFORM TO ASTM C330.
- 5. CONCRETE SHALL BE EVALUATED ACCORDING TO METHOD 1 OR METHOD 2 AS DESCRIBED IN ACI 301. THE RESULTS OF THESE ANALYSES SHALL BE SUBMITTED TO THE EOR FOR APPROVAL PRIOR TO ANY WORK.
- THE CONTRACTOR SHALL MAKE PROVISIONS TO ALLOW AN INDEPENDENT TESTING AGENCY TO CAST 4 TEST CYLINDERS FOR EACH 50 CUBIC YARDS OF CONCRETE PLACED, OR FOR ANY DAY'S OPERATION. THE TESTING AGENCY SHALL BE RESPONSIBLE FOR CASTING AND CURING SPECIMENS IN COMPLIANCE TO ASTM C31 AND CASTING TESTING SPECIMENS IN COMPLIANCE TO ASTM C39.
- DRAWINGS SHOWING THE LOCATION OF CONSTRUCTION JOINTS. CONTROL JOINTS, AND PLACING SEQUENCE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE PREPARATION OF REINFORCING SHOP DRAWINGS. MAXIMUM POUR LENGTHS OF WALLS TO BE 40'-0" AND A MINIMUM OF 4'-0" AWAY FROM INTERSECTIONS AND CORNERS.
- GROUT USED TO SET PLATES SHALL BE NON-SHRINK AND NON-METALLIC. THE CONTRACTOR SHALL USE SMOOTH FORMS FOR EXPOSED CONCRETE SURFACES. BOARD FORMS MAY BE USED FOR UNEXPOSED CONCRETE
- SURFACES. EARTH FORMS ARE FORBIDDEN. 10. PROVIDE A MINIMUM OF 6" OF COMPACTED GRANULAR FILL UNDER ALL SLABS ON GRADE.
- 11. VAPOR BARRIER TO BE 10 MILS THICKNESS MINIMUM, LAP MINIMUM 6" AND
- TAPE ALL SEAMS. VERIFY ADDITIONAL REQUIREMENTS WITH ARCHITECT. 12. FLOOR FLATNESS AND LEVELNESS OF SLAB ON GRADE CONCRETE SHALL HAVE THE FOLLOWING TOLERANCES, AS RECOGNIZED BY THE MOST CURRENT VERSION OF ASTM E 1155 AND ACI 302.1. SEE SPECIFICATION FOR FURTHER REQUIREMENTS (F(F) SPECIFIED OVERALL VALUE (SOV) OF 50, MINIMUM LOCALIZED VALUE (MLV) OF 25 AND F(L) SPECIFIED OVERALL VALUE (SOV) OF 33, MINIMUM LOCALIZED VALVE (MLV) OF 17).

SPREAD FOUNDATIONS

- 1. ALL FOUNDATIONS SHALL BE SUPPORTED ON APPROVED EXISTING SUBGRADE OR APPROVED COMPACTED STRUCTURAL FILL HAVING A MINIMUM ALLOWABLE BEARING CAPACITY AS INDICATED IN THE SOIL DESIGN VALUES.
- 2. SUBSURFACE CONDITIONS SHALL BE IMPROVED TO MEET CAPACITY WHEN REQUIRED, AS RECOMMENDED IN GEOTECHNICAL REPORT 3. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE VALIDITY OF THE
- SUBSURFACE CONDITIONS DESCRIBED IN THE DRAWINGS, SPECIFICATIONS, TEST BORINGS OR GEOTECHNICAL REPORTS. THIS DATA IS INCLUDED TO ASSIST THE CONTRACTOR DURING BIDDING AND SUBSEQUENT CONSTRUCTION, AND TO REPRESENT CONDITIONS ONLY AT SPECIFIC LOCATIONS AT THE PARTICULAR TIME THE OBSERVATIONS WERE MADE.
- 4. ALL EXTERIOR FOUNDATIONS SHALL BEAR ON APPROVED SUBGRADE AT MINIMUM DEPTH OF 4'-0 BELOW ADJACENT FINISH EXTERIOR GRADE. 5. FOOTING ELEVATIONS SHOWN ON THE DRAWINGS REPRESENT ESTIMATED DEPTHS AND ARE NOT TO BE CONSTRUED AS LIMITING THE AMOUNT OF
- **EXCAVATION REQUIRED TO REACH SUITABLE BEARING MATERIAL** 6. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORTS IN ALL EXCAVATIONS AS REQUIRED TO PREVENT HORIZONTAL MOVEMENT OR VERTICAL SETTLEMENT OF SURROUNDING SOIL AND/OR PROPERTY WHICH WILL ENDANGER LIVES OR PROPERTY.
- 7. THE CONTRACTOR SHALL PROVIDE CONTROL OF SURFACE AND SUBSURFACE WATER PROMPTLY TO ENSURE THAT ALL FOUNDATION WORK IS PERFORMED IN A DRY CONDITION.
- 8. FOUNDATIONS SHALL NOT BE PLACED ON FROZEN SUBGRADE. 9. THE CONTRACTOR SHALL PROTECT IN-PLACE FOUNDATIONS AND SLABS-ON-GRADE FROM FROST PENETRATION UNTIL THE PROJECT IS COMPLETE.
- 10. FOUNDATION WALLS SHALL BE BRACED DURING BACKFILLING AND COMPACTION OPERATIONS. BRACING SHALL BE LEFT IN PLACE UNTIL PERMANENT STRUCTURAL SUPPORT SYSTEM IS INSTALLED AND APPROVED BY THE ENGINEER.
- 11. WHERE FOUNDATION WALLS HAVE FILL ON BOTH SIDES, BACKFILLING SHALL BE DONE SIMULTANEOUSLY ON BOTH SIDES OF THE WALL.

CONCRETE REINFORCING

ACI 315	DETAIL AND DETAILING OF CONCRETE REINFORCEMENT		
ACI 318	BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE		
MSP2	CRSI MANUAL OF STANDARD PRACTICE		
AWS D1.4	STRUCTURAL WELDING CODE - REINFORCING STEEL		
WRI	WELDED WIRE FABRIC MANUAL OF STANDARD PRACTICE		

1. THE REINFORCEMENT FABRICATOR SHALL PROVIDE AND SCHEDULE ON SHOP DRAWINGS ALL REQUIRED REINFORCING STEEL AND NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN PLACE AT THE CORRECT LOCATIONS.

ASTM C1116 Type III

- 2. THE REQUIRED CLEARANCE FOR REINFORCEMENT (UNO) SHALL BE 3" FOR CONCRETE PLACED DIRECTLY AGAINST EARTH, 2" (#6 & LARGER) AND 1 1/2" (#5 & SMALLER) FOR CONCRETE EXPOSED TO EARTH OR WEATHER, 1 1/2" (# 14 & LARGER) AND 3/4" (#11 & SMALLER) FOR CONCRETE NOT EXPOSED TO EARTH OR WEATHER.
- 3. THE CONTRACTOR SHALL REFER TO TYPICAL DETAILS SHOWN ON THE CONTRACT DRAWINGS FOR ADDITIONAL REINFORCING REQUIREMENTS. 4. WHERE REINFORCEMENT IS REQUIRED IN SECTIONS, REINFORCEMENT IS
- CONSIDERED TYPICAL WHERE EVER THE SECTION APPLIES. 5. WELDED WIRE FABRIC SHALL HAVE A MINIMUM OF 6" LAP AND BE TIED TOGETHER
- 6. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF COMPLETION OF REINFORCEMENT INSTALLATION AND ALLOW AT LEAST 24 HOURS BEFORE SCHEDULED CONCRETE PLACEMENT FOR THE ARCHITECT TO INSPECT REINFORCEMENT.

PREFABRICATED WOOD TRUSSES

MACRO FIBER REINFORCING

CODES:	
TRUSS PLATE	DESIGN SPECIFICATIONS FOR LIGHT METAL PLAT
INSTITUTE	CONNECTED WOOD TRUSSES

- 1. THE WOOD TRUSS FABRICATOR SHALL SUBMIT CALCULATIONS TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION. THE CALCULATIONS MUST BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE LOCAL JURISDICTION.
- 2. THE WOOD TRUSSES SHALL BE ERECTED AND BRACED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN "BRACING OF WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS"
- 3. ALL WOOD TRUSSES SHALL BE SUPPORTED BY DIRECT END BEARING ON WALLS, BEAMS, COLUMNS, OR JOIST HANGERS.
- 4. DESIGN LOADS FOR TRUSSES SHALL BE AS NOTED ON DRAWINGS. 5. DESIGN TRUSS MEMBERS FOR CONCENTRATED LOADS OF SPRINKLER

PIPING AND OTHER MECHANICAL LOADS.

GROUT (28 DAY STRENGTH)

REINFORCING BARS

REINFORCED MASONRY

ACI 530.1/ASCE 6/TMS 602 SPECIFICATION FOR MASONRY STRUCTURES ACI 530/ASCE 5/TMS 402 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES MATERIALS: CONCRETE MASONRY BLOCK ASTM C-90 2,000 PSI ASTM C270 TYPE M/S MORTAR

ASTM C476

ASTM A615 Gr 60

2,000 PSI

Fy=60 KSI

- 1. THE REQUIRED MINIMUM 28 DAY COMPRESSIVE STRENGTH OF THE COMBINATION OF CONCRETE BLOCK, GROUT AND MORTAR ON THE NET
- AREA OF THE CONSTRUCTION (f'm) SHALL BE A MINIMUM OF 2,000 PSI. 2. ALL CONCRETE BLOCK MASONRY UNITS SHALL BE NORMAL WEIGHT. 3. ALL CONCRETE BLOCK MASONRY UNITS SHALL BE LAID IN RUNNING
- 4. MASONRY BLOCK CELLS CONTAINING VERTICAL REINFORCING SHALL BE GROUTED SOLID. FILLING CELLS WITH MORTAR IS UNACCEPTABLE.
- ALL BOND BEAMS TO BE GROUTED SOLID. 6. THE BASE OF EACH CELL IN WHICH REINFORCING BAR IS PLACED MUST HAVE A CLEAN OUT HOLE.
- 7. VERTICAL REINFORCING BARS SHALL BE LAPPED PER SCHEDULE. MECHANICAL SPLICES MAY BE USED IN LIEU OF LAP SPLICES.
- 8. PROVIDE CONTINUOUS REINFORCED BOND-BEAMS IN ALL REINFORCED MASONRY WALLS AT THE TOP, AND AS REQUIRED IN THE CONTRACT DRAWINGS. BOND-BEAMS AT THE TOP OF THE WALL SHALL BE CONTINUOUS AT MASONRY CONTROL JOINTS. ALL OTHER BOND-BEAMS SHALL NOT BE CONTINUOUS AT MASONRY CONTROL JOINTS. BOND-BEAM REINFORCING SHALL EXTEND INTO AND BE CONTINUOUS WITH ALL INTERSECTING BOND-BEAMS.
- 9. REINFORCED MASONRY WALLS SHALL HAVE #9 GAUGE (LADDER TYPE) HORIZONTAL REINFORCING AT SPACING AS NOTED ON CONTRACT DRAWINGS. BUT AT A MAXIMUM OF 16" O.C. VERTICALLY.
- 10. FILL CORES OF MASONRY UNDER ALL BEARING PLATES. THE MINIMUM WIDTH SHALL BE 3 TIMES THE BEARING PLATE LENGTH FOR THREE COURSES BELOW BEARING, UNO.
- MEMBERS ARE INSTALLED. 12. PROVIDE BAR POSITIONERS ON ALL REINFORCING TO HOLD AND MAINTAIN PROPER REBAR LOCATIONS AND COVER DURING GROUTING.

