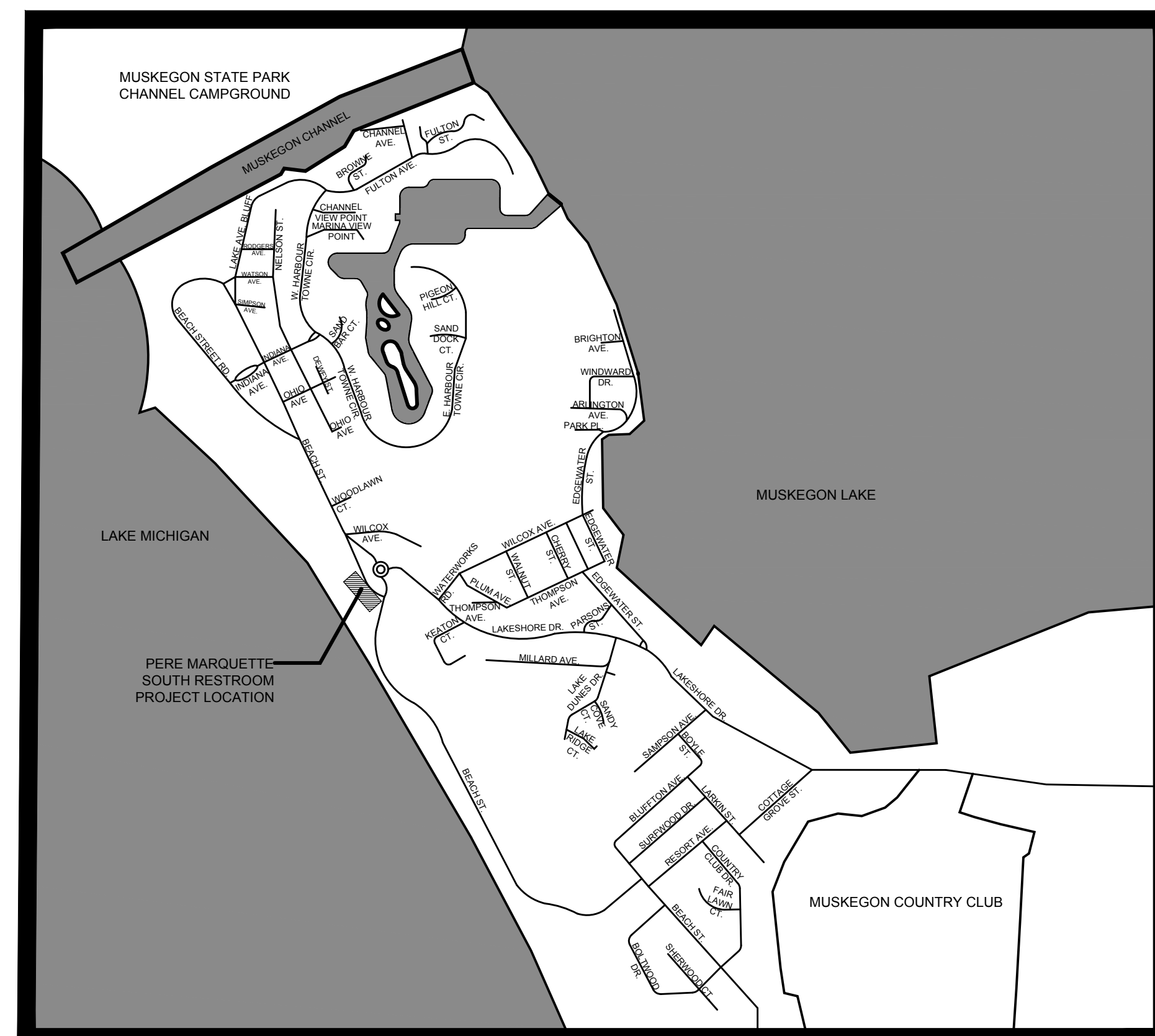
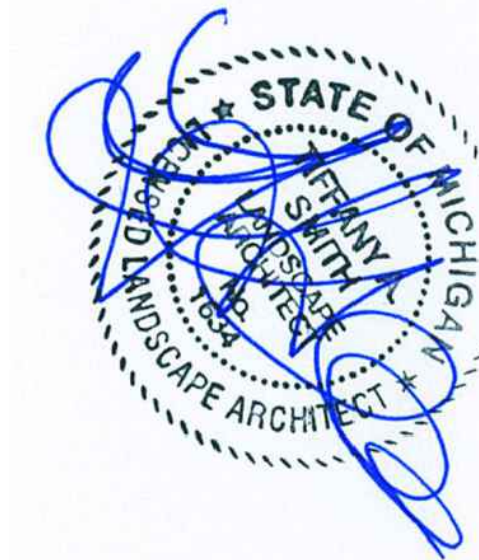


CONSTRUCTION PLANS

PERE MARQUETTE SOUTH RESTROOM - TF22-0119

CITY OF MUSKEGON, MICHIGAN

BID SET 7.22.2024



LOCATION MAP

NOT TO SCALE



CONSULTING TEAM MEMBERS:

Geotechnical

Soils & Structures

6480 Grand Haven Rd.

Muskegon, MI 49441

(800) 933-3959

Topographic Survey and

Civil Engineer

LRE

2121 3 Mile Rd. NW

Walker, MI 49544

(616) 301-7888

Structural, Mechanical, Electrical & Plumbing Engineering

Classic Engineering, LLC.

100 Cesar E. Chavez Ave. SW Suite 400

Grand Rapids, MI 49503

(616) 742-2810



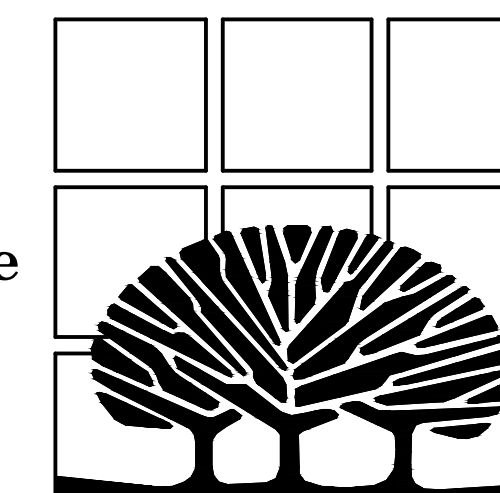
SHEET INDEX

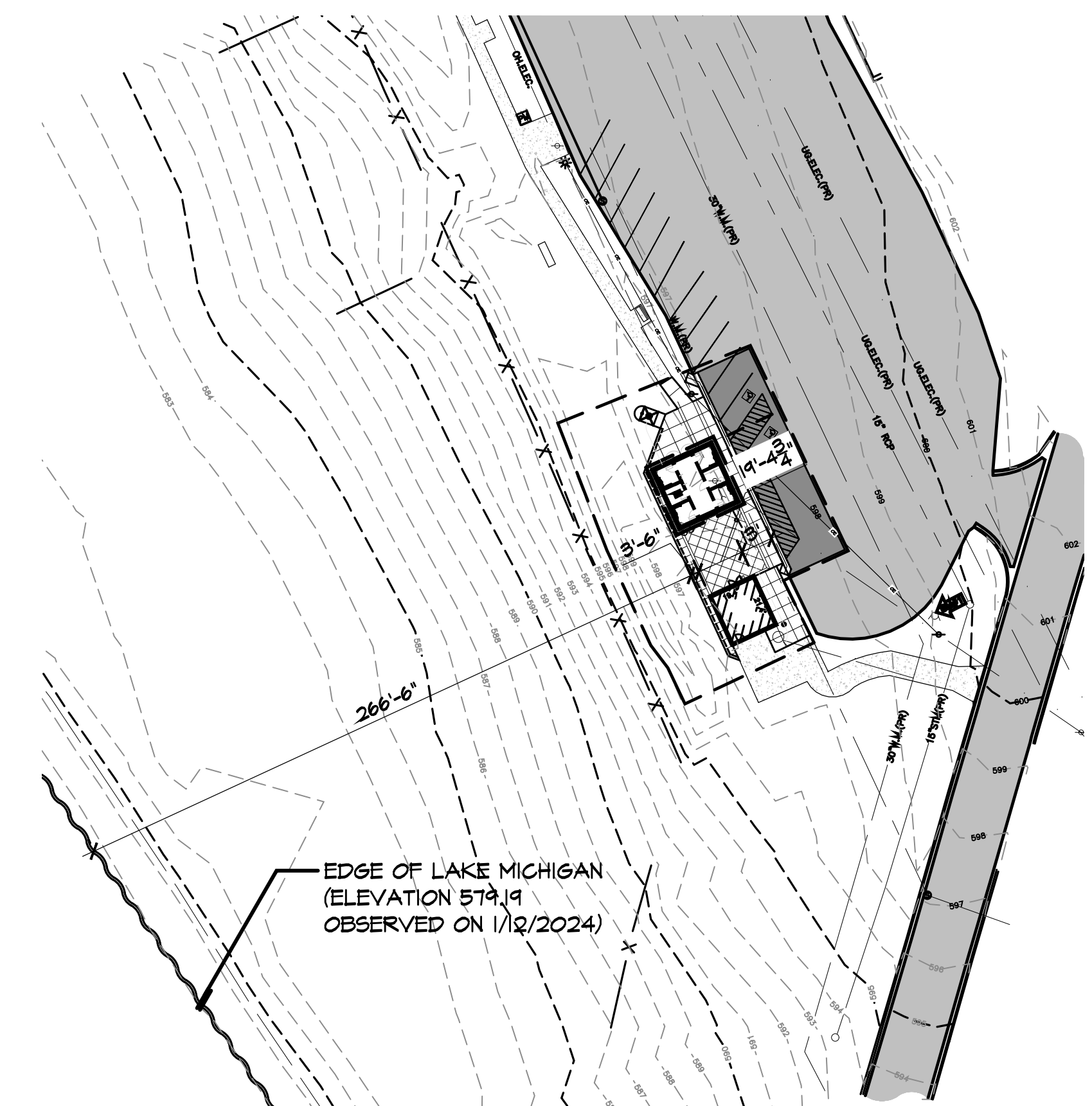
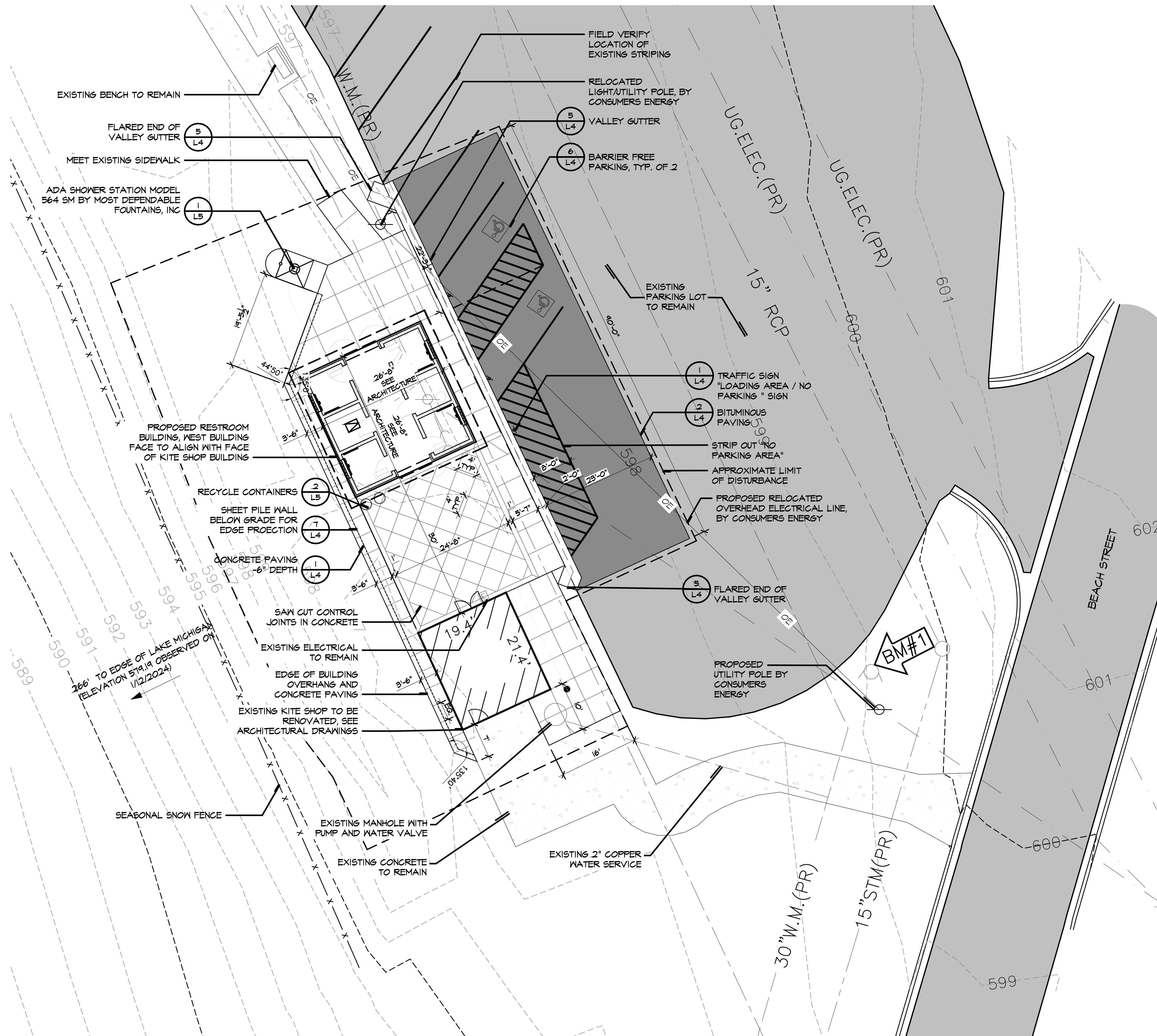
L1	Site and Layout Plan
L2	Existing Conditions and Removals
L3	Grading and SESC Plan
L4-L5	Construction Details
C1	Survey Plan
C2	Utility Plan
A1	Floor/Roof Plans, Schedules
A2	Exterior Elevations
A3	Sections, Details
A4	Interior Elevations, Details
S0	Structural Notes
S1-S2	Structural Plans and Details
P1	Plumbing Floor Plan
M1	Mechanical Floor Plan
E1	Electrical Site Plan
E2	Restroom Building Electrical Floor Plan
E3	Kite Shop Electrical Floor Plan
E4	Photometrics, Legend and Details
E5	Electrical Details, Schedules and One-Lines