11. BRACE ALL MASONRY WALLS DURING CONSTRUCTION AS REQUIRED TO

RESIST WIND AND OTHER TEMPORARY LOADS UNTIL FINAL STRUCTURAL

STRUCTURAL WOOD CONSTRUCTION

CODES:						
NFPA	NATIONAL DESIGN	NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION				
NFPA	DESIGN VALUES F	OR WOOD CONSTRU	CTION			
AITC	TIMBER CONSTRU SPECIFICATIONS	TIMBER CONSTRUCTION MANUAL, PART II, DESIGN				
APA		US PRODUCT STANDARD PS 1-83 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD				
AFPA		AMERICAN FOREST AND PAPER ASSOCIATION - MANUAL FOR ENGINEERED WOOD CONSTRUCTION				
MATERIALS:			SPECIES/GRADE			
SAWN LUMBER WALL STUDS COLUMNS		ASTM D1990-96A OR ASTM D245	SPF STUD SPF No.1/No.2			
JOISTS & BEAMS			SPF No.1/No.2			
I-JOISTS		ASTM D5055				

SAWN LUMBER WALL STUDS COLUMNS JOISTS & BEAMS	ASTM D1990-96A OR ASTM D245	SPF STUD SPF No.1/No.2 SPF No.1/No.2
I-JOISTS	ASTM D5055	
LSL WALL STUDS HEADERS		1.3E 1.3E
LVL WALL STUDS HEADERS	ASTM D5055	2600 Fb, 2.0E
PSL BEAMS COLUMNS	ASTM D5055	2.0E 1.8E
GLUE-LAMINATED TIMBER	AITC A190.1 & ASTM D3737	DF BALANCED 24F -1.8E
WOOD PANELS (COMPOSITE, ORIENTED STRANDBOARD & PLYWOOD)	DOC PS 1 OR PS 2	APA RATED
PRESERVATIVE TREATED WOOD	AWPA STD U1 & M4	S. PINE No.2
FIRE-RETARDANT TREATED LUMBER	IBC 2303.2 ASTM E84 CLASS A	S. PINE No.2
TONGUE & GROOVE DECKING	AMERICAN FOREST AND PAPER ASSOCIATION WOOD CONSTRUCTION	Fb=1000 PSI E=1.8 KSI

ALL WOOD SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 15% PRIOR TO INSTALLATION. MOISTURE CONTENT SHALL BE DETERMINED PER ASTM

DATA 2

- 2. ALL WOOD SHALL BE PROTECTED FROM MOISTURE BEFORE INSTALLATION. ALL WOOD STORED AT THE BUILDING SITE SHALL BE ELEVATED 6" ABOVE THE GROUND AND COVERED WITH PLASTIC TARPAULINS.
- ALL STRUCTURAL WOOD SHALL MEET OR EXCEED ALLOWABLE UNIT
- STRESSES AND/OR GRADE AS REQUIRED BY THE DRAWINGS. 4. JOISTS SHALL BE BRIDGED WITH 1" X 3" CROSS BRIDGING, OR EQUAL, AT
- INTERVALS NOT EXCEEDING 8' -0" O.C. ALL WOOD PERMANENTLY EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, MASONRY OR CONCRETE SHALL HAVE A PRESERVATIVE TREATMENT EQUAL TO 0.4 P.C.F RETENTION OF PRESSURE INJECTED
- PRESERVATIVE. 6. ALL JOISTS AND RAFTERS SHALL BE SUPPORTED BY DIRECT END BEARING ON
- WALLS, BEAMS OR JOIST HANGERS. WOOD MEMBERS SHALL NOT BE IN DIRECT CONTACT WITH CONCRETE OR MASONRY WITHOUT BEING MADE OF NATURALLY DURABLE OR PRESERVATIVE TREATED WOOD UNLESS 1/2" AIR SPACE IS PROVIDED AROUND (TOP, SIDES, END) OF WOOD RAFTERS/JOISTS/GIRDERS: IMPERVIOUS MOISTURE BARRIER OR 1" ELEVATED BASE IS PROVIDED AT WOOD COLUMNS; IMPERVIOUS MOISTURE BARRIER IS PROVIDED AT SILL
- WOOD STRUCTURAL PANELS SHALL BE LAID WITH THE LONG PANEL DIRECTION PERPENDICULAR TO THE SUPPORTING MEMBERS, WITH ENDS STAGGERED
- WOOD STRUCTURAL PANELS SHALL BEAR THE APPROPRIATE GRADING STAMP BY THE REVIEWING AGENCY.
- 10. ALL NAILS GIVEN ON THE PLANS SHALL BE CONSIDERED "COMMON NAILS" UNLESS NOTED ON THE PLANS.
- 11. ALL FASTENERS FOR WOOD CONSTRUCTION CONNECTORS (JOIST HANGERS ETC.) SHALL BE PROVIDED BY OR APPROVED BY THE CONNECTOR'S MANUFACTURER

12. ALL FASTENERS AND WOOD CONSTRUCTION CONNECTORS IN CONTACT WITH

- PRESERVATIVE-TREATED OR FIRE TREATED WOOD SHALL BE STAINLESS 13. ALL FASTENERS AND WOOD CONSTRUCTION CONNECTORS IN CONTACT WITH
- FIRE RETARDANT TREATED WOOD USED IN INTERIOR APPLICATIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS FASTENERS AND WOOD CONSTRUCTION CONNECTORS SHALL BE STAINLESS STEEL OR HOT-DIPPED GALVANIZED STEEL
- 14. ALL BOLTS AND LAG SCREWS SHALL CONFORM TO ASTM A307 OR HOT DIP GALV. WASHERS SHALL BE PROVIDED BETWEEN THE HEAD OR NUT AND THE WOOD SURFACE.
- 15. NO WOOD MEMBER SHALL BE CUT, NOTCHED. OR DRILLED WITHOUT THE
- SPECIFIC WRITTEN PERMISSION OF THE EOR.
- 16. THE GLUE-LAMINATED TIMBER FABRICATOR SHALL SUBMIT DRAWINGS AND CALCULATIONS, INCLUDING CONNECTIONS, TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION. THE CALCULATIONS MUST BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE LOCAL JURISDICTION.

STRUCTURAL STEEL

CODES:

AISC SPECIFICATION FOR DESIGN, FABRICATION AND ERECTION OF STEEL FOR BUILDINGS							
AISC		CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS					
AISC	AND BRIDGES	RD PRACTICE FOR STEEL	LBUILDINGS				
AWS D1.1		DING CODE - STEEL					
AISC	STRUCTURAL STEE	L DETAILING MANUAL					
MATERIALS:							
HOT ROLLED	W & WT SHAPES	ASTM A992	Fy=50 KSI				
ANGLES, CH	ANNELS & PLATES	ASTM A36	Fy=36 KSI				
S + M SHAPE	S	ASTM A36	Fy=36 KSI				
HP SHAPES		ASTM A572 Gr 50	Fy=50 KSI				
STEEL PIPE		ASTM A53 Gr B	Fy=35 KSI				
RECTANGUL	AR HSS	ASTM A500 Gr B	Fy=46 KSI				
ROUND HSS		ASTM A500 Gr B	Fy=42 KSI				
HIGH STREN	GTH BOLTS	ASTM A325					
HEAVY HEX N	NUTS	ASTM A563					
HARDENED S	STEEL WASHERS	ASTM A436					
ANCHOR RO	DS	ASTM F1554 Gr 36	Fy=36 KSI				
THREADED F	RODS	ASTM A36	Fy=36 KSI				
HEADED STU	ID ANCHORS	ASTM A108					
PROVIDE 2 MII	THICKNESS RED OR	GRAY OXIDE PRIMER ON	NALL STEFL				

- ROVIDE 2 MIL THICKNESS RED OR GRAY OXIDE PRIMER ON ALL STEEL
- 2. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED PER ASTM A123 AND FASTENERS HOT DIPPED GALVANIZED PER ASTM A153.
- 3. ANCHOR RODS SHALL BE PRESET WITH TEMPLATES. 4. LEVELING PLATES AND BEARING PLATES SHALL BE SET IN A FULL BED OF
- NON-SHRINK GROUT. 5. CONNECTIONS MAY BE BOLTED OR WELDED AT THE FABRICATORS OPTION.
- BOLTED CONNECTIONS SHALL BE A MINIMUM BOLT DIAMETER OF 3/4" (UNO), HIGH STRENGTH BOLTS IN SINGLE OR DOUBLE SHEAR (UNO) AND SIMPLE SHEAR CONNECTIONS SHALL BE CAPABLE OF END ROTATION PER AISC REQUIREMENTS FOR UNRESTRAINED MEMBERS.
- THE MINIMUM FILLET WELD SIZE SHALL NOT BE LESS THAN 3/16" (UNO). 7. ALL WELDS SHALL USE WELD METAL CONFORMING TO E70XX AND
- CONFORMING TO AWS WELDING PROCEDURES AND STANDARDS. 8. ALL WELDS SHALL BE MADE BY AWS CERTIFIED WELDERS CERTIFIED IN THE POSITION IN WHICH THE WELD IS TO BE MADE.
- 9. THE ERECTION OF ANY STRUCTURAL STEEL MEMBERS SHALL NOT COMMENCE UNTIL ALL SUPPORTING CONCRETE/MASONRY ELEMENTS HAVE ATTAINED AT LEAST 75% OF THEIR INTENDED MINIMUM COMPRESSIVE STRENGTH.
- 10. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SUPPORTS AS REQUIRED FOR THE SAFE ERECTION OF ALL STEEL. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL PERMANENT BRACING HAS BEEN INSTALLED AND FLOOR SLAB CONCRETE HAS ATTAINED 75% OF ITS REQUIRED STRENGTH.
- 11. STRUCTURAL STEEL SHALL BE TRUE AND PLUMB BEFORE FINAL BOLTING OR WELDING OF CONNECTIONS.
- 12. THE CONTRACTOR SHALL NOT MODIFY OR CUT ANY STRUCTURAL STEEL WITHOUT WRITTEN APPROVAL FROM THE EOR.
- 13. THE CONTRACTOR SHALL FIELD TOUCH UP ALL ABRASIONS, BURNS, AND SIMILAR DEFECTS IN PAINT OF STRUCTURAL STEEL.
- 14. PROVIDE 1/4" CLOSURE/END PLATES FOR ALL OPEN ENDS OF HSS & PIPE MEMBERS.

POST-INSTALLED ANCHORS

BE REPLACED.

- 1. THE DIAMETER, EMBEDMENT LENGTH AND TYPE OF ADHESIVE ANCHORS, EXPANSION ANCHORS, AND SCREW ANCHORS SHALL BE AS SPECIFIED ON THE
- 2. THE SUBSTITUTION OF OTHER MANUFACTURER'S SIMILAR PRODUCTS IS ALLOWED, PROVIDED THAT THE SIZE IS EQUAL TO, AND CAPACITY IN SHEAR AND UPLIFT ARE EQUAL TO OR GREATER THAN WHAT IS SPECIFIED ON THE DRAWINGS. THE COST OF REDESIGN OF SUCH SUBSTITUTIONS SHALL BE BORE BY THE CONTRACTOR.
- 3. INSTALLATION OF ANCHORS SHALL STRICTLY FOLLOW ALL MANUFACTURER'S WRITTEN INSTRUCTIONS AND SPECIFICATIONS. ALL DRILL HOLE PREPARATIONS
- SHALL BE FOLLOWED. 4. NO LOAD SHALL BE APPLIED TO ADHESIVE ANCHORS PRIOR TO THE FULL CURE
- TIME AS SPECIFIED BY THE MANUFACTURER. 5. TESTING OF 10% OF ALL INSTALLED ANCHORS IS REQUIRED. TESTED ANCHORS SHALL MEET THE MANUFACTURERS PROOF LOAD REQUIREMENTS AND/OR INSTALLATION TORQUE REQUIREMENTS. MALFUNCTIONING FASTENERS SHALL

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STRUCTURAL SHEET INDEX

GENERAL NOTES

FOUNDATION PLAN

ROOF FRAMING PLAN

HIGH ROOF FRAMING PLAN

CONCRETE SECTIONS & DETAILS

CONCRETE SECTIONS & DETAILS

MASONRY SECTIONS & DETAILS

WOOD SECTIONS & DETAILS

WOOD SECTION & DETAILS

SCHEDULES

Sheet Name

Sheet Number

S1.1

S1.2

S3.0

S3.1

	SHEARWALL SCHEDULE									
	BLOCKED/	KED/ EXTERIOR SHEATHING		INTERIOR SHEATHING						
MARK	UNBLOCKE D	NBLOCKE		TYPE FASTENING		SILL PLATE ANCHORS				
SW1	BLOCKED	APA RATED 7/16"	8d (1 3/8" PEN MIN) @ 6/12	SEE ARCH	-	SIMPSON 1/4" Ø SDS HD SCREW @ 12" OC (3" PEN MIN) @ WOOD				
SW2	BLOCKED	APA RATED 7/16"	8d (1 3/8" PEN MIN) @ 4/12	SEE ARCH	-	SIMPSON 1/4" Ø SDS HD SCREW @ 6" OC (3" PEN MIN) @ WOOD				

1. SEE TYPICAL SHEARWALL DETAIL.

2. LETTER AFTER SHEARWALL DESIGNATION DENOTES ANCHORAGE TYPE, SEE SHEARWALL ANCHORAGE SCHEDULE.

	SHEARWALL ANCHORAGE							
LABEL	STRAP	HOLDOWN	THREADED ROD Ø	ENDPOST				
А	-	DTT2Z	1/2"	(1) 2x				
NOTE:								

1. SEE TYPICAL HOLDOWN ANCHORAGE DETAIL FOR THREADED ROD EMBEDMENT LENGTH AND ANCHORAGE REINFORCING.

2. HOLDOWNS ONLY REQUIRED AT CONCRETE, USE STRAPS ELSEWHERE. SEE TYPICAL SHEARWALL DETAIL.

3. AT STRAPS, PROVIDE 1/2 OF SPECIFIED NAILS IN EACH END LENGTH. BETWEEN END LENGTHS, PROVIDE NAILS @ 6" ON CENTER.

4. IF SHEARWALL ENDS ARE UNALIGNED, CONTINUE END POST TO FOUNDATION AND PROVIDE HOLDOWN. IF SHEARWALL IS SUPPORTED BY BEAM, PROVIDE STRAPS AND WRAP AROUND BEAM.

	CONCRETE SLAB ON GRADE SCHEDULE							
	CVCTEM	CONCRETE SLAB		COMPACTED GRAVEL				
MARK	SYSTEM DEPTH	TYPE	THICKNESS	SLAB REINFORCING	THICKNESS	REMARKS		
SOG 5	11"	NWC	5"	FORTA FERRO FIBER REINFORCING (3 LB/CY)	6"	SEE TYPICAL SLAB JOINT DETAIL		

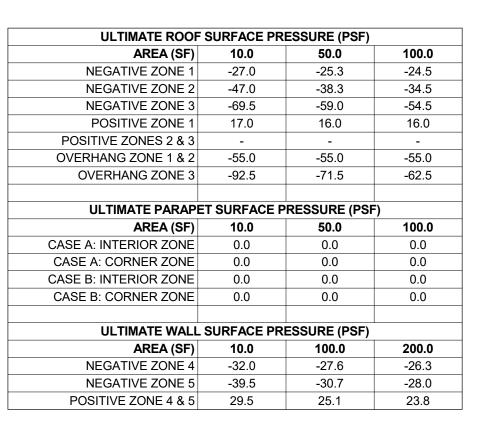
WOOD DECK/SHEATHING SCHEDULE						
	SYSTEM	STRUCTURAL LAYER		TOPPING/OVERLAY!		
MARK	DEPTH	TYPE	THICKNESS	TYPE	THICKNESS	REMARKS
WD062	5/8"	PLYWOOD/OSB WOOD SHEATHING	5/8"	-		PROVIDE SIMPSON PSC CLIPS AT PANEL EDGES

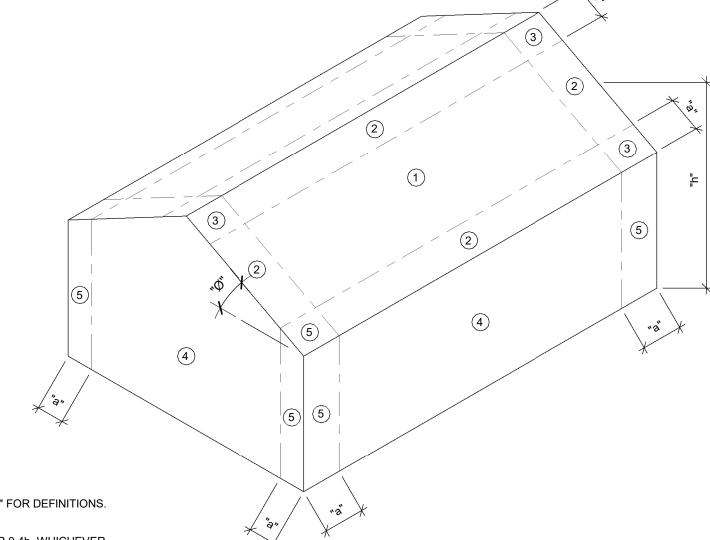
PIER SCHEDULE								
MARK	DIMENSIONS			REINFORCING		REMARKS		
WARK	DIAMETER	WIDTH	DEPTH	VERTICAL	TIES	REIVIARRS		
P1		1'-0"	1'-0"	(4)-#6	#3 @1'-0" OC			

LINTEL SCHEDULE								
MARK	LINTEL	JAMB REINF	LINTEL TYPE	REMARKS				
L1	8" BOND BEAM W/ (2)-#5 CONT	(1) #5	A					
L2	16" BOND BEAM W/ (2)-#5 CON	(1) #5	A					

WOOD COLUMN SCHEDULE							
MARK	SIZE	GRADE	TOP CONNECTION	BOTTOM CONNECTION	REMARKS		
WC1	6X6 TIMBER	SPF No.1/No.2	CCQ	ABU	GALVANIZE CONNECTIONS WHEN EXPOSED TO WEATHER		

WOOD HEADER SCHEDULE							
MARK	SIZE	GRADE	JAMB STUDS	KING STUDS	REMARKS		
H1	(3) 2x8	SPF	(1) 2x	(1) 2x			





NOTE:

1. REFER TO "WIND LOADS AT COMPONENTS AND CLADDING" FOR DEFINITIONS.

1. THROUGH (5) INDICATES WIND LOAD ZONES. 2. NOTATION:

"a" 10 PERCENT OF LEAST HORIZONTAL DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4" OF LEAST HORIZONTAL DIMENSION OR 3 FT. "h" MEAN ROOF HEIGHT, IN FEET, EXCEPT THAT EAVE HEIGHT SHALL BE

USED FOR $\emptyset \le 10^\circ$ "Ø" ANGLE OF PLANE OF ROOF FROM HORIZONTAL, IN DEGREES.

 $7^{\circ} < \emptyset \leq 45^{\circ}$

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RIVERSIDE PARK RESTROOMS

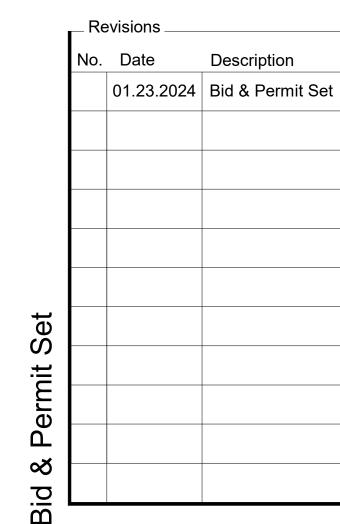
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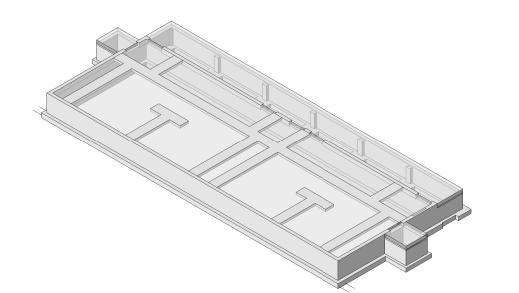
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S_{0.2}



COMPONENTS & CLADDING DIAGRAM

S0.2 SCALE: 1" = 1'-0"





- FOUNDATION PLAN NOTES:

 1. SEE SHEET S0.1 FOR GENERAL NOTES AND S0.2 FOR SCHEDULES.

 2. SEE SHEET S3.0.FOR FOUNDATION WALL CONSTRUCTION JOINTS AND TYPICAL REINFORCING DETAILS.

 3. TOP OF EXTERIOR FOOTING ELEVATION = 96'-0" UNO.

- TOP OF EXTERIOR FOOTING ELEVATION = 96'-0" UNO.
 TOP OF INTERIOR FOOTING ELEVATION = 100'-0" UNO.
 TOP OF PIER ELEVATION = 99'-4" UNO.
 TOP OF FOUNDATION WALL ELEVATION = 100'-0" UNO.
 SEE MECHANICAL DRAWINGS FOR HOUSEKEEPING PADS REQUIRED FOR MECHANICAL EQUIPMENT.
 SEE ARCHITECTURAL DRAWINGS FOR DOOR OPENING SIZES AND LOCATIONS IN WALLS.



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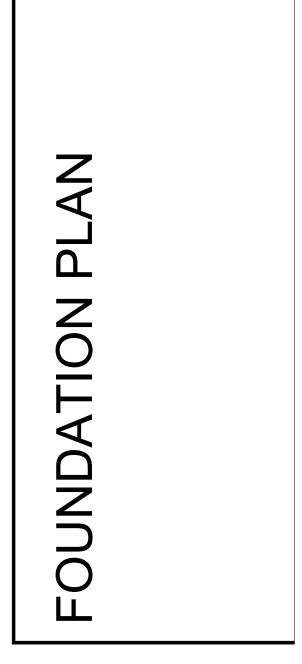
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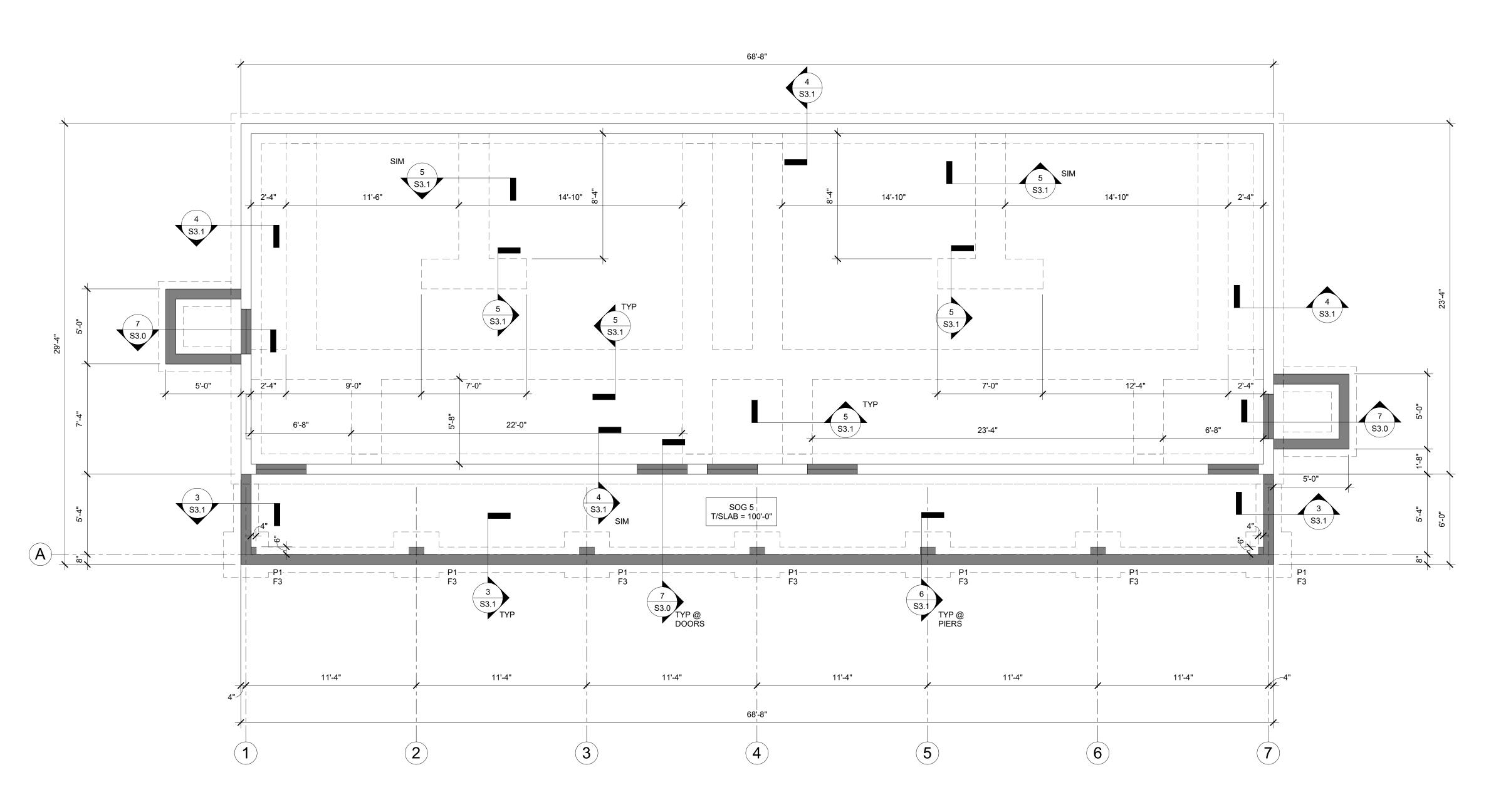
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- HIGH ROOF PLAN NOTES:

 1. SEE SHEET S0.1 FOR GENERAL NOTES AND S0.2 FOR SCHEDULES. 2. SEE SHEET S4.0 FOR TYPICAL MASONRY SECTIONS AND DETAILS, INCLUDING TYPICAL WALL REINFORCING.
- SEE SHEET S6.0 FOR TYPICAL WOOD SECTIONS AND DETAILS. 4. SEE ARCHITECTURAL DRAWINGS FOR TRUSS PROFILES, HEEL
- HEIGHTS, TRUSS BEARING ELEVATIONS AND ROOF SLOPES. COORDINATE FINAL SIZE AND LOCATION OF OPENINGS, EQUIPMENT AND ROOF DRAINS WITH MECHANICAL AND PLUMBING CONTRACTORS.
- 6. ALL HEADERS AND BEAMS TO BE DROPPED UNO.7. ALL WOOD STUD BEARING WALLS TO BE 2x6 SPF No.1/No.2 @ 16" OC.