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Vicinity Map
Scale: 1"=50'

LAYOUT GENERAL NOTES

1. ALL LAYOUT IS TO BE STAKED BY THE REGISTERED LAND SURVEYOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
2. NORTHINGS AND EASTINGS REFLECT THE CENTERLINE OF PATHS AND MAJOR END POINTS OF SITE ELEMENTS. AN EFFORT HAS BEEN MADE TO MINIMIZE THE DISTURBANCE OF MATURE TREES AND OTHER EXISTING NATURAL SITE FEATURES. THESE NORTHINGS AND EASTINGS MAY ONLY BE ADJUSTED WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT.
3. CONTRACTOR SHALL VERIFY IN THE FIELD ALL LINES AND DIMENSIONS INDICATED IN THE PLANS AND REPORT ANY INCONSISTENCIES TO THE LANDSCAPE ARCHITECT FOR RESOLUTION.
4. ALL ANGLES ARE PERPENDICULAR UNLESS OTHERWISE NOTED.
5. CONTRACTOR TO RECEIVE ELECTRONIC FILES OF PLANS IN AUTOCAD 2024 PRIOR TO CONSTRUCTION.

SITE GENERAL NOTES

1. SITE PLAN SHOWN FOR GENERAL INFORMATION AND DETAIL REFERENCE ONLY. SEE FOLLOWING PLAN SHEETS FOR SITE REMOVALS, EXISTING CONDITIONS, LAYOUT, GRADING, AND PLANTING INFORMATION.

COMPLIANCE

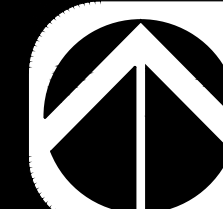
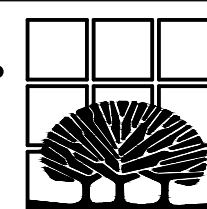
- ALL CONSTRUCTION SHALL CONFORM TO ALL ASPECTS OF THE STATE OF MICHIGAN BUILDING CODE (MBC), THE ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG) AND THE AMERICANS WITH DISABILITIES ACT (ADA). ALL WORK BY THE CONTRACTOR FOR COMPLETE EXECUTION OF THIS PROJECT SHALL MEET OR EXCEED LAWS, GUIDELINES, AND STATUTES IN EVERY SITUATION. IN THE EVENT THE CONTRACTOR BELIEVES THAT ANY PORTION OF THE WORK IS INCONSISTENT WITH THE MBC, ADAAG, AND ADA THEY MUST IMMEDIATELY INFORM THE LANDSCAPE ARCHITECT.

SITE PLAN LEGEND

- | | |
|--|--------------------------------|
| | DETAIL NUMBER
SHEET NUMBER |
| | CONCRETE PAVING
6" DEPTH |
| | EXISTING CONCRETE TO
REMAIN |
| | BITUMINOUS PAVING |
| | EXISTING BITUMINOUS
PAVING |

Pere Marquette Park South Restroom
Muskegon, MI

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529 Greenwood Avenue S.E. • East Grand Rapids, MI 49506
616-451-3346 • FAX: 616-451-1935 • EMAIL: tas@mcsagroup.com

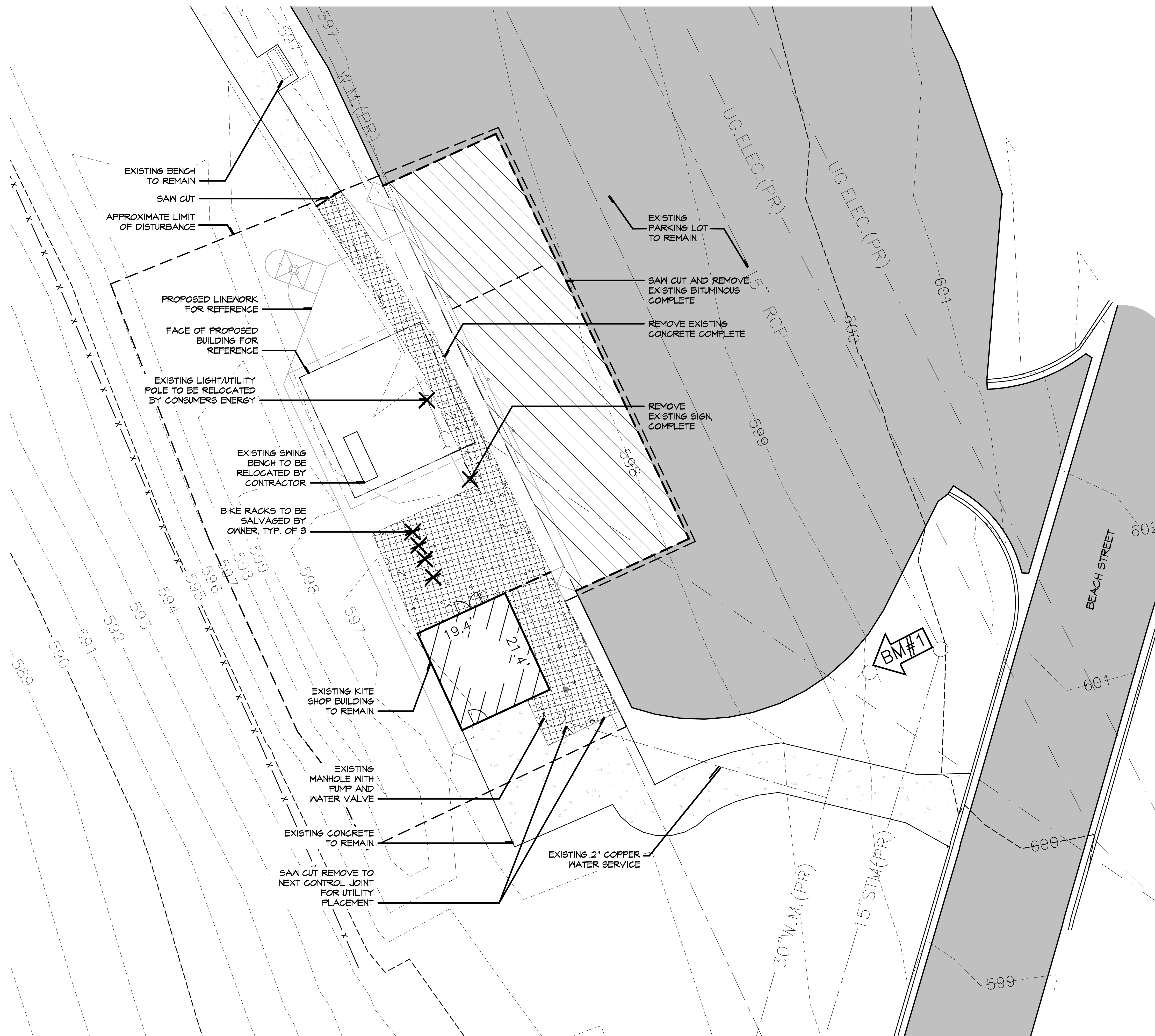


SCALE:
1"= 10'

Site and Layout Plan

DATE
7.22.2024
REVISIONS

PROJECT NO.
2215
SHEET NO.
L1



EXISTING CONDITIONS AND REMOVALS NOTES:

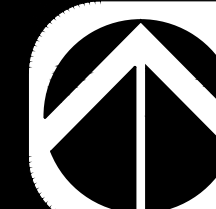
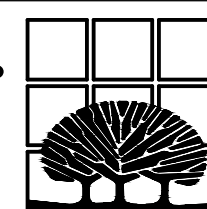
1. SURVEY PROVIDED BY LRE, 2121 3 MILE RD. NW, WALKER, MI 49544, PHONE: 616-301-7888.
2. THE CONTRACTOR IS TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION OPERATIONS. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGES TO UTILITIES CAUSED BY THEIR WORK. CONTACT MISS DIG FOR CONFIRMATION OF UTILITY LOCATIONS (1-800-482-7171).
3. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR DAMAGE TO ITEMS NOT SCHEDULED FOR REMOVAL.
4. REMOVAL ITEMS SHOWN ARE BASED ON BEST AVAILABLE INFORMATION AND ARE SHOWN SCHEMATICALLY. THE CONTRACTOR SHALL WALK THE SITE PRIOR TO BID TO BE FULLY FAMILIAR WITH THE EXTENT OF REMOVAL ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REMOVALS NECESSARY TO COMPLETE CONSTRUCTION. QUESTIONS REGARDING ITEMS TO BE REMOVED SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT.
5. CONTRACTOR SHALL STRIP AND STOCKPILE TOPSOIL AND DISTRIBUTE A MINIMUM OF 4" OF TOPSOIL, UNLESS OTHERWISE NOTED, ON ALL DISTURBED AREAS AT COMPLETION OF SITE GRADING. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED PER PLANTING PLANS AND SPECIFICATIONS.
6. ALL WORK SHALL BE SECURED AND CONTRACTOR SHALL UTILIZE ORANGE BARRELS AND SNOW FENCING DURING ACTIVE CONSTRUCTION TO RESTRICT PEDESTRIAN ACCESS.