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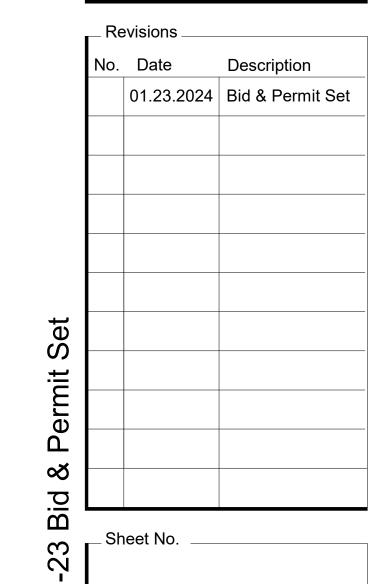
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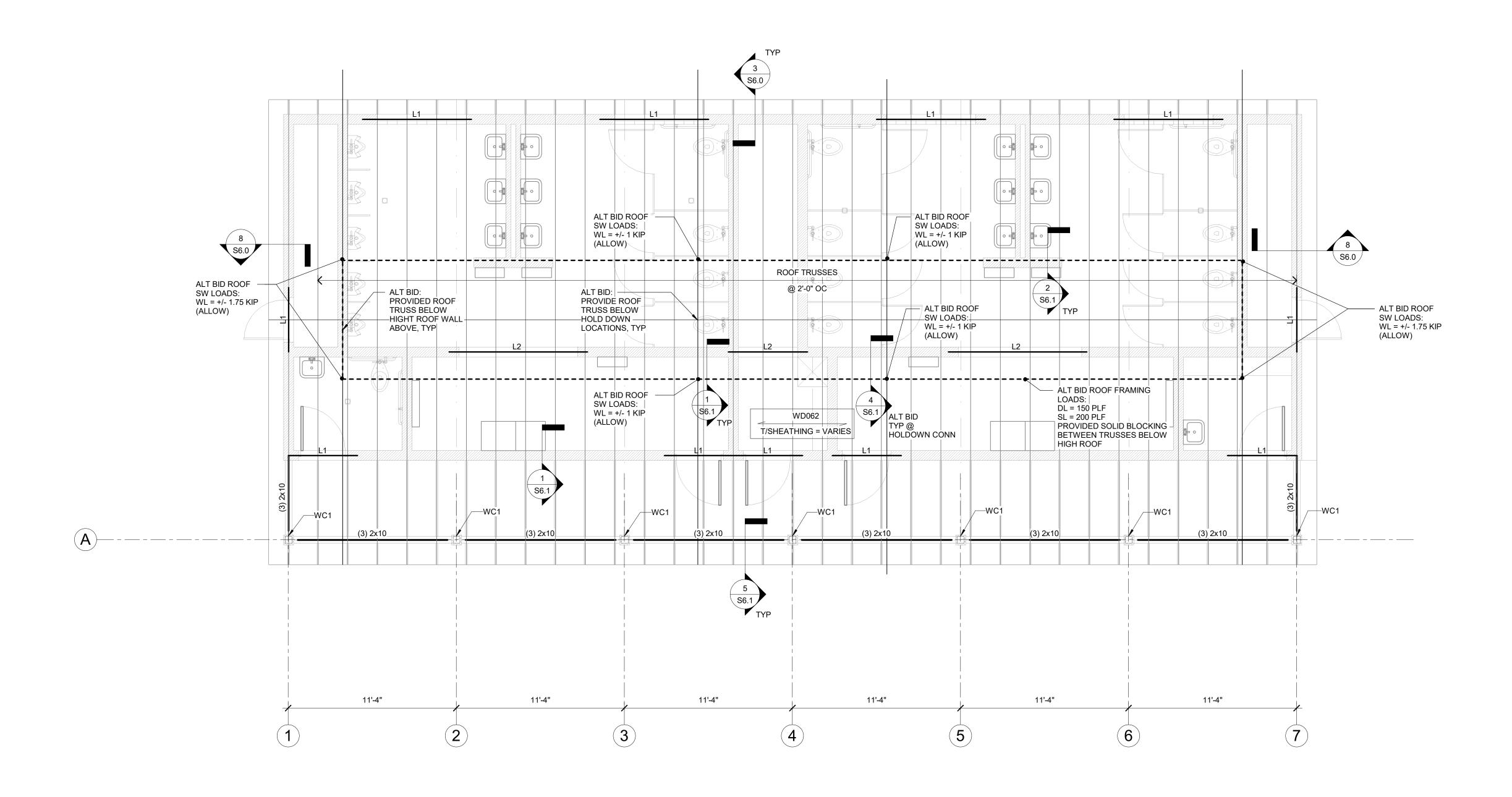
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- ROOF PLAN NOTES:

 1. SEE SHEET S0.1 FOR GENERAL NOTES AND S0.2FOR SCHEDULES.

 2. SEE SHEET S4.0 FOR TYPICAL MASONRY SECTIONS AND DETAILS,
- INCLUDING TYPICAL WALL REINFORCING. SEE SHEET S6.0 FOR TYPICAL WOOD SECTIONS AND DETAILS.
 SEE ARCHITECTURAL DRAWINGS FOR TRUSS PROFILES, HEEL
- HEIGHTS, TRUSS BEARING ELEVATIONS AND ROOF SLOPES.
 COORDINATE FINAL SIZE AND LOCATION OF OPENINGS, EQUIPMENT AND ROOF DRAINS WITH MECHANICAL AND PLUMBING
- CONTRACTORS. 6. PROVIDE L1 LINTEL FOR ALL LOUVER OPENINGS. COORDINATE WITH ARCH & MEP FOR LOCATIONS AND SIZES.



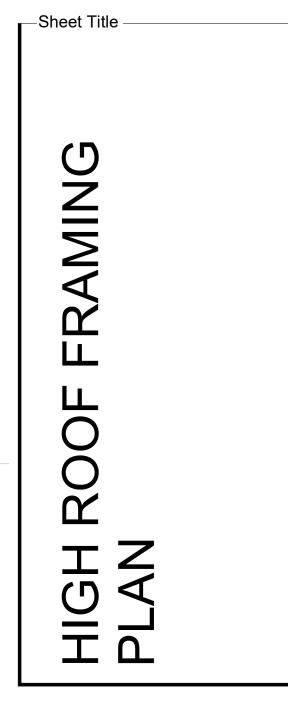
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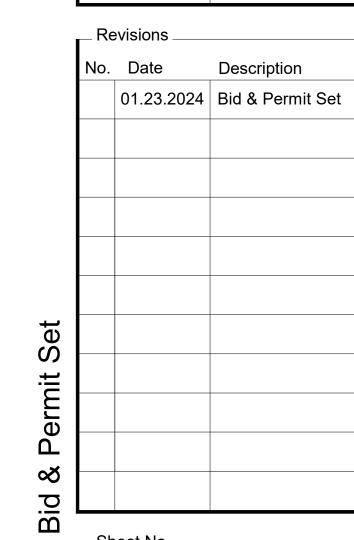
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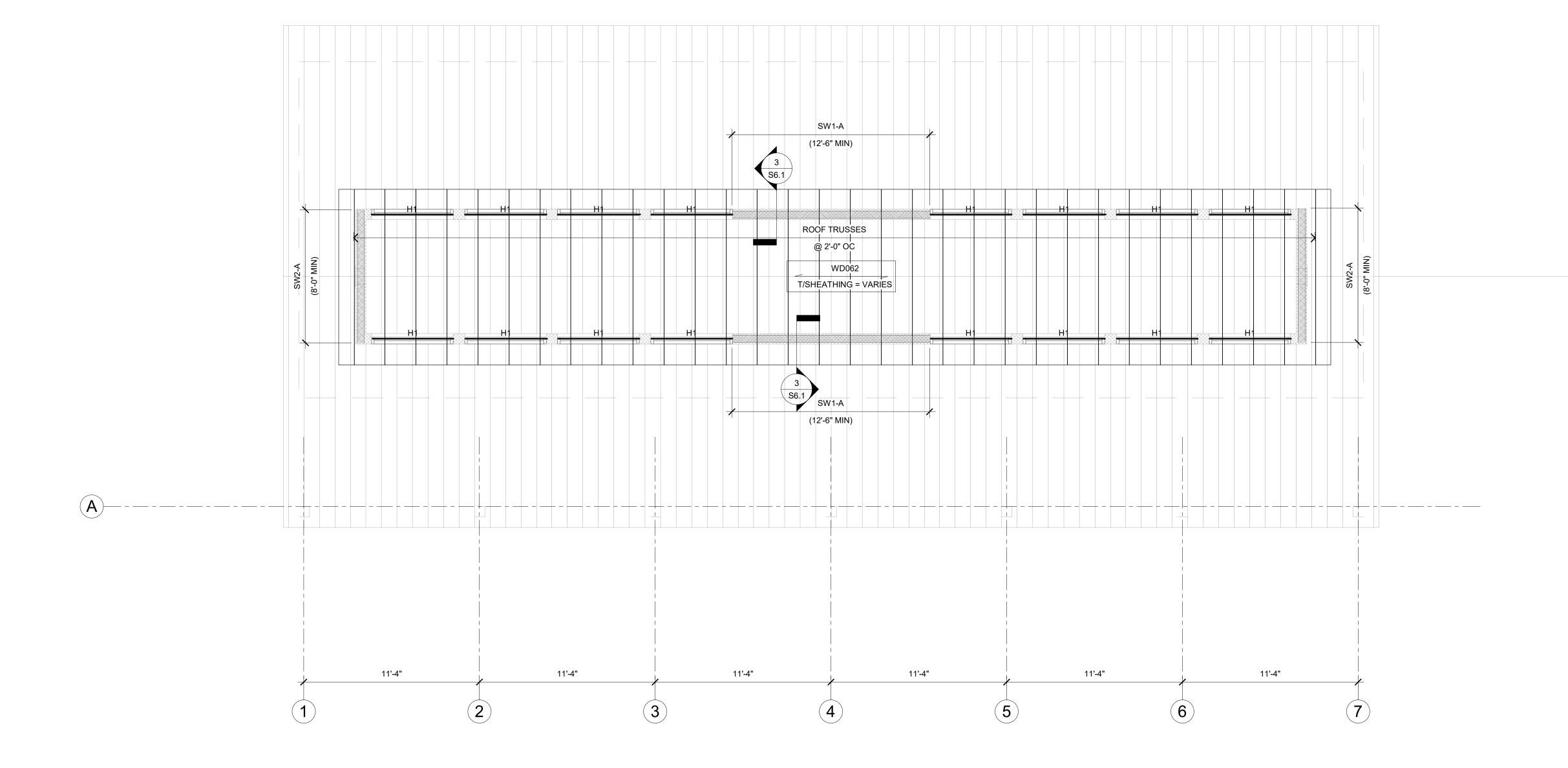
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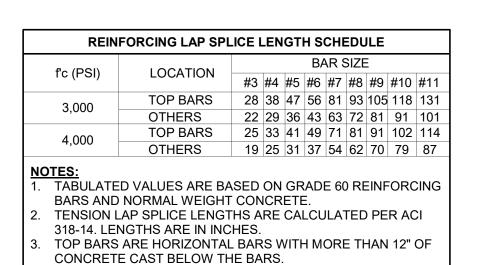


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SPLICE LENGTHS IN THIS SCHEDULE ARE BASED ON CLEAR

COVER AT LEAST 1.0 BAR Ø AND CLEAR SPACING AT LEAST

TYPICAL CONCRETE

REINFORCING LAP LENGTHS S3.0

LAP SPLICE

CONSTRUCTION JOINT

S3.0

- SUITABLE BEARING SUBGRADE

LIMITS OF

EXCAVATION

FOUNDATION WALL

CONCRETE FOOTING

TYPICAL WALL

SCALE: NTS

CONT VERTICAL

2x4 KEYWAY W/

WATERSTOP

CONCRETE

 $\frac{4}{\text{S3.0}}$

SCALE: NTS

STRUCTURAL FILL PLACED IN -

LAYERS WITH MAX LOOSE THICKNESS OF 8" COMPACTED

TO 95% OF THE MAX DRY

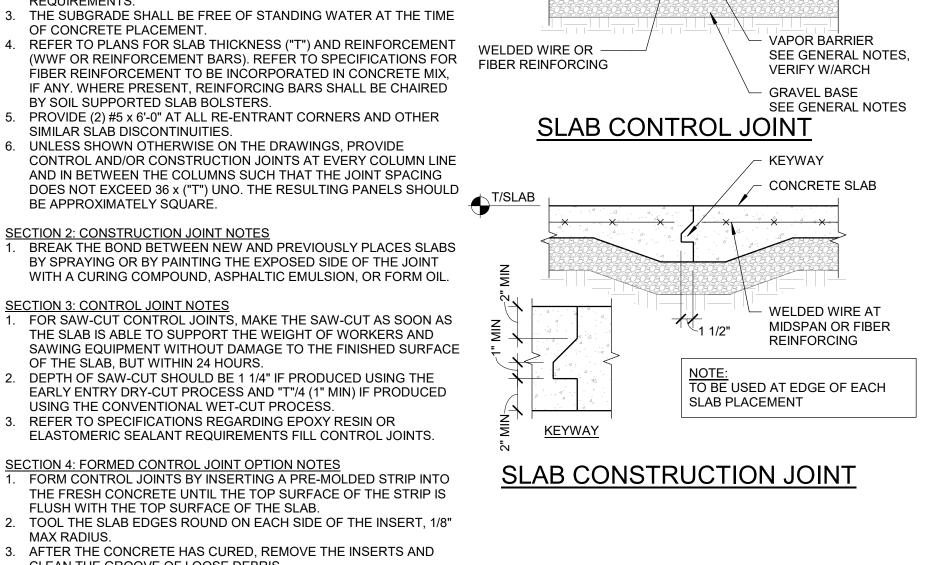
(MODIFIED PROCTOR)

DENSITY AS DETERMINED BY

ASTM TEST DESIGNATED D 1557

FOUNDATION

2.0 BAR Ø.



JOINT DEPTH TO

BE 1/4 OF SLAB

THICKNESS

SAWCUT CONTROL

JOINT OR PLASTIC

CONCRETE SLAB

INSERT



CLEAN THE GROOVE OF LOOSE DEBRIS.

SECTION 1: SLAB-ON-GRADE NOTES

1. SLAB-ON-GRADE CONSTRUCTION SHOULD CONFORM WITH THE

REFER TO GEOTECHNICAL REPORT AND/OR ARCHITECTURAL DRAWINGS & SPECIFICATIONS FOR SUB-FLOOR DRAINAGE SYSTEM, SUBGRADE PREPARATION, MUD SLAB AND/OR VAPOR RETARDER

6. UNLESS SHOWN OTHERWISE ON THE DRAWINGS, PROVIDE

SLAB CONSTRUCTION.

OF CONCRETE PLACEMENT.

BY SOIL SUPPORTED SLAB BOLSTERS.

SIMILAR SLAB DISCONTINUITIES.

BE APPROXIMATELY SQUARE.

SECTION 3: CONTROL JOINT NOTES

MAX RADIUS.

SECTION 2: CONSTRUCTION JOINT NOTES

OF THE SLAB, BUT WITHIN 24 HOURS.

USING THE CONVENTIONAL WET-CUT PROCESS.

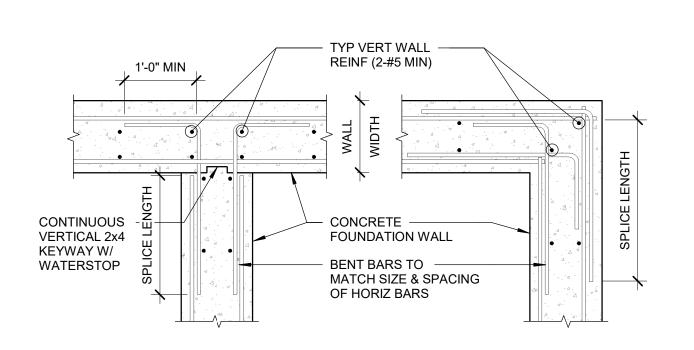
SECTION 4: FORMED CONTROL JOINT OPTION NOTES

FLUSH WITH THE TOP SURFACE OF THE SLAB.

REFER TO SPECIFICATIONS REGARDING EPOXY RESIN OR

RECOMMENDATIONS AND REQUIREMENTS SET FORTH IN THE

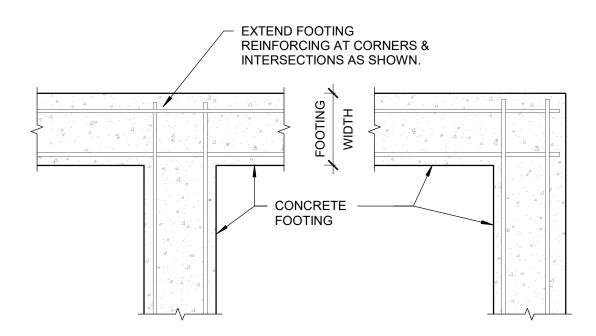
LATEST RELEASE OF ACI 302 GUIDE FOR CONCRETE FLOOR AND

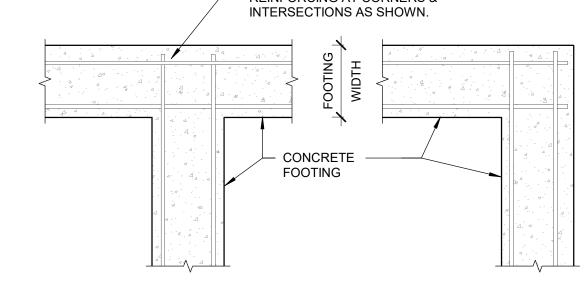


TYPICAL WALL REINFORCING

NOT TO BE USED UNDER

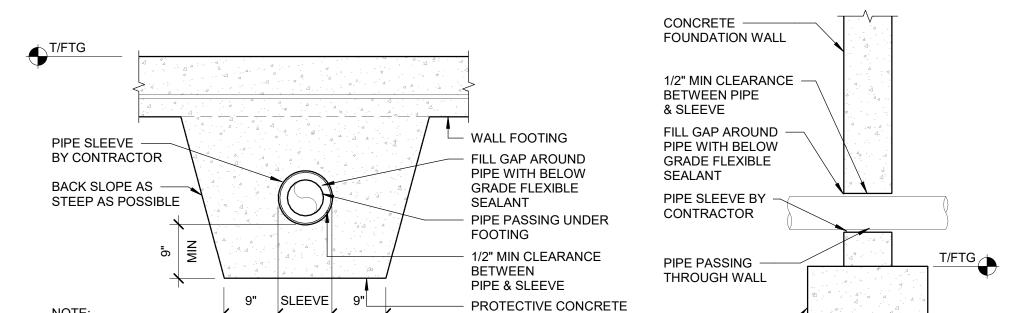
9 S3.0







THROUGH WALL



TO TRANSFER LOAD

FOOTING WIDTH, TYP

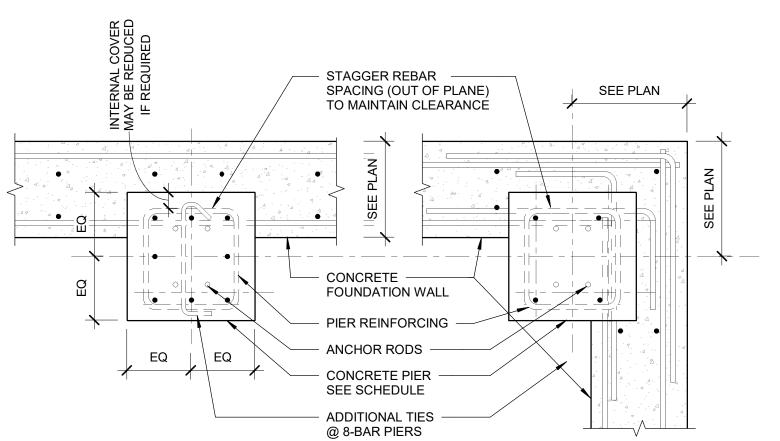
AROUND PIPE TO MATCH

WALL FOOTING

UNDER WALL FOOTING

OD

MIN



T/PIER

CONCRETE

CONCRETE

FOOTING

CONCRETE

#4 @ 24" OC

SEE PLAN

7 S3.0

FOUNDATION WALL

SLAB

SEE SCHEDULE

TYPICAL PIER AT WALL AND CORNER SCALE: NTS

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Project Info. — 22005 RIVERSIDE PARK

RESTROOMS

WOOD COLUMN

BOTTOM CONN

SEE SCHEDULE

REINFORCING

EQ

EQ

SEE SCHEDULE

TYPICAL CONCRETE PIER DETAIL

THERMAL BREAK

PITCH

SLAB

SEE ARCH

MINIMUM STOOP DIMENSIONS AS FOLLOWS:

4" BEYOND DOOR JAMB AT HINGE SIDE 1'-6" BEYOND DOOR JAMB AT LATCH SIDE COORDINATE FINAL LOCATION WITH ARCH/CIVIL.

5'-0" FROM FACE OF BUILDING

TYPICAL STOOP SECTION

EQ

SEE SCHEDULE

SEE SCHEDULE & PLAN

TIES, TOP (3) @ 1-1/2" OC

REMAINDER PER SCHEDULE

FOOTING

REINFORCEMENT

4" CONCRETE

SLAB W/ #4's @

12" OC EACH WAY

- (1) #5 CONT @ TOP

FOUNDATION WALL &

FOOTING TYPICAL 3

. T/FTG

(2) #5 CONT

SIDES

1'-8"

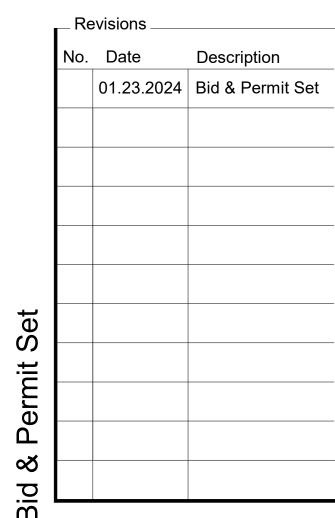
- #4 @ 48" OC

SEE SCHEDULE

New Construction 600 Labaree St Watertown, WI -Sheet Title

S 4

Drawn by	Checked by
C4E	C4E



2

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Sheet No.

S3.0

S3.0

TYPICAL OVER EXCAVATION DETAIL SCALE: NTS

8" MIN IF LEAN

CONCRETE OPTION USE

1. CONTRACTOR'S OPTION: ELIMINATE STRUCTURAL FILL BY LOWERING

THICKNESS TO REACH SUITABLE BEARING SUBGRADE.

CONTRACTOR, ARCHITECT/ENGINEER, AND OWNER.