REMOVALS LEGEND

- REMOVE EXISTING CONCRETE, COMPLETE
- EXISTING CONCRETE TO REMAIN
- REMOVE AND REPLACE BITUMINOUS PAVING
- EXISTING BITUMINOUS PAVING TO REMAIN
- SAW CUT
- EXISTING SITE ELEMENT TO BE REMOVED COMPLETE
- APPROXIMATE LIMIT OF WORK

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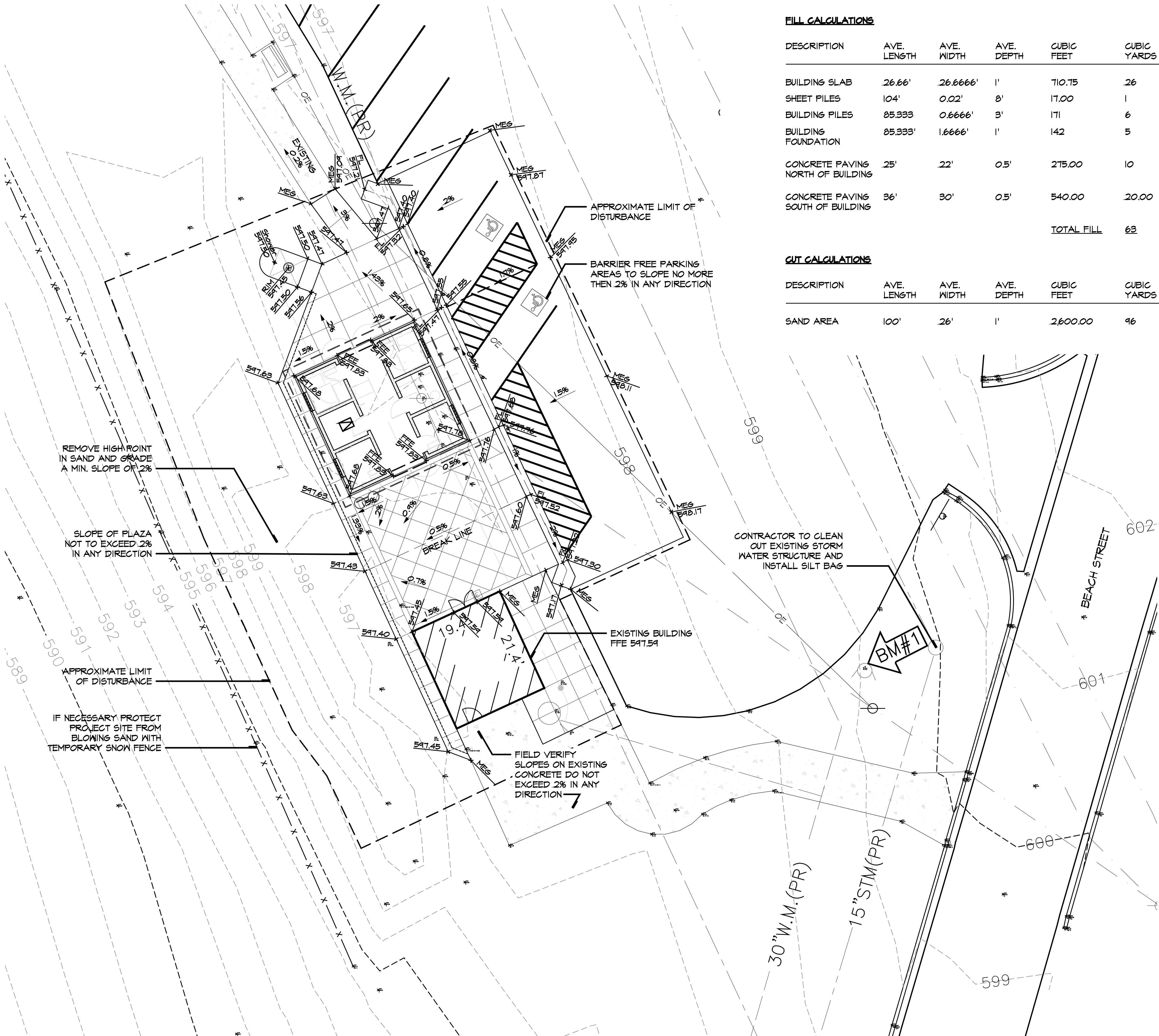


SCALE:
1"= 10'

**Existing Conditions
and Removals Plan**

DATE
7.22.2024
REVISIONS

PROJECT NO.
2215
SHEET NO.
L2

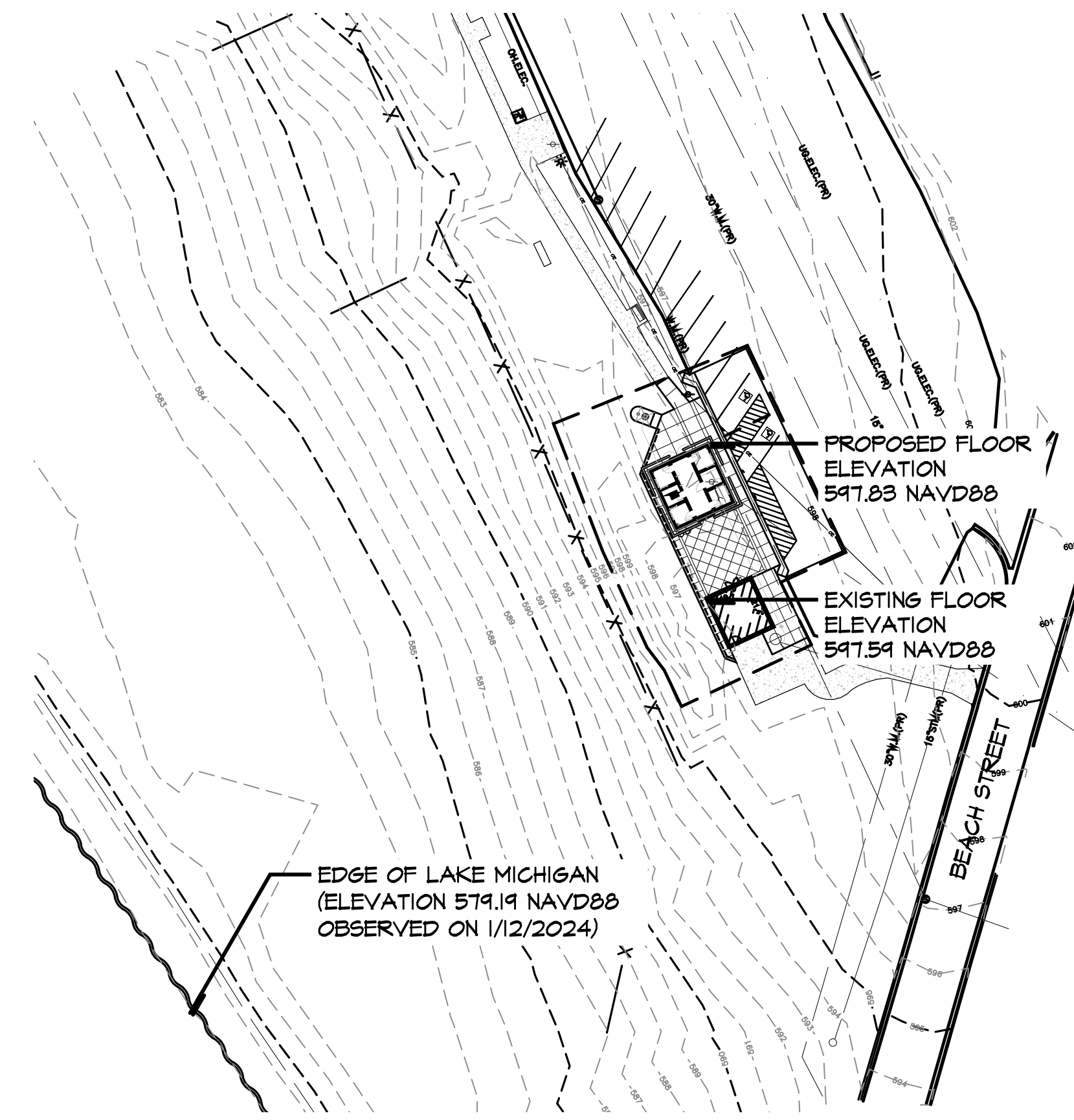


FILL CALCULATIONS

DESCRIPTION	AVE. LENGTH	AVE. WIDTH	AVE. DEPTH	CUBIC FEET	CUBIC YARDS
BUILDING SLAB	26.66'	26.6666'	1'	710.75	26
SHEET PILES	104'	0.02'	8'	17.00	1
BUILDING PILES	85.333	0.6666'	3'	171	6
BUILDING FOUNDATION	85.333'	1.6666'	1'	142	5
CONCRETE PAVING NORTH OF BUILDING	25'	22'	0.5'	275.00	10
CONCRETE PAVING SOUTH OF BUILDING	36'	30'	0.5'	540.00	20.00
TOTAL FILL					63

CUT CALCULATIONS

DESCRIPTION	AVE. LENGTH	AVE. WIDTH	AVE. DEPTH	CUBIC FEET	CUBIC YARDS
SAND AREA	100'	26'	1'	2600.00	96



Vicinity Map
Scale: 1"=50'

SOIL EROSION AND SEDIMENTATION CONTROL GENERAL NOTES

- ALL WORK SHALL COMPLY WITH THE APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL (SESC) RULES AND REGULATION (SOIL EROSION AND SEDIMENTATION CONTROL - 1994 PA 451, PART 91, AS AMENDED, MCL 324.9101 ET SEQ.).
- PLACE EROSION CONTROL MEASURES AS SHOWN TO ESTABLISH VEGETATION AND ELIMINATE SEDIMENTATION INTO NON-CONSTRUCTION AREAS. CONTRACTOR SHALL OBTAIN REQUIRED EROSION AND SEDIMENTATION CONTROL PERMIT AND MUST POST THE PERMIT ON SITE THROUGHOUT THE DURATION OF THE PROJECT
- ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
- ANY MUD OR DEBRIS TRACKED ONTO EXISTING ROADWAYS, PARKING AREAS, AND SIDEWALKS MUST BE REMOVED DAILY.
- ANY MATERIAL STOCKPILED ON-SITE MUST BE PROTECTED WITH TARP AND OR SILT FENCE.

GRADING GENERAL NOTES:

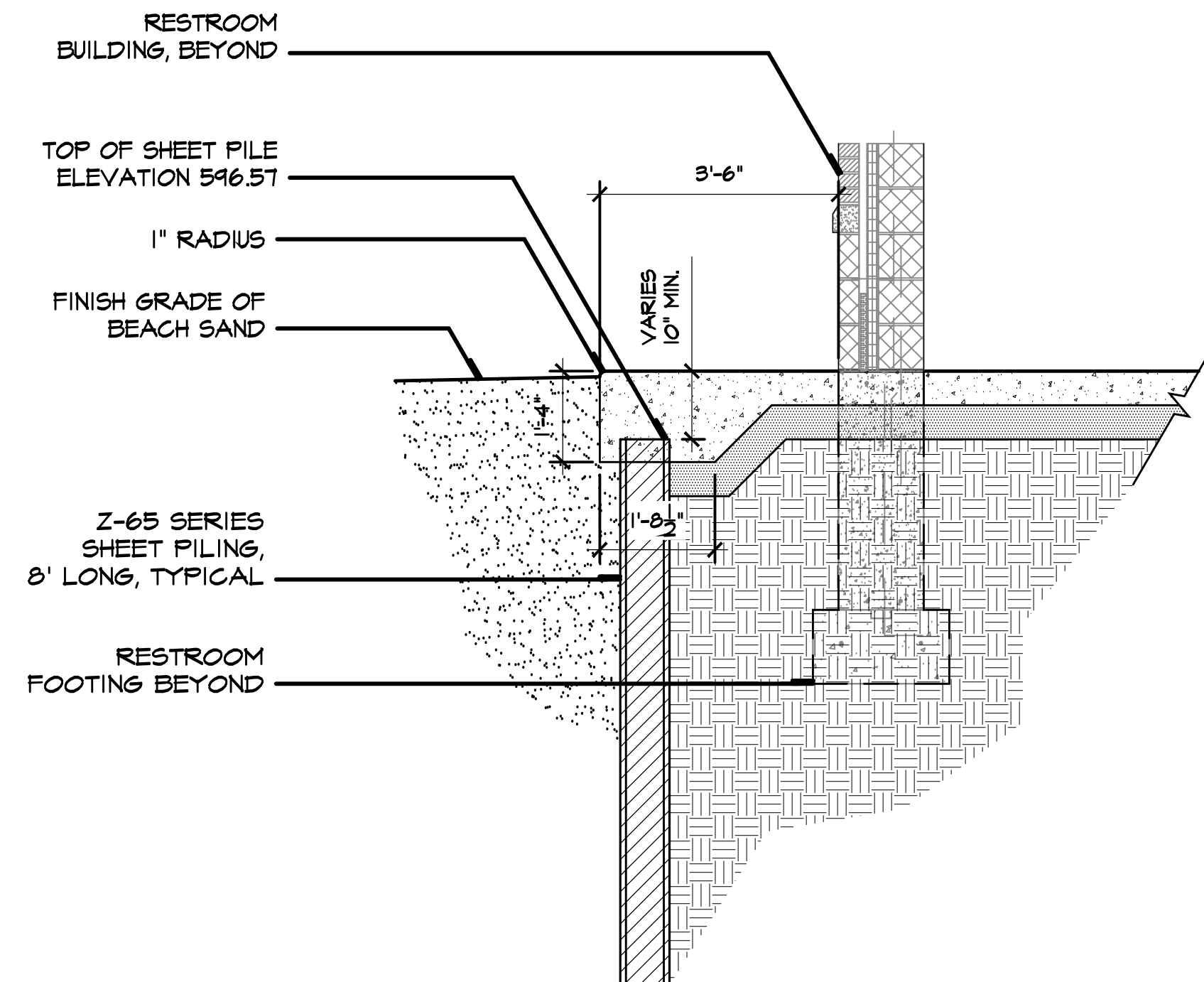
- FINISHED SURFACES TO BE SMOOTH AND EVEN WITH NO ABRUPT OR AWKWARD CHANGES IN GRADE. ADJUSTMENTS TO BE APPROVED BY LANDSCAPE ARCHITECT.
- GRADE ALL SURFACES AS NOTED ON PLANS, MAXIMUM TRAVERSE SLOPE, OR RUNNING SLOPE SHALL NOT EXCEED 5% (1' IN 20') UNLESS OTHERWISE NOTED. PROPOSED CROSS SLOPES SHALL NOT EXCEED 2% (1' IN 50') UNLESS OTHERWISE NOTED.
- ANY PAVING IN EXCESS OF THESE SLOPES AND NOT MEETING ADA REQUIREMENTS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THEIR OWN COST.
- LIMITS OF DISTURBANCE LINE SHALL BE MAINTAINED AS SHOWN ON THE PLANS.
- ANY EXCESS SOIL TO BE HAULED OFF-SITE.
- SEE SOIL REPORT WITHIN THE SPECIFICATIONS FOR EXCAVATION GRADING AND COMPACTION RECOMMENDATIONS.