DESIGNED FOOTING ELEVATION SO THAT FOOTING RESTS DIRECTLY ON

SUITABLE BEARING SUBGRADE, PROVIDE LEAN CONCRETE (fc = 500 PSI MIN)

UNDER THE FOOTING AS SHOWN HATCHED ABOVE, OR INCREASE FOOTING

2. THIS DETAIL APPLIES ONLY AT THOSE LOCATIONS WHERE GEOTECH ENGINEER

DEEMS SOILS AT DESIGNED FOOTING ELEVATIONS ARE INADEQUATE FOR

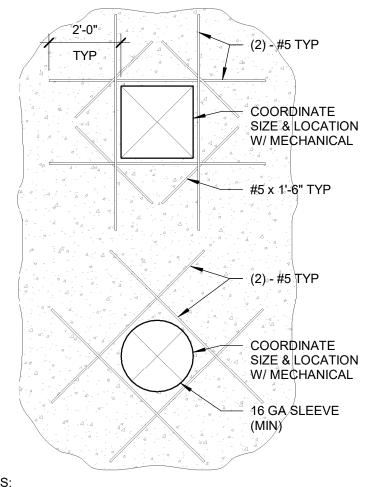
COMPENSATED ON A PRE-ESTABLISHED UNIT COST AGREED UPON BY THE

FOOTING SUPPORT. WHERE THIS WORK IS REQUIRED, CONTRACTOR WILL BE

TYPICAL PIPE CROSSING FOUNDATION WALL SCALE: NTS

S3.0

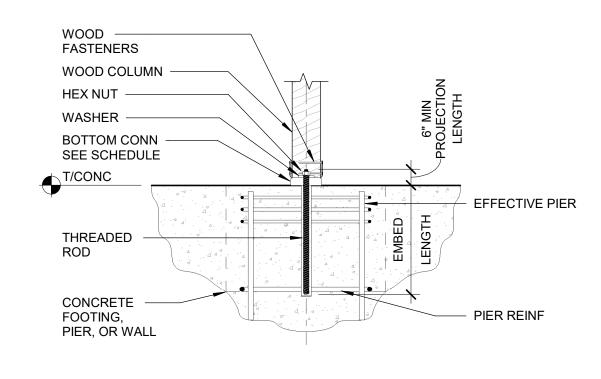
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NOTES:

- 1. APPLIES TO 24" (MAX) OPENINGS THROUGH FOUNDATION WALL.
- TOP OF OPENING TO BE 24" (MIN) FROM TOP OF WALL.
 REINFORCING LAYERS TO MATCH FOUNDATION WALL.
 USE 90° STANDARD HOOK AT CORNERS AND ENDS OF WALL.

TYPICAL CONCRETE WALL PENETRATION <u>1</u> S3.1 SCALE: NTS



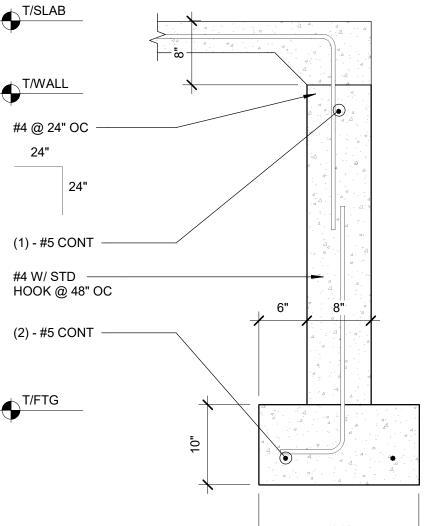
CONN TYPE	WOOD FASTENER S	THREADED ROD Ø (IN.)	EMBED LENGTH (IN.)	EPOXY TYPE
SIMPSON ABA44	(6) - 10d	1/2	4 1/4	HILTI HIT-RE 500
SIMPSON ABA66	(8) - 16d	5/8	5	HILTI HIT-RE 500
SIMPSON ABU88	(18) - 16d	(2) - 5/8	6 5/8	HILTI HIT-RE 500

 $\begin{pmatrix} 2 \\ S3.1 \end{pmatrix}$

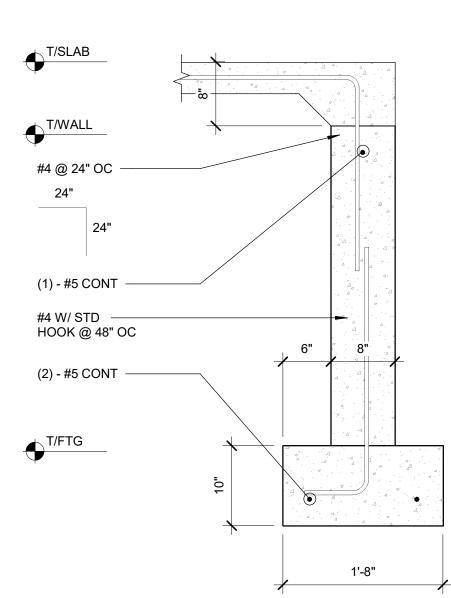
SCALE: NTS

TYPICAL WOOD COLUMN BASE

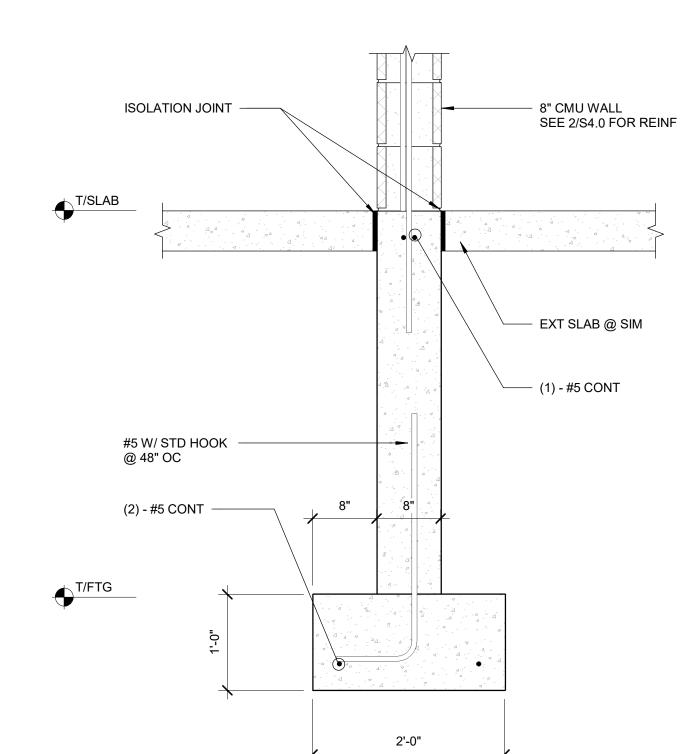
3 S3.1











SECTIONS **८** ∞

259 South Stree, Suite A WAUKESHA, WI 53186

Project Info. -22005

RIVERSIDE PARK

RESTROOMS

New Construction

600 Labaree St

Watertown, WI

-Sheet Title -

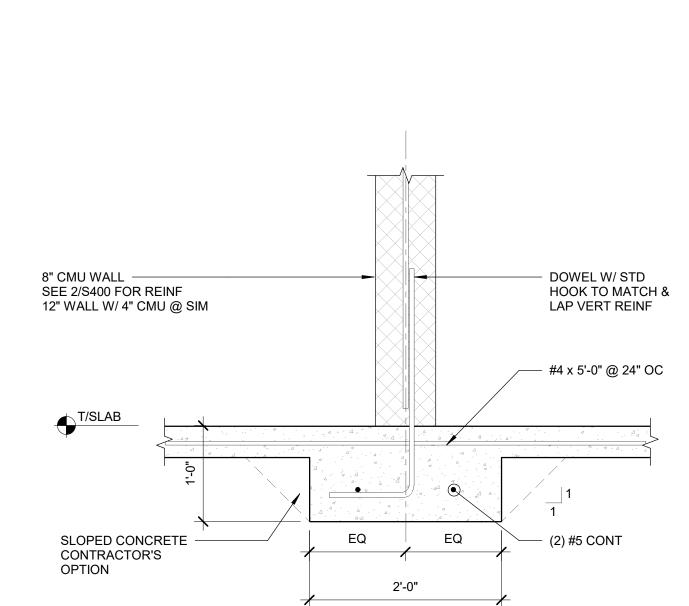
p: 833-380-6180

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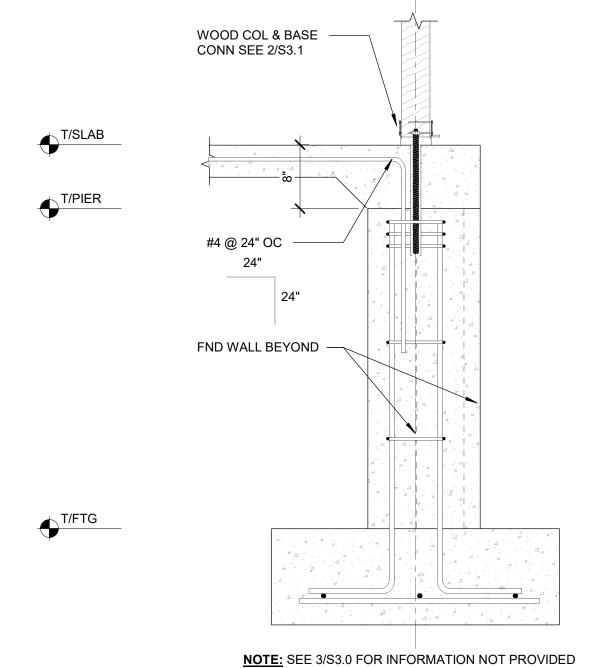
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Sheet No.

2024







SCALE: NTS





259 South Stree, Suite A WAUKESHA, WI 53186 p: 833-380-6180

Project Info. =22005

RIVERSIDE PARK RESTROOMS

New Construction

600 Labaree St Watertown, WI

Sheet Title

T/SLAB

-SEE 1/S400

2 LAYERS OF REINFORCING

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Drawn by Checked by C4E C4E

1	Re	evisions	
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WIDTH OF WALL ____10__ LAP HORIZONTAL BARS BREAK AT CONTROL JOINT LOCATIONS UNO. NOTES: 1. JAMB REINFORCEMENT PER LINTEL SCHEDULE OR LINTEL DETAILS. MIN (1) #5 EA JAMB. 2. 8" BOND BEAM W/ (1) #5 CONT. 3. LINTEL, SEE SCHEDULE DOWELS TO MATCH & LAP VERTICAL REINFORCEMENT. VERTICAL BAR . WHEN "W" IS LESS THAN 2'-0" AT 8" REINFORCEMENT CMU WALL AND 3'-0" AT 12" CMU WALL, IN SOLID GROUTED ADD 1/4" CLOSED TIE SETS AT 8" OC. CELL . REINFORCE VERT CELLS AT END OF WALL AND ADJACENT TO CONTROL 6____ JOINTS. . HORIZ JOINT REINFORCEMENT, SEE GENERAL NOTES. DOWELS TO MATCH 8. ROOF OR FLOOR LINE BEYOND. 9. 8" BOND BEAM W/ (2) #4 CONT AT ROOF & LAP VERT REINF CMU WALL OR FLOOR LINE, UNO. CONTROL 10. 8" BOND BEAM W/ (2) #4 CONT AT TOP OF WALL, UNO. SEE ARCH FOR 2'-0" MIN 11. #5 @ 48" OC TYPICAL WALL COURSING HEIGHTS TO OPENING REINFORCING, UNO, 11 -TOP OF CONCRETE "W" 1'-4" 2'-8" OR T/SLAB MAX GREATER NOTE:
CLEANOUTS ARE REQUIRED IN THE BOTTOM COURSE FOR EACH POUR HEIGHT GREATER THAN 5'-0". 1 LAYER OF REINFORCING

TYPICAL MASONRY REINFORCING LAP LENGTHS

MECH SP

MECH SP

NA

BAR 8" & 10" BLOCK | 12" BLOCK | CENTERED | CENTERED | CENTERED

IN 8" BLOCK | IN 10" BLOCK | IN 12" BLOCK

MECH SP

MECH SP

MECH SP

NA

13"

33"

MECH SP MECH SP

MECH SP

MECH SP

MASONRY BAR LAP LENGTHS (Ld) F'm = 2,000 psi

CLEAR

COVER ≥ 2"

MECH SP

MECH SP

MECH SP

MECH SP

MECH SP

MECH SP

CLEAR

COVER <u>></u> 1 3/4"

39" MECH SP

MECH SP

MECH SP

NA

SIZE

#10

#11

TYP CMU WALL REINFORCEMENT SCALE: NTS

4

2 S4.0

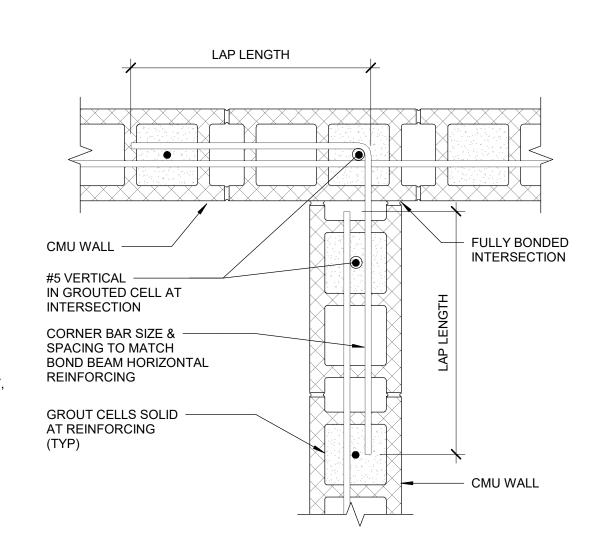
CONC MASONRY PROVIDE VERT REINF IN GROUTED CELL EA SIDE OF SASH UNIT CONTROL JOINT STOP JOINT REINF @ CONTROL JOINT (TYP) GASKET BACKER ROD **OPTION A** W/ SEALANT

PROVIDE VERT REINF IN CONC MASONRY GROUTED CELL EA SIDE OF STRETCHERS CONTROL JOINT STOP JOINT REINF @ **GROUT KEY** CONTROL JOINT (TYP) **BUILDING PAPER OR OTHER** BOND BREAK, ONE SIDE ONLY, BACKER ROD CUT BOND BREAK BACK TO W/ SEALANT BEHIND SEALANT

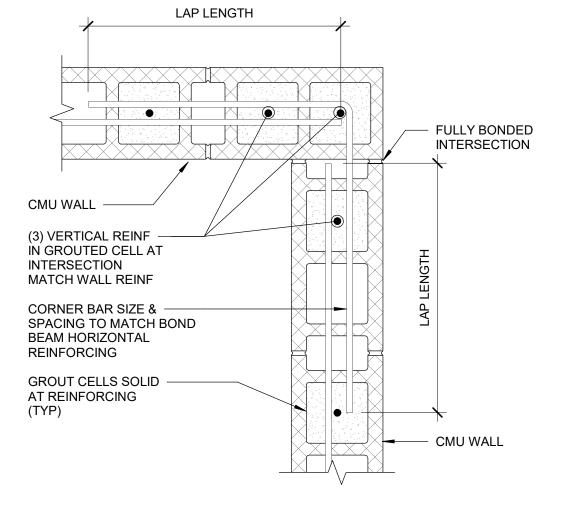
OPTION B

PROVIDE CONTROL JOINTS IN MASONRY WALLS AS FOLLOWS: EXTERIOR CONCRETE MASONRY 25' OC TYPICAL 12' MAX FROM CORNERS INTERIOR CONCRETE MASONRY 25' OC TYPICAL 12' MAX FROM CORNERS

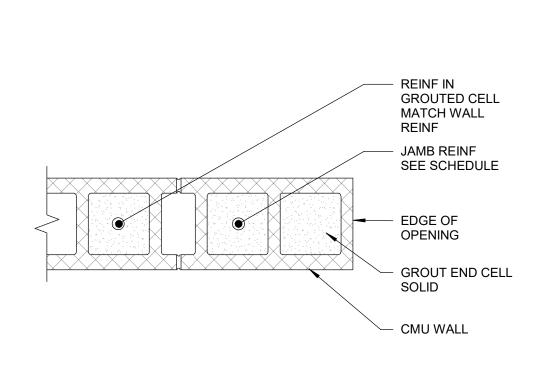












BOND BEAM TO MATCH

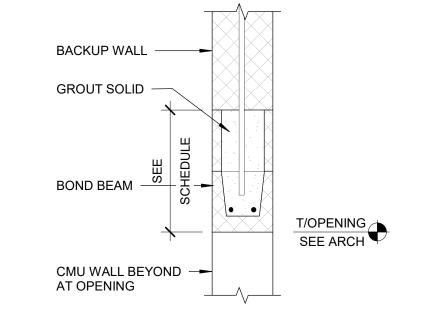
TYPICAL REINFORCED CMU WALL

CONSTRUCTION DETAIL

3 S4.0

SCALE: NTS





LINTEL TYPE A

SCALE: NTS



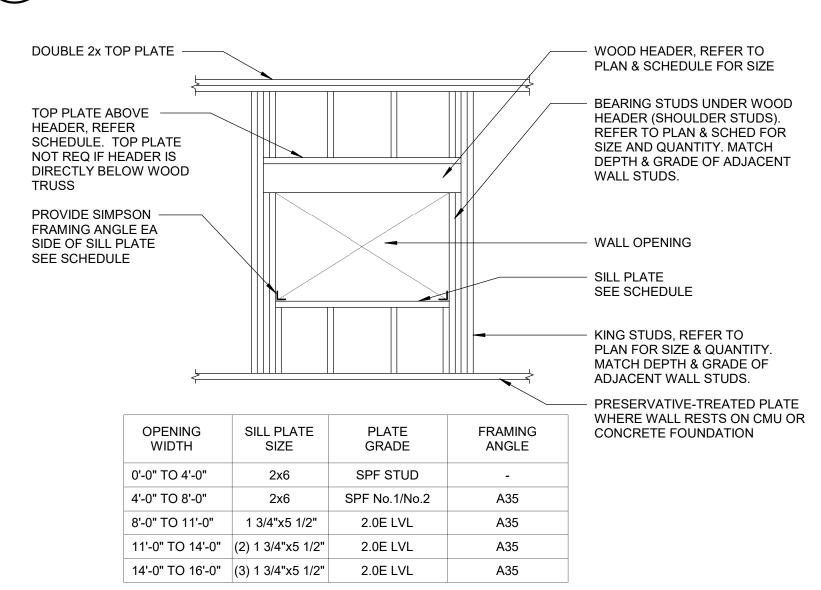
Mequon, WI 53092 | 262.236.9372

C4E Project #: 21325

	TYPICAL FASTENING SCHEDULE	
CONNECTION TYPE:	NAILING - COMMON NAILS: (UNLESS OTHER CONNECTION IS REQUIRED)	NAILING - STRIP NAILS: (UNLESS OTHER CONNECTION IS REQUIRED
DOUBLE TOP PLATES, FACE NAIL DOUBLE TOP PLATES, LAP SPLICE, FACE NAIL TOP PLATES, LAPS & INTERSECTIONS, FACE NAIL		3"x0.131" @ 12" OC (12) 3"x0.131" (3) 3"x0.131"
TOP PLATE TO STUD, END NAIL CONT HEADER TO STUD, TOENAIL STUD TO SOLE PLATE	(2) 16d COMMON (3-1/2"x0.162") (4) 8d COMMON (2-1/2"x0.131") (4) 8d COMMON (2-1/2"x0.131"), TOENAIL OR (2) 16d COMMON (3-1/2"x0.162"), END NAIL	3"x0.131" (4) 3"x0131" TOENAIL (3) 3"x0.131" END NAIL
BUILT-UP STUD COLUMNS, FACE NAIL BUILT-UP CORNER STUDS & SUPPORT STUDS	10d COMMON (3"x0.148") @ 16" OC STAGGERED 16d COMMON (3-1/2"x0.162") @ 24" OC STAGGERED	3"x0.131" @ 12" OC STAGGERED 3"x0.131" @ 16" OC STAGGERED
BUILT-UP HEADER, FACE NAIL	16d COMMON (3-1/2"x0.162") @ 12" OC ALONG EACH EDGE	
PLYWOOD/OSB ROOF SHEATHING (APA RATED) UNLESS NOTED OTHERWISE	8d COMMON (2-1/2"x0.131") @ 6" OC AT SUPPORTED PANEL EDGES 8d COMMON (2-1/2"x0.131") @ 12" OC AT INTERMEDIATE MEMBERS IN FIELD OF PANELS	3"x0.131" @ 6" OC AT SUPPORTED PANEL EDGES 3"x0.131" @ 12" OC AT INTERMEDIATE MEMBERS IN FIELD OF PANELS
JOIST TO SILL OR GIRDER, TOENAIL RIM JOIST TO TOP PLATE, TOENAIL BLOCKING BTWN JOIST/RAFTERS TO TOP PL, TOENAIL	(3) 8d COMMON (2-1/2"x0.131") 8d COMMON (2-1/2"x0.131") @ 6" OC (3) 8d COMMON (2-1/2"x0.131")	(3) 3"x0.131" 3"x0.131" @ 6" OC (3) 3"x0.131"
JOIST TO RIM BOARD, FACE NAIL SOLE PLATE TO JOIST/BLOCKING, FACE NAIL	(3) 16d COMMON (3-1/2"x0.162") 16d COMMON (3-1/2"x0.135") @ 16" OC	(4) 3"x0.131" 3"x0.131" @ 8" OC
FLOOR SHEATHING (APA RATED) UNLESS NOTED OTHERWISE	#8 SCREWS @ 6" OC AT SUPPORTED PANEL EDGES #8 SCREWS @ 12" OC AT INTERMEDIATE MEMBERS IN FIELD OF PANELS W/ CONSTRUCTION ADHESIVE	#8 SCREWS @ 6" OC AT SUPPORTED PANEL EDGES #8 SCREWS @ 12" OC AT INTERMEDIATE MEMBERS IN FIELD OF PANELS W/ CONSTRUCTION ADHESIVE

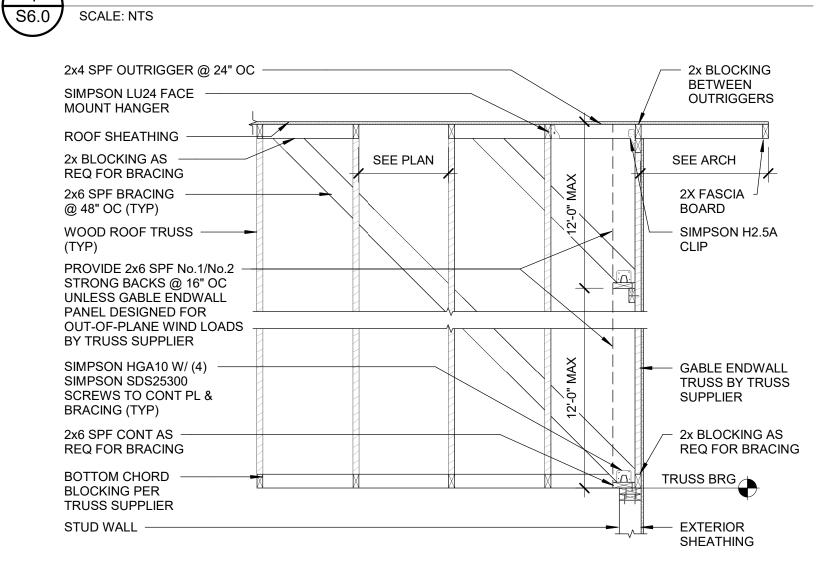
TYPICAL WOOD FASTENING SCHEDULE

SCALE: NTS

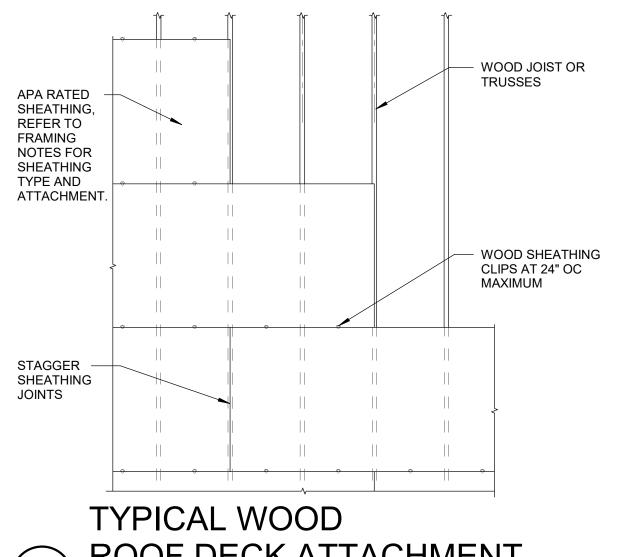


NOTE:
USE SIMPSON HH HEADER HANGER FOR HEADER CONNECTION TO WOOD COLUMNS.