GRADING LEGEND:

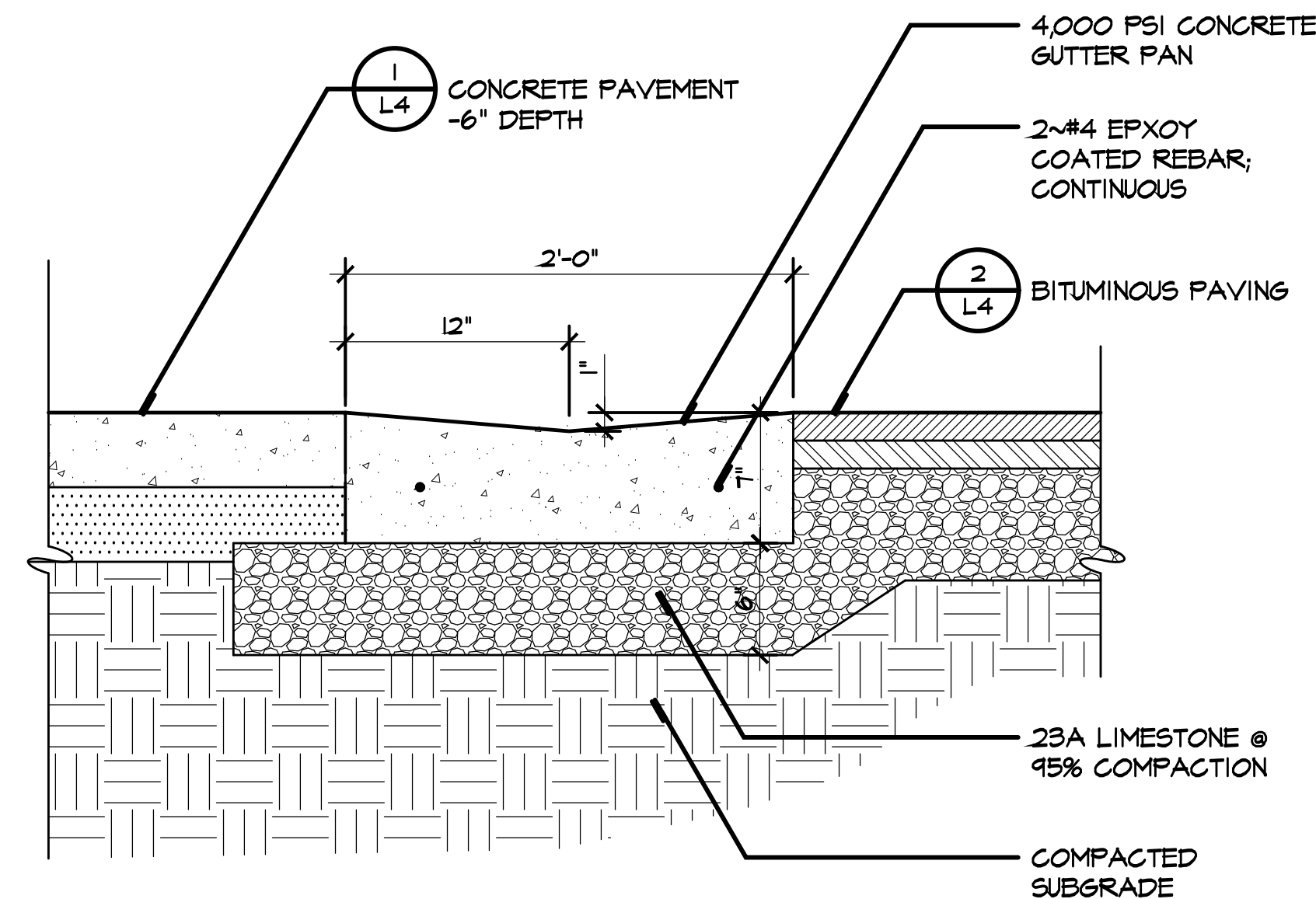
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEV.
- PROPOSED DIRECTION OF SLOPE
- RIM RIM ELEVATION
- FL FLOW LINE
- MEG MEET EXISTING GRADE

COMPLIANCE NOTE:

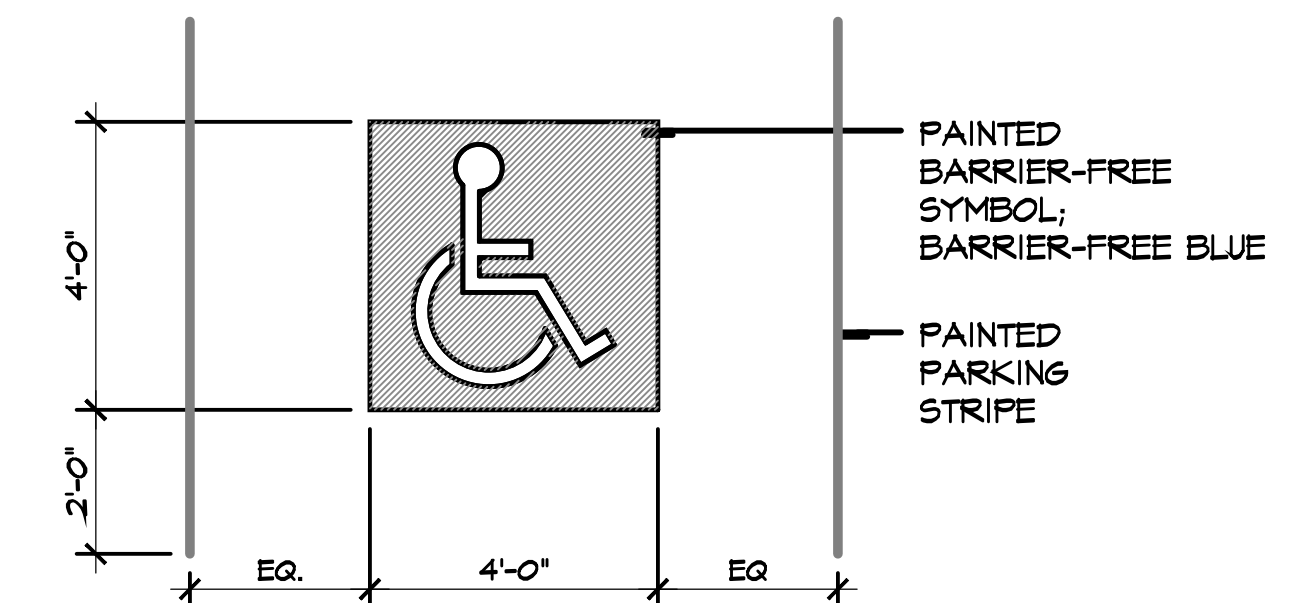
- ALL CONSTRUCTION SHALL CONFORM TO ALL ASPECTS OF THE STATE OF MICHIGAN BUILDING CODE (MBC), UNIFORM FEDERAL ACCESSIBILITY STANDARDS (UFAS), THE ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG) AND THE AMERICANS WITH DISABILITIES ACT (ADA). ALL WORK BY THE CONTRACTOR FOR COMPLETE EXECUTION OF THIS PROJECT SHALL MEET OR EXCEED LAWS, GUIDELINES, AND STATUTES IN EVERY SITUATION. IN THE EVENT THE CONTRACTOR BELIEVES THAT ANY PORTION OF THE WORK IS INCONSISTENT WITH THE MBC, UFAS, ADAAG, AND ADA THEY MUST IMMEDIATELY INFORM THE LANDSCAPE ARCHITECT.



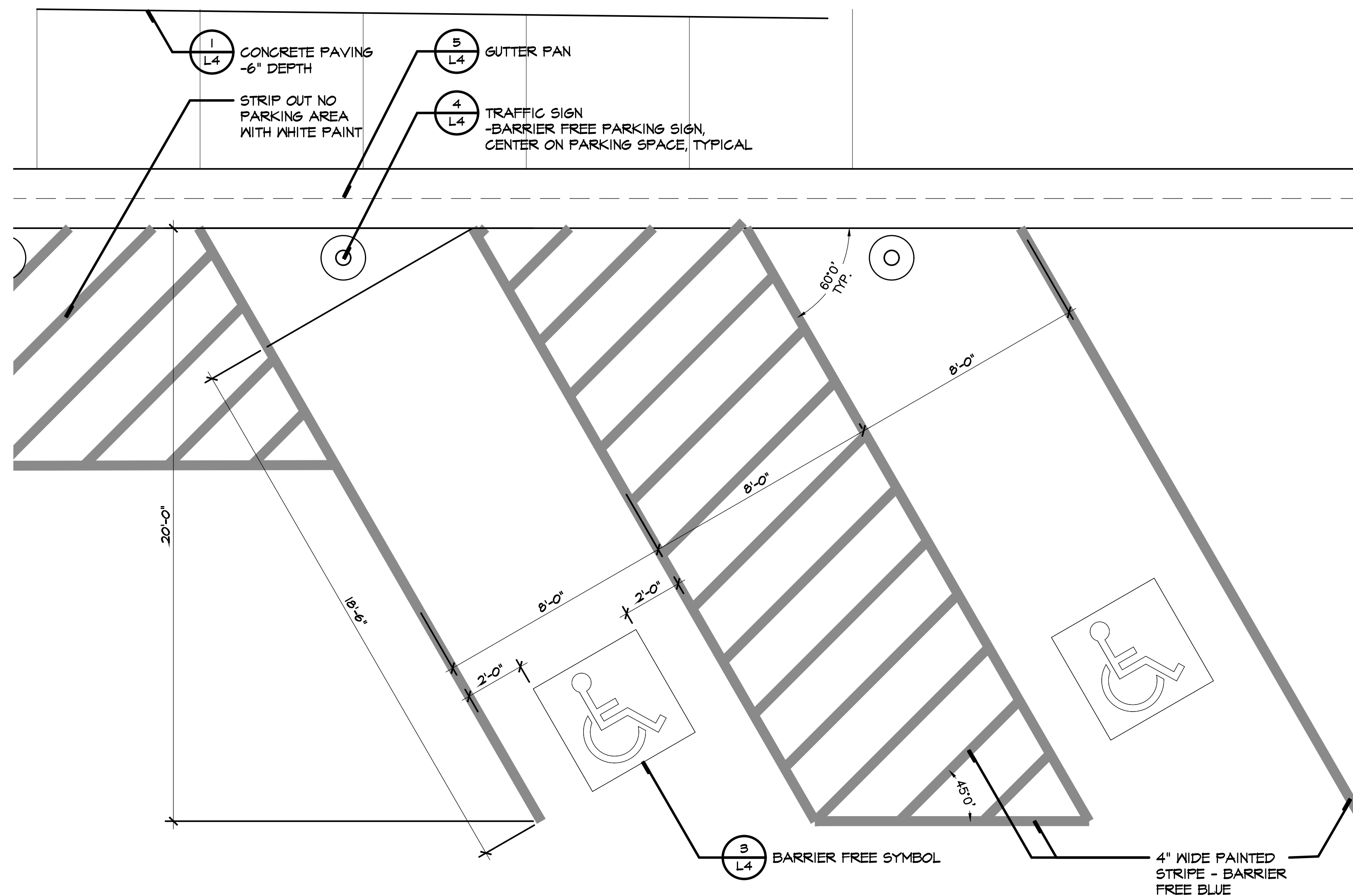
7 Sheet Pile Edge Protection
 L4 Scale: 1/2"=1'-0"



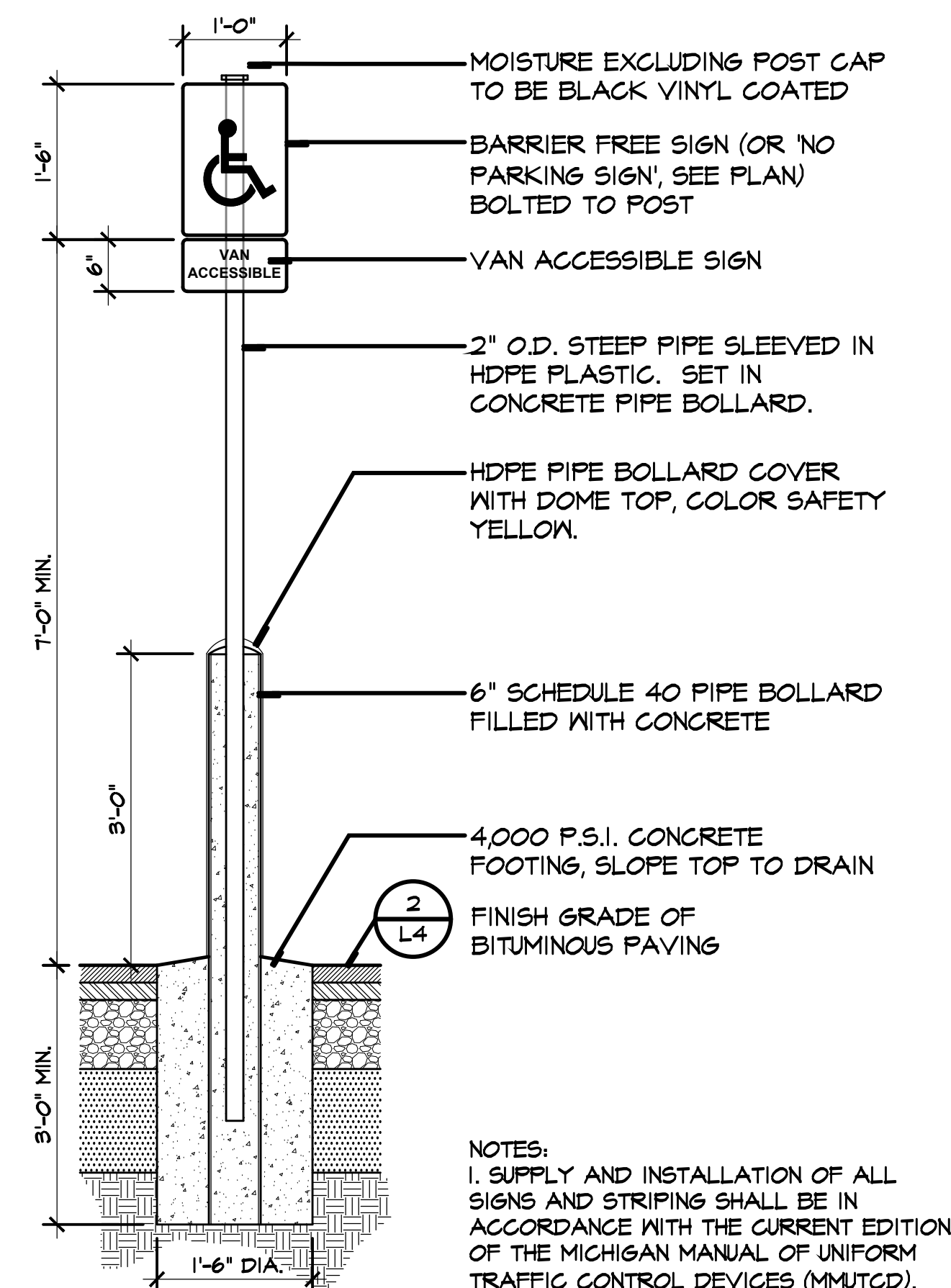
5 Gutter Pan
 L4 Scale: 1 1/2"=1'-0"



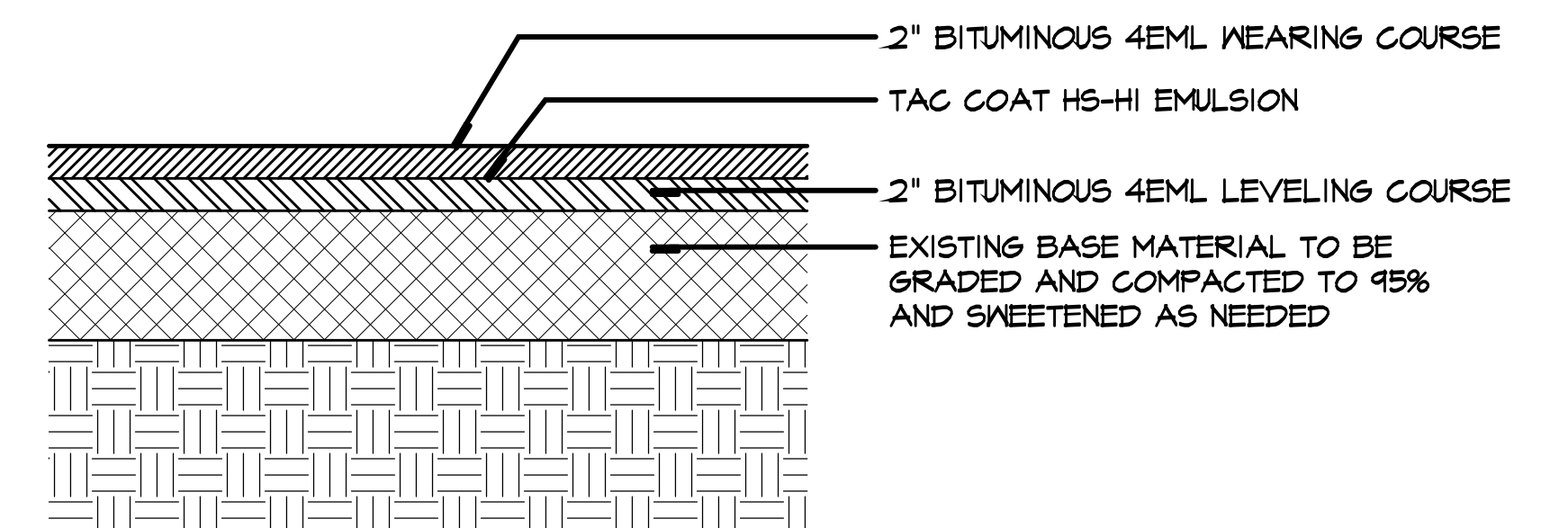
3 Barrier Free Symbol
 L4 Scale: 3/8"=1'-0"



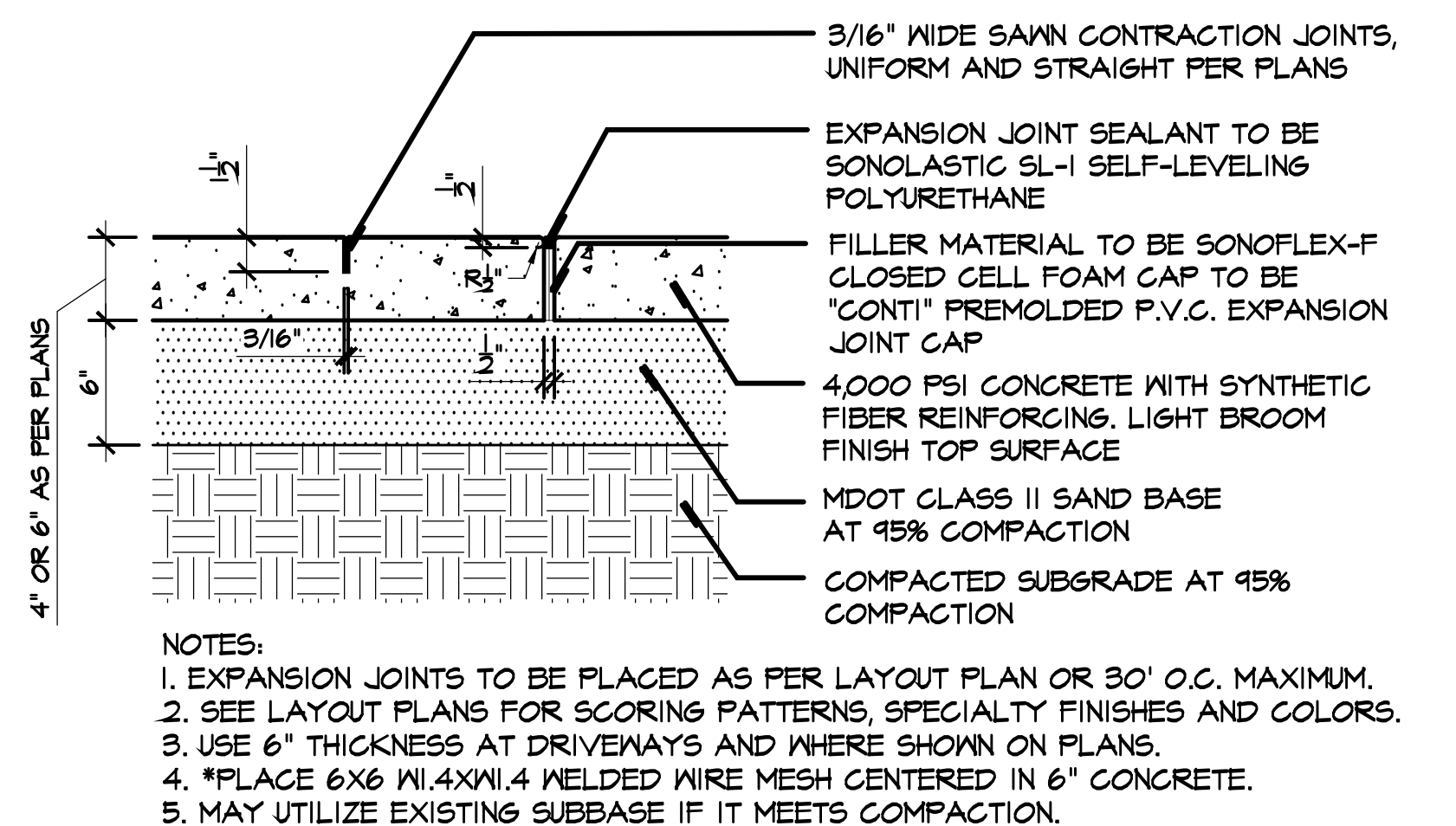
6 Barrier Free Striping
 L4 Scale: 3/8"=1'-0"



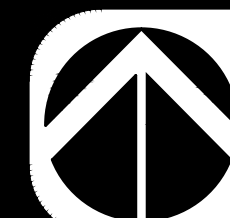
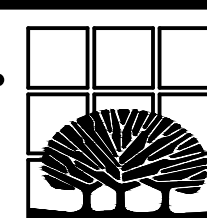
4 Traffic Sign
 L4 Scale: 3/4"=1'-0" PRODUCT DATA REQUIRED

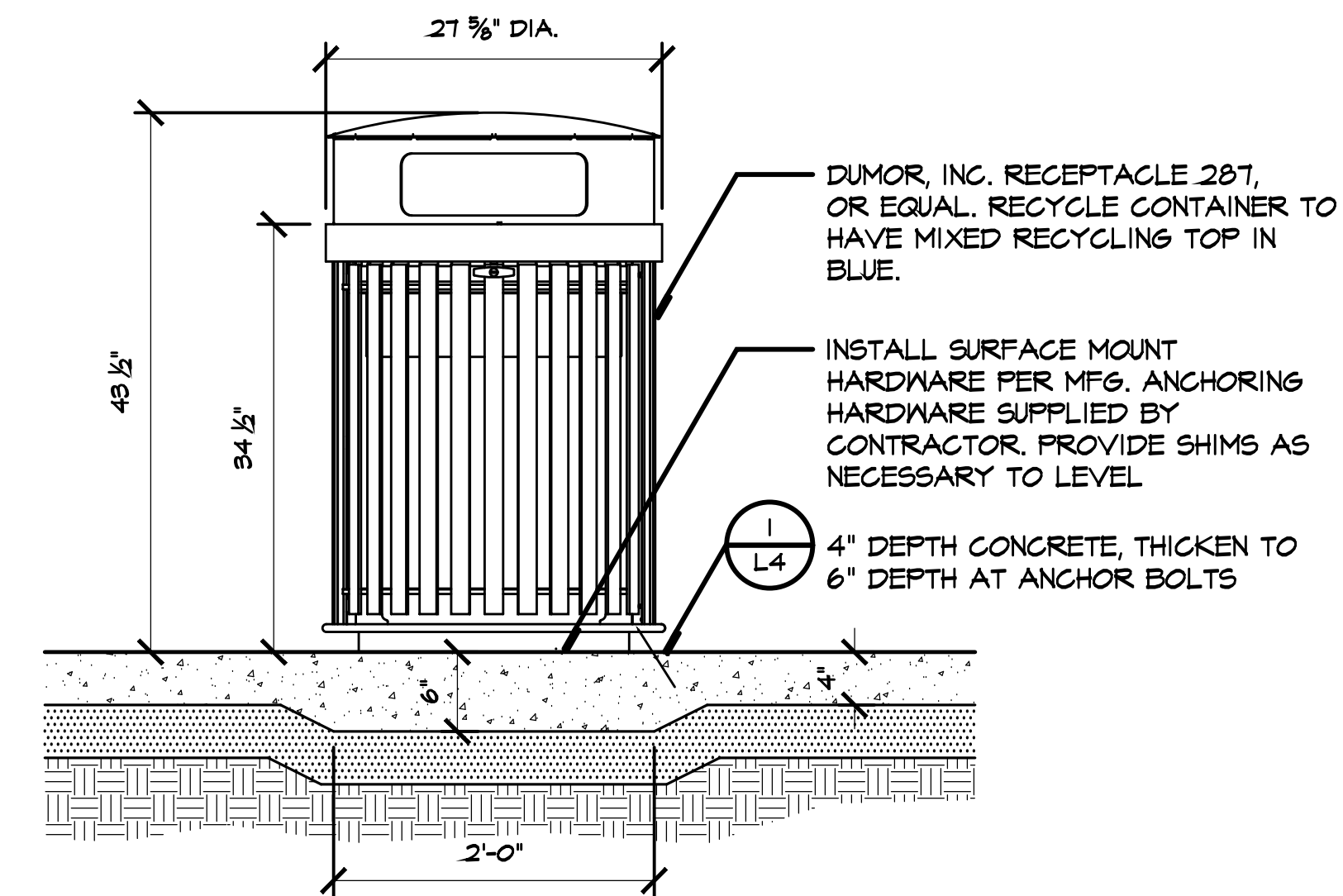


2 Bituminous Paving
 L4 Scale: 1 1/2"=1'-0"



1 Concrete Paving & Joints
 L4 Scale: 1-1/2"=1'-0"

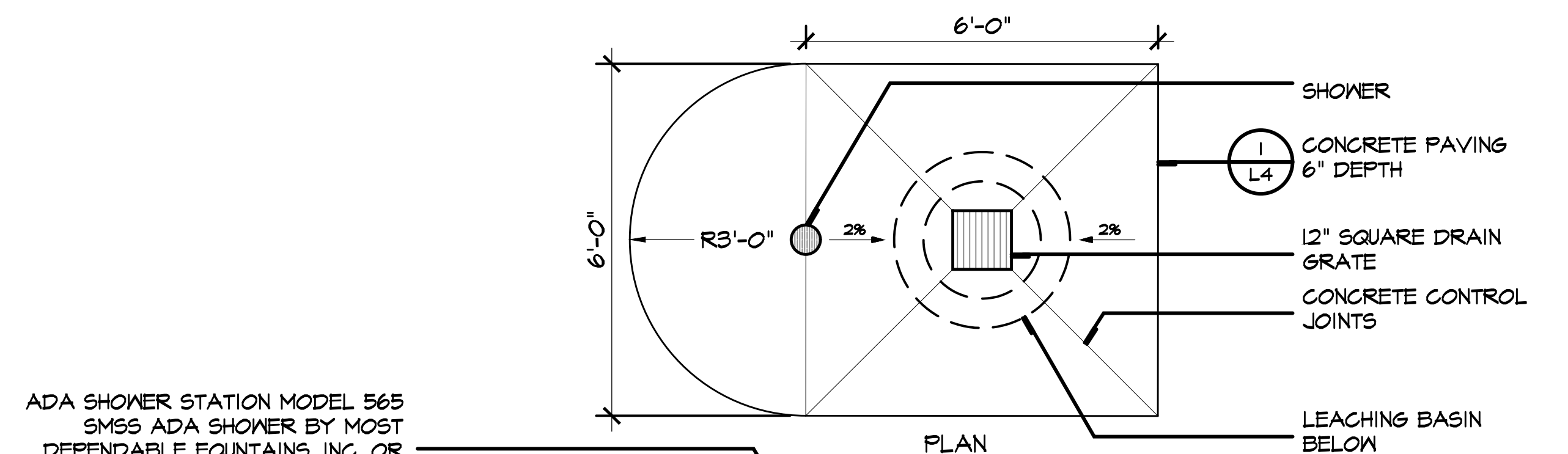




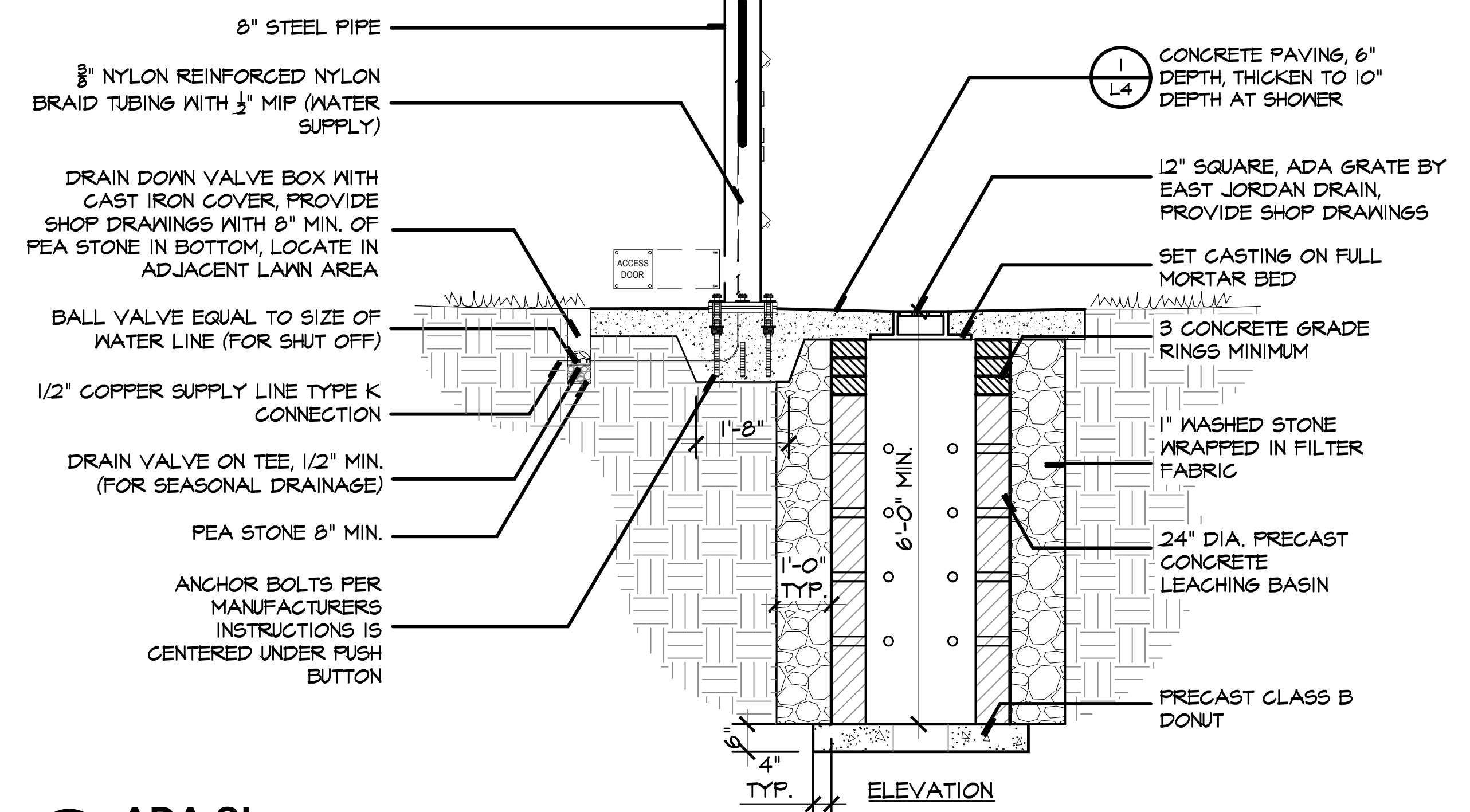
2 L5 Recycle Containers

Scale: 1"=1'-0"

PRODUCT DATA REQUIRED



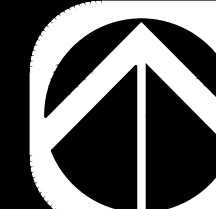
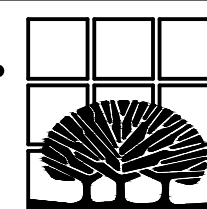
ADA SHOWER STATION MODEL 565 SMSS ADA SHOWER BY MOST DEPENDABLE FOUNTAINS, INC. OR APPROVED EQUAL. INSTALL PER MANUFACTURERS RECOMMENDATIONS

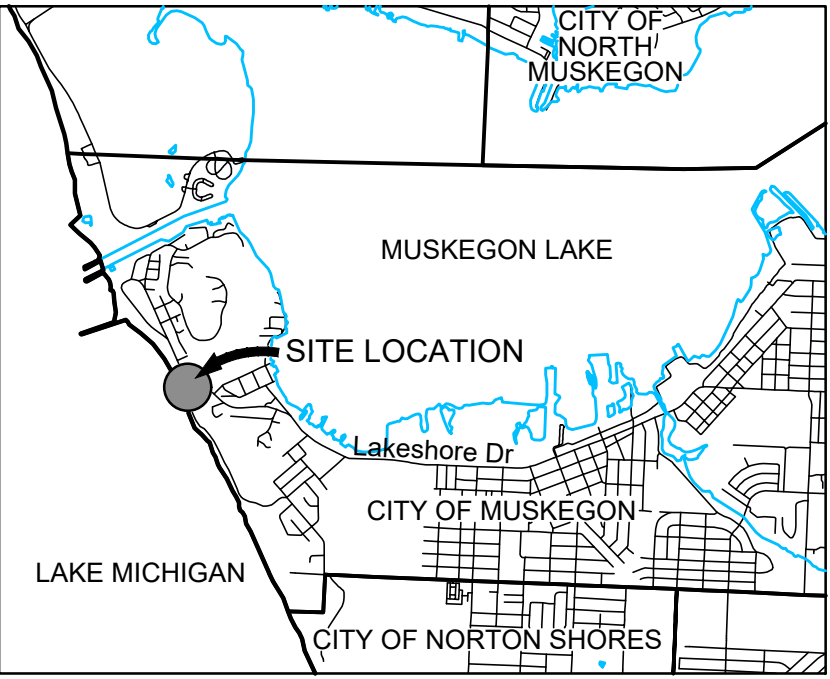
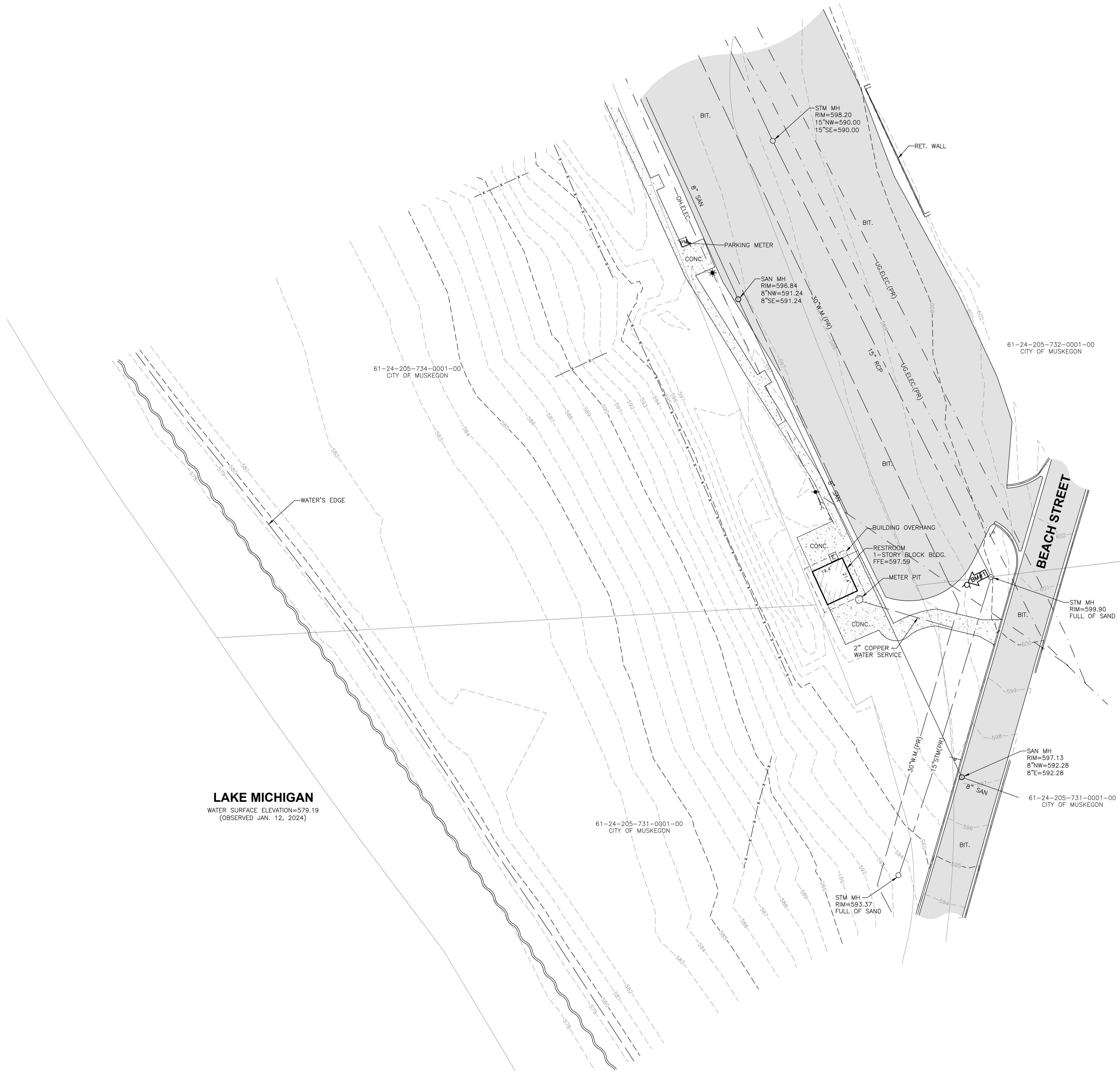


1 L5 ADA Shower

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

PROVIDE SHOP DRAWINGS





BENCHMARK INFORMATION

BM#1) ELEVATION: 600.69
N. FLANGE BOLT UNDER "E" ON HYDRANT
SE. OF RESTROOM BUILDING

THE ELEVATIONS ARE BASED ON NAVD 88

BASIS OF BEARINGS

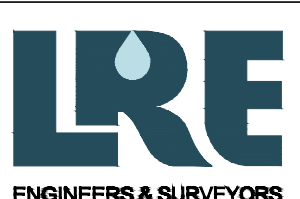
MICHIGAN STATE PLANE COORDINATE SYSTEM,
NAD83(2011), MICHIGAN ZONE SOUTH

NOTES

- 1. CONTRACTOR TO FIELD VERIFY HORIZONTAL & VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND MUST NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

LEGEND

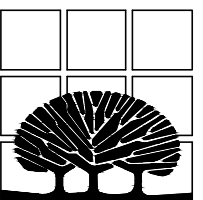
- BENCHMARK
- WELL
- MONUMENT
- FOUND IRON STAKE
- SET IRON STAKE
- SET WOOD STAKE
- SIGN
- RR SIGN
- GUY POLE
- GUY ANCHOR
- UTILITY POLE
- LIGHT POLE
- POST
- SOIL BORING
- MAILBOX
- AC UNIT
- FLAGPOLE
- FIRE HYDRANT
- WATER VALVE
- ELECTRIC TRANSFORMER
- GAS METER
- WATER METER
- TELEPHONE RISER
- ELECTRIC METER
- CATCH BASIN
- ROUND CATCH BASIN
- UTILITY MANHOLE
- STORM MANHOLE
- FLARED END SECTION
- SANITARY MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- DECIDUOUS TREE
- CONIFEROUS TREE
- WATER UTILITY LINE
- TELEPHONE UTILITY LINE
- ELECTRIC UTILITY LINE
- GAS UTILITY LINE
- STEAM UTILITY LINE
- STORM UTILITY LINE
- SANITARY UTILITY LINE
- FIBER OPTIC UTILITY LINE
- OVERHEAD UTILITY LINE
- LAKE LINE
- EXISTING CONTOUR
- DECK
- CONCRETE
- GRAVEL
- BITUMINOUS



LRE
ENGINEERS & SURVEYORS

2121 3 Mile Rd. NW
Walker, MI 49544
Ph: 616-301-7888
www.LREMI.com

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA.



BM#1) ELEVATION: 600.69
N. FLANGE BOLT UNDER "E" ON HYDRANT
SE. OF RESTROOM BUILDING

NOTES

- | | |
|---|----------------------------|
|  | PROPOSED WATERMAIN |
|  | PROPOSED HYDRANT |
|  | PROPOSED WATERMAIN BENDS |
|  | PROPOSED GATE VALVE |
|  | PROPOSED SANITARY SEWER |
|  | PROPOSED SANITARY MANHOLE |
|  | PROPOSED SANITARY CLEANOUT |
|  | CURB STOP & BOX |

APPROVED TOP SOIL OR SIDEWALK

90% RELATIVE COMPACTED APPROVED EXCAVATED MATERIAL

UNDISTURBED SOIL

HAND-TAMP AROUND SIDES OF PIPE

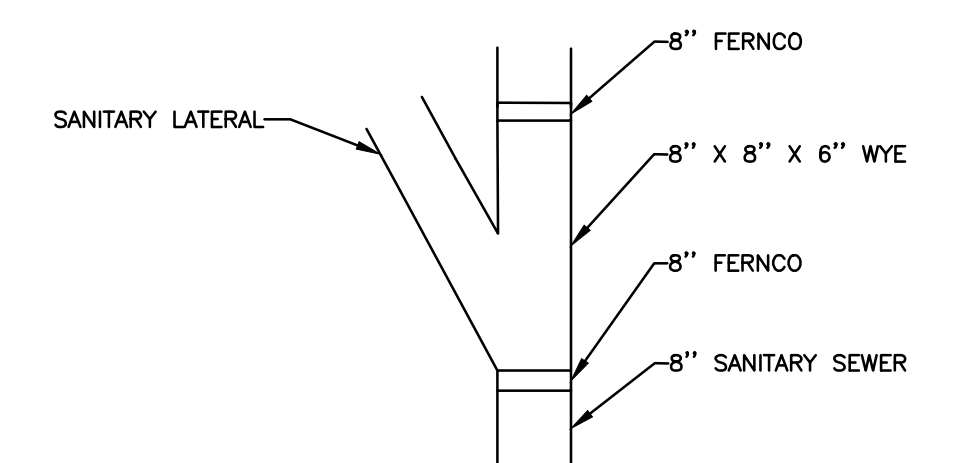
NOTE: IN WET CONDITIONS PLACE MDT 26A PEA STONE TO PIPE HAUNCHES

PIPE

MIN

WIDTH

MDOT CL. II SAND BACKFILL COMPACTED TO





LRE
ENGINEERS & SURVEYORS

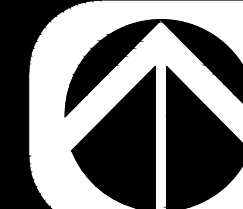
2121 3 Mile Rd. NW
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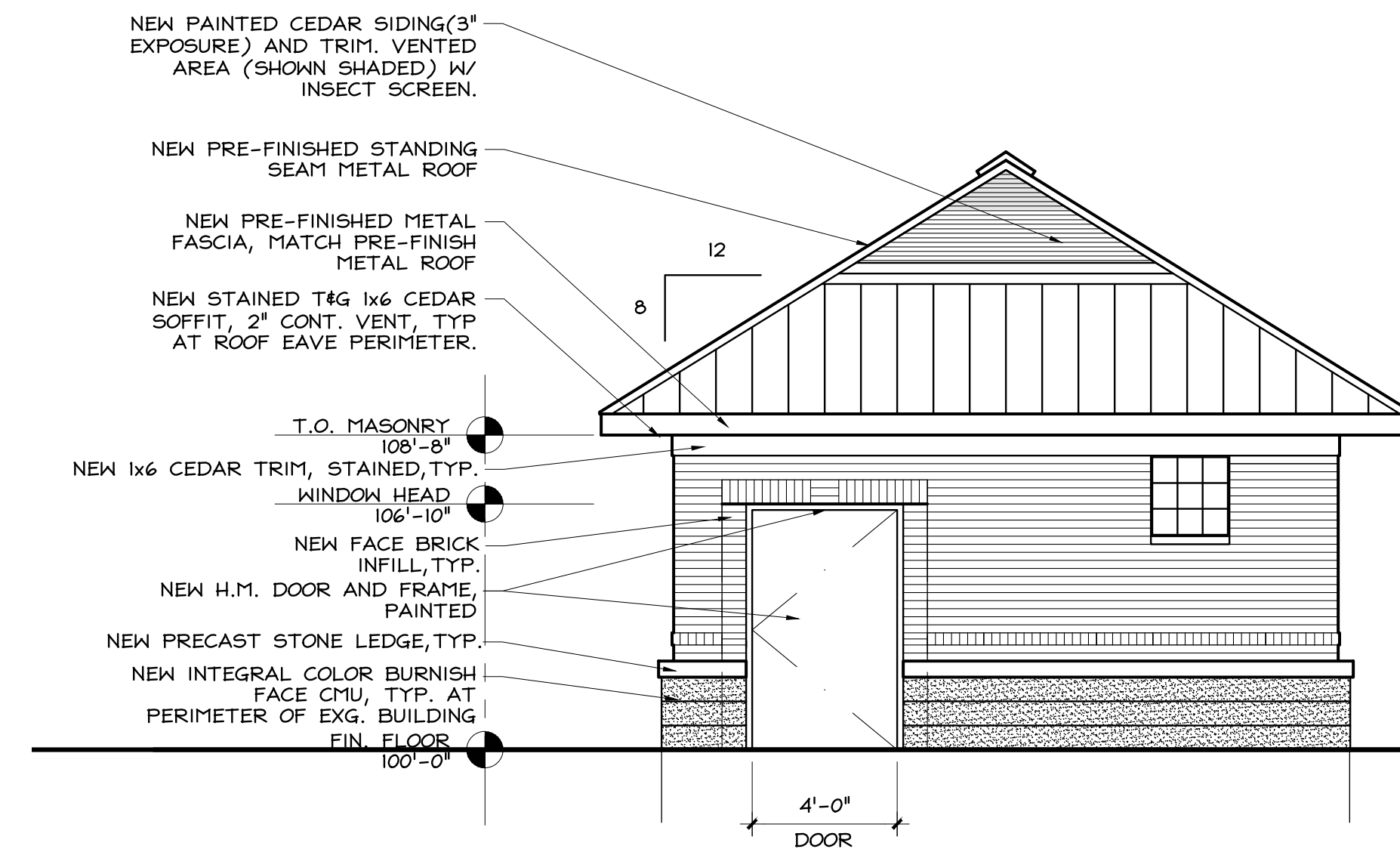
529 Greenwood Avenue S.E. • East Grand Rapids, MI 49506
616-451-3346 • FAX: 616-451-1935 • EMAIL: tas@mcsagroup.com



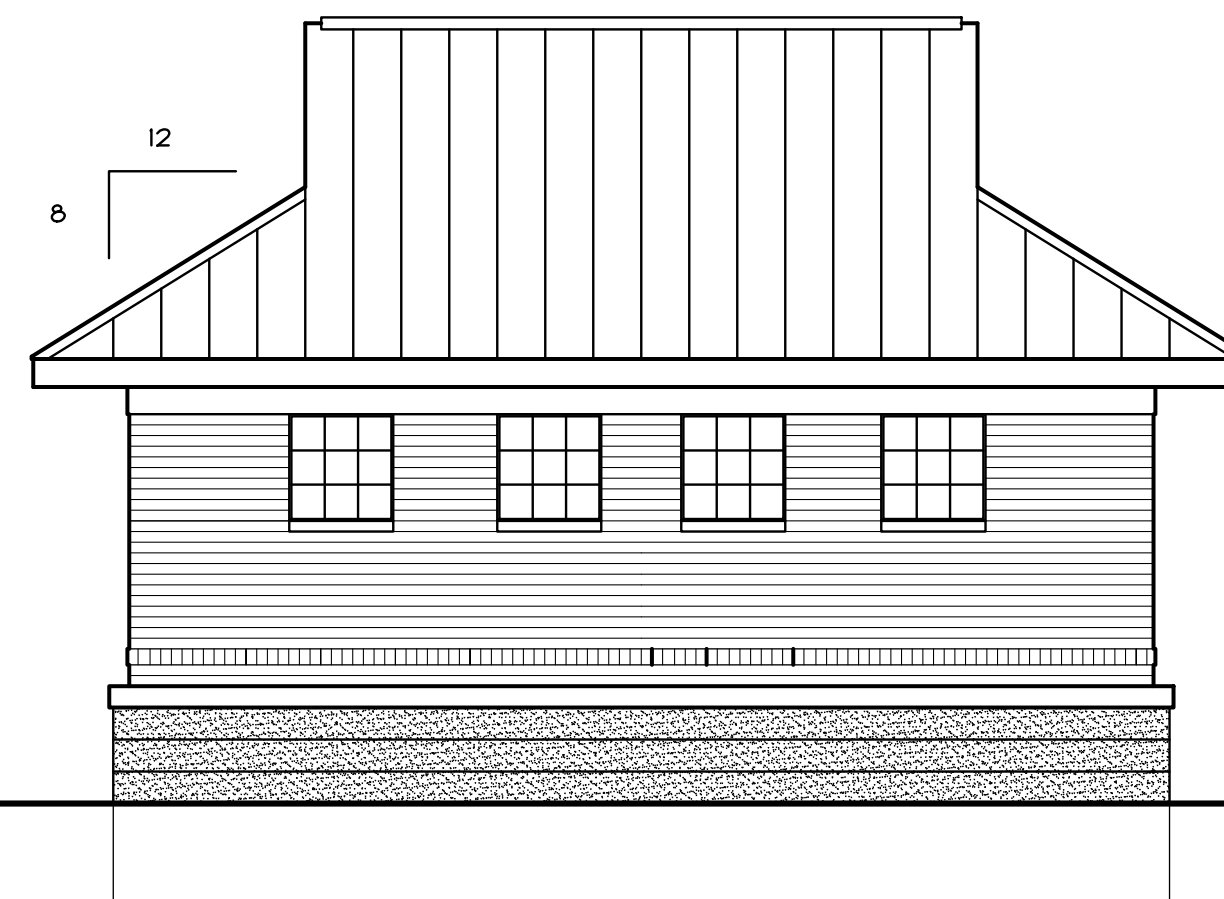
Utility Plan

PROJECT NO.
2215

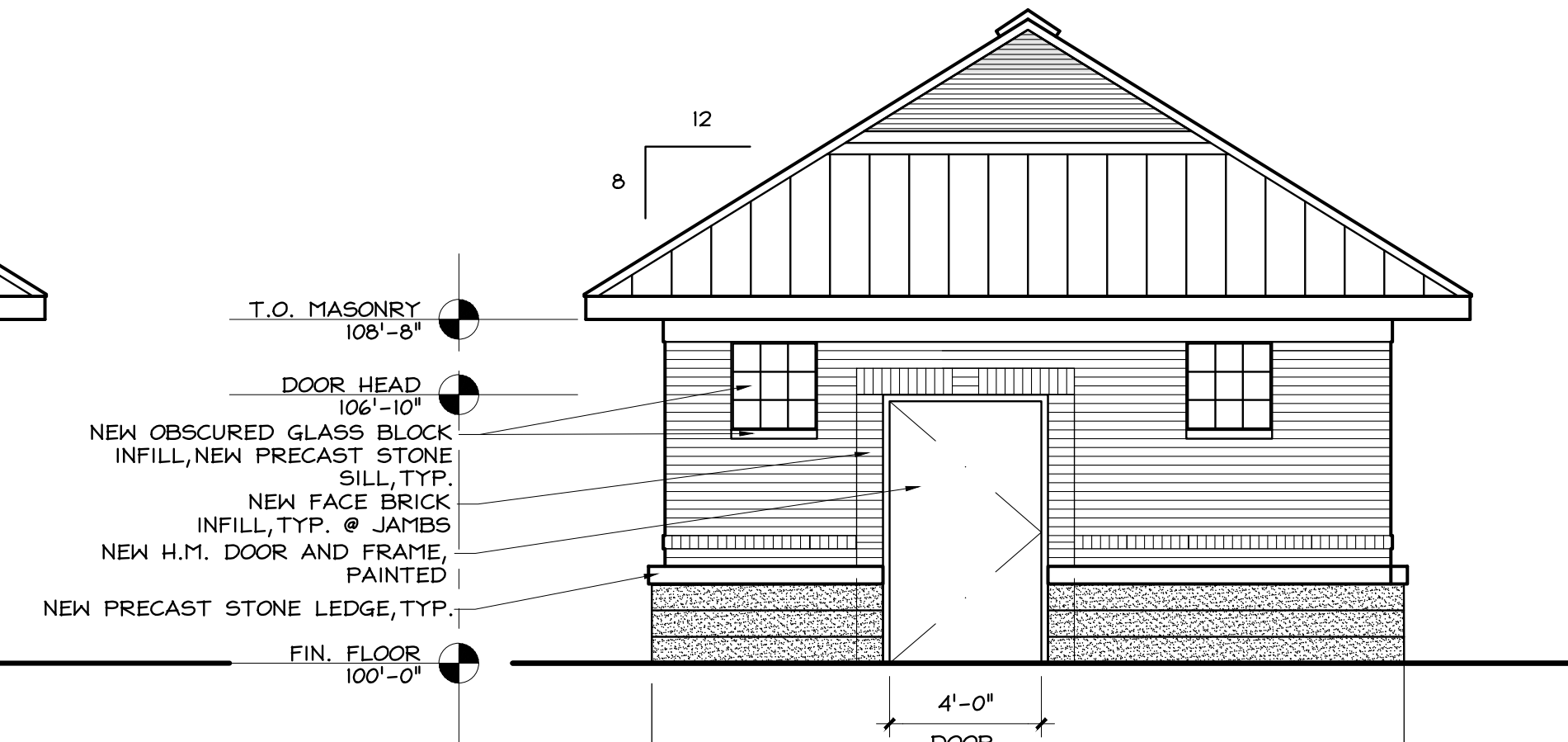
C2



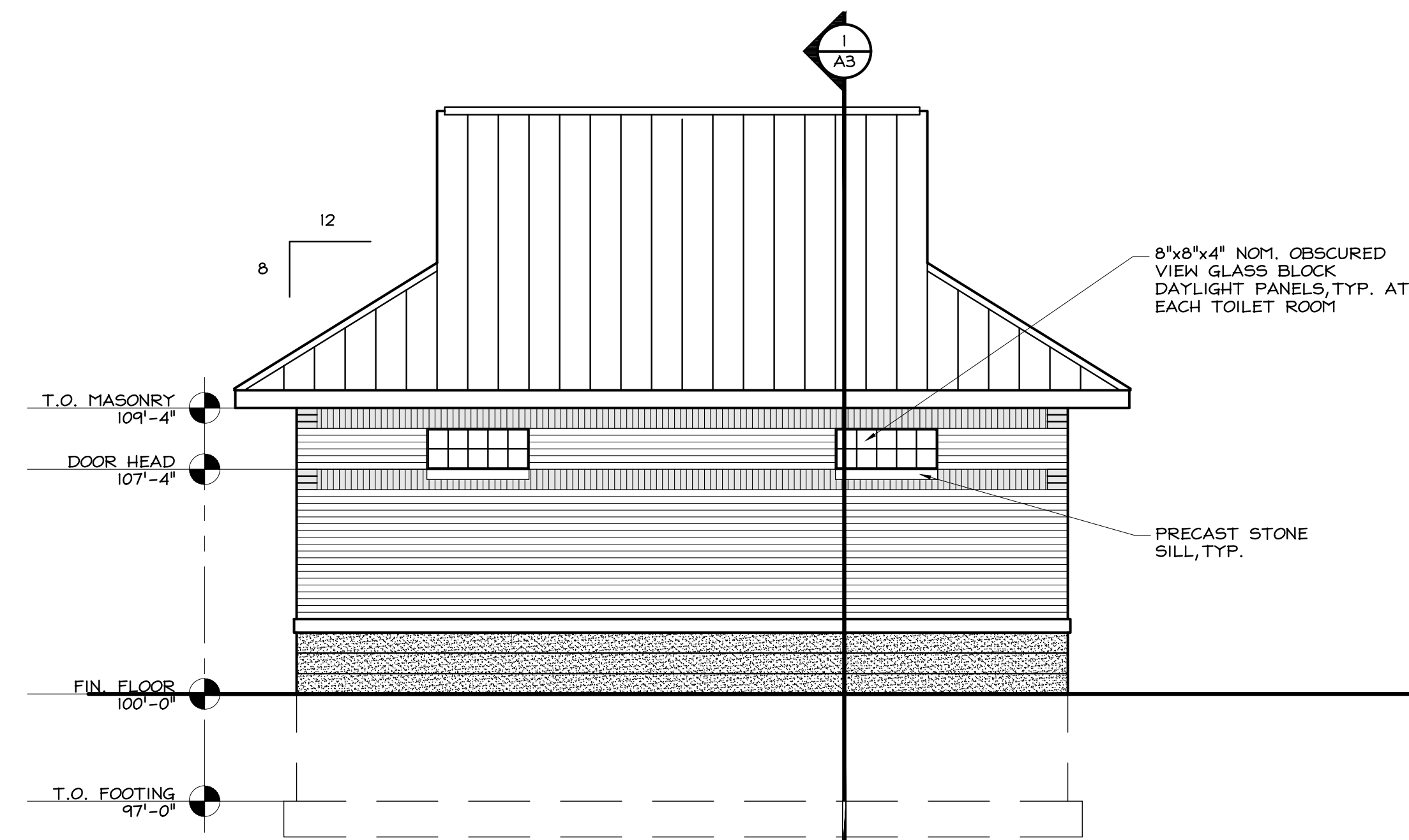
1 EXG. BUILDING - WEST ELEVATION
SCALE: 1/4" = 1'-0"



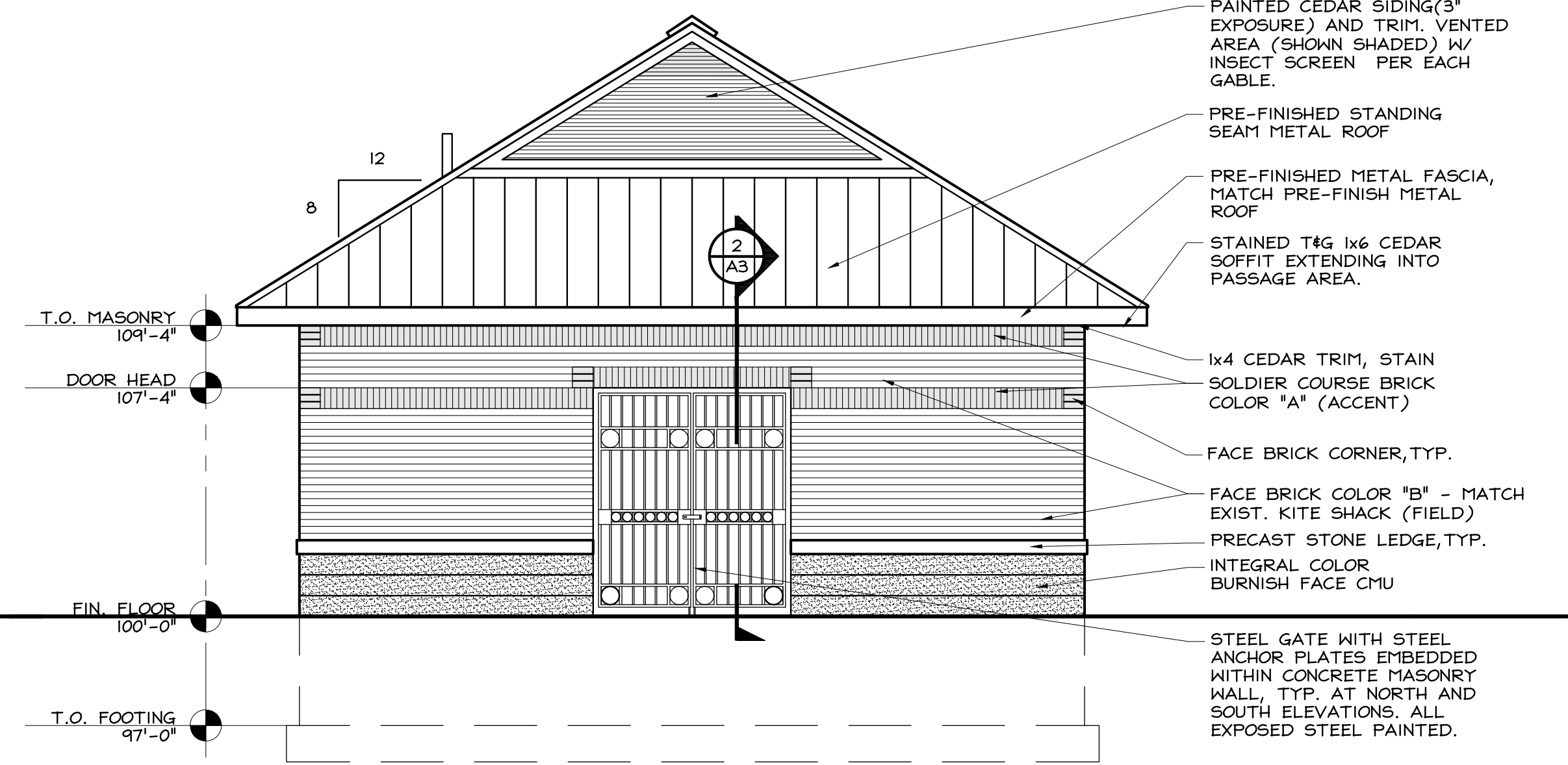
2 EXG. BILDING - SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



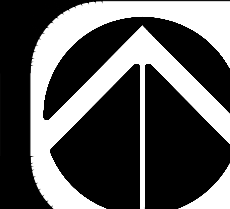