TYPICAL FRAMING AROUND AN OPENING IN A WOOD STUD BEARING WALL

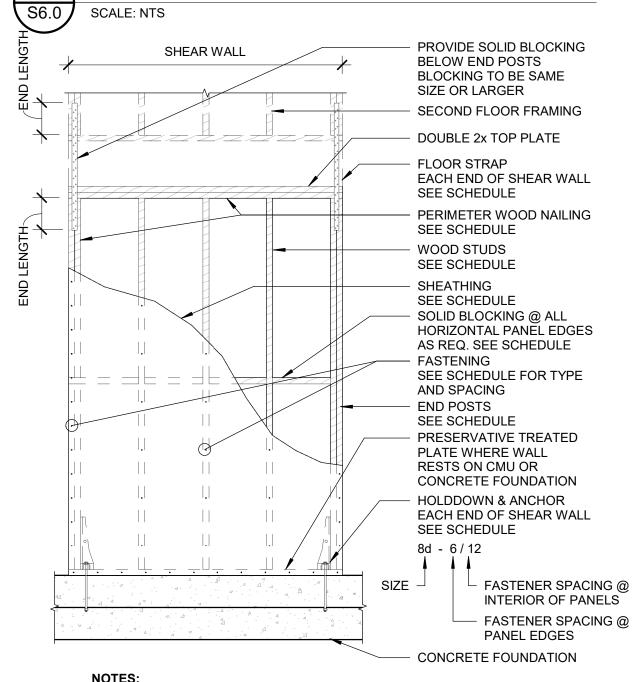






2x JOISTS OR TRUSSES AT 2'-0"OC MAXIMUM

ROOF DECK ATTACHMENT



NOTES:

1. TYPICAL DETAILS SHOWN WITH PLYWOOD OR OSB SHEATHING. GYPSUM BOARD

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3. TYPICAL DETAILS SHOWN WITH PLYWOOD OR OSB SHEATHING. GYPSUM BOARD

3. TYPICAL DETAILS SHOWN WITH PLYWOOD OR OSB SHEAR WALLS SIMILAR, SEE SCHEDULE FOR FASTENERS AND SPACING. 2. CONTRACTOR OPTION: WOOD SHEATHING MAY BE ORIENTED W/ LONG

S6.0

SCALE: NTS

DIMENSION VERTICAL-OPPOSITE WHAT IS SHOWN ON DETAIL TYPICAL WOOD SHEAR WALL

2x4 SPF OUTRIGGER @ 24" OC 2x BLOCKING BETWEEN SIMPSON LU24 FACE **OUTRIGGERS** MOUNT HANGER **ROOF SHEATHING** 2x BLOCKING AS SEE PLAN SEE ARCH **REQ FOR BRACING** 2x6 SPF BRACING 2X FASCIA BOARD @ 48" OC (TYP) WOOD ROOF TRUSS ----SIMPSON H2.5A PROVIDE 2x6 SPF No.1/No.2 **GABLE ENDWALL** STRONG BACKS @ 16" OC TRUSS BY TRUSS UNLESS GABLE ENDWALL SUPPLIER PANEL DESIGNED FOR OUT-OF-PLANE WIND LOADS BY TRUSS SUPPLIER SIMPSON HGA10 W/ (4) - 2x TREATED PL W/ SIMPSON SDS25300 1/2" Ø SIMPSON TITEN HD SCREWS TO CONT PL & @ 48" OC (4 1/2" EMBED) BRACING (TYP) 2x6 CONT AS 2x BLOCKING AS **REQ FOR BRACING** REQ FOR BRACING **BOTTOM CHORD** TRUSS BRG **BLOCKING PER** TRUSS SUPPLIER

8" BOND BM

W/ (2) #5 CONT

S6.0

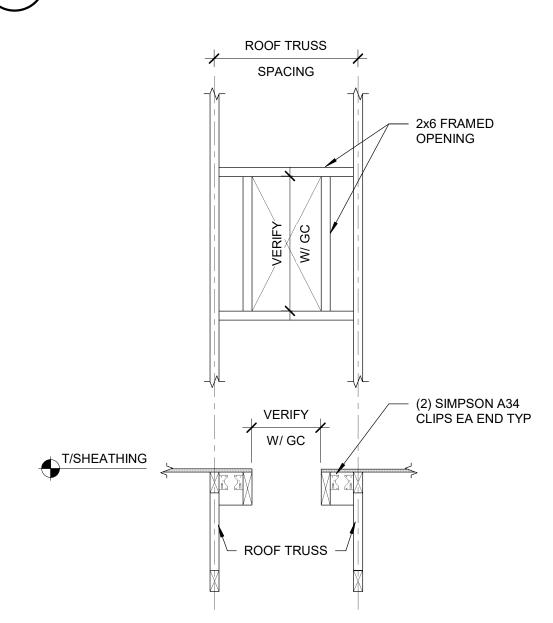
CMU WALL

YPICAL GABLE END DETAIL - CMU WALL SCALE: NTS

STAGGER JOINTS IN TOP PLATES (3)-STUD SPACES **APART MIN & COINCIDE** JOINT W/ WALL STUD BELOW DOUBLE TOP PLATE MATCH WALL STUD MATERIAL UNO VERTICAL WALL STUDS, REFER TO PLAN AND WALL STUDS. SCHEDULE FOR SIZE & REFER TO SCHEDULE SPACING FOR SPACING REFER TO ARCH FOR SHEATHING AT TYPICAL **INTERIOR & EXTERIOR WALLS** AT SHEAR WALLS, REFER TO SHEAR WALL SCHEDULE FOR SHEATHING TYPE & ATTACHMENT INFORMATION PROVIDE SOLID WOOD **BLOCKING AT ALL WOOD** PANEL JOINTS WHEN INDICATED ON SHEAR WALL SCHEDULE PRESERVATIVE TREATED BOT PLATE W/ 5/8"Ø SIMPSON TITEN HD (3 5/8" EMBED) AT 4'-0" OC, UNO WOOD SHEATHING MAY BE ORIENTED W/ REFER TO SHEAR WALL LONG DIMENSION VERTICAL (OPPOSITE SCHEDULE FOR SPACING AT WHAT IS SHOWN) AT CONTRACTORS OPTION WALLS DESIGNATED AS SHEAR WALLS ON PLAN

TYPICAL WOOD **BEARING WALL**

S6.0 SCALE: NTS



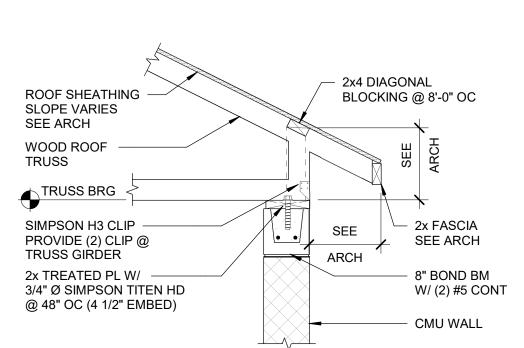
NOTES:
1. PROVIDE FRAMING FOR OPENINGS LARGER THAN 8" X 8". 8" Ø OR SUPPORTING EQUIPMENT IN EXCESS 2. GENERAL CONTRACTOR TO COORDINATE FINAL SIZE AND LOCATIONS OF MECHANICAL AND

PLUMBING OPENINGS. TYPICAL ROOF OPENING S6.0

SECTION

SCALE: NTS

S6.0



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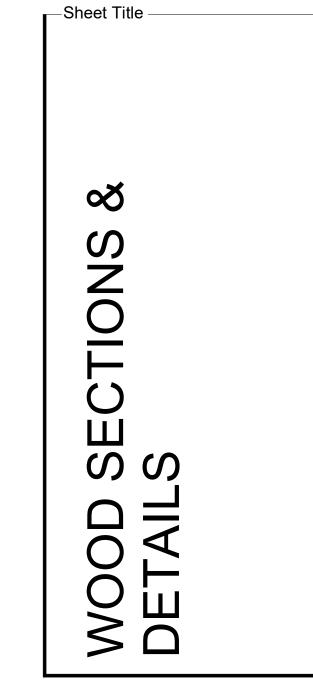
RIVERSIDE PARK

RESTROOMS

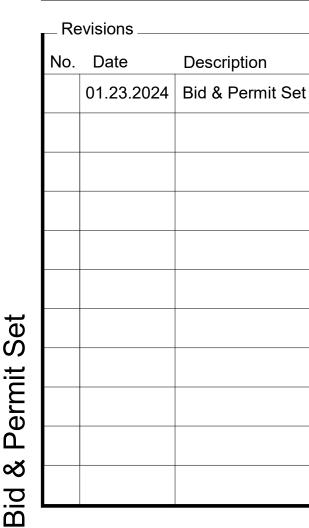
New Construction

p: 833-380-6180

600 Labaree St Watertown, WI



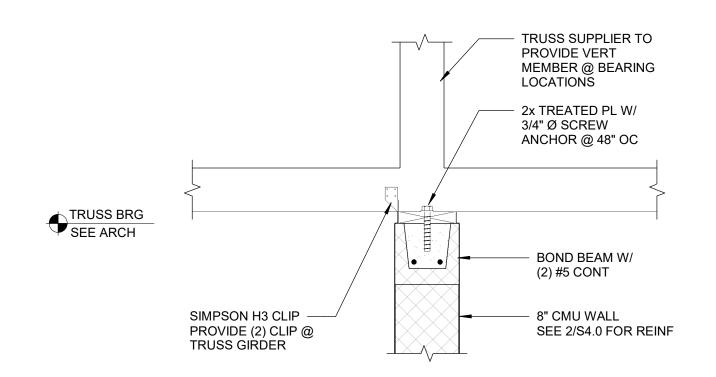
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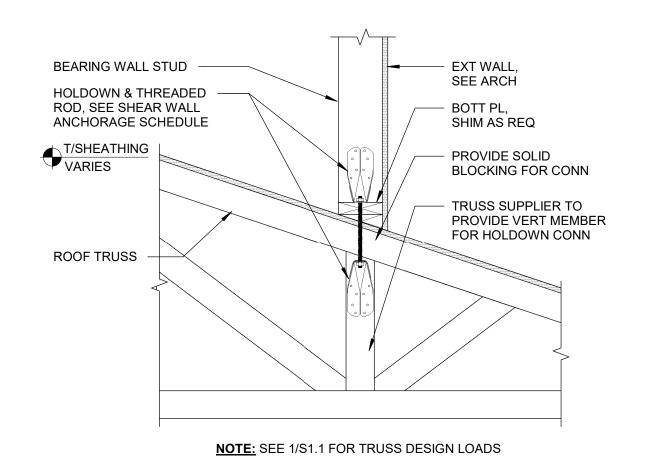
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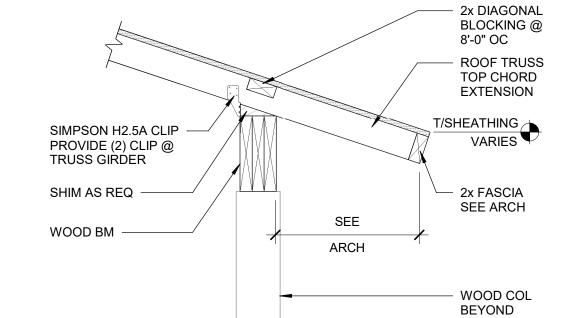




SECTION

S6.1 SCALE: NTS





NO SILL PL BELOW

TRUSS BOTT CHORD (NON BRG)

T/WALL SEE ARCH

- ROOF TRUSS BOTT CHORD

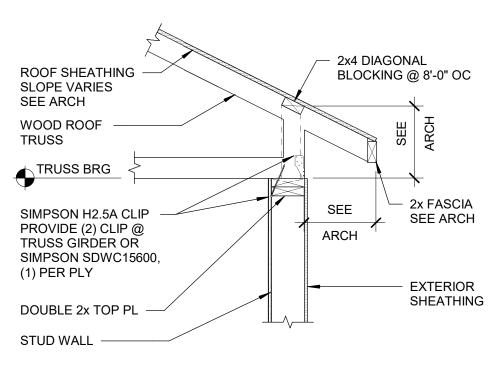
BOND BEAM W/

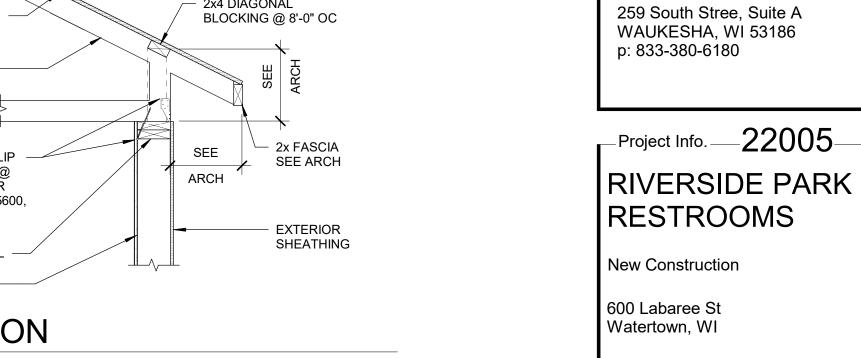
(2) #5 CONT

8" CMU WALL

SEE 2/S4.0 FOR REINF









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S6.1

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| Collaborative | Communicative | 12308 Corporate Pkwy, Suite 450 Mequon, WI 53092 | 262.236.9372 **C4E** Project #: 21325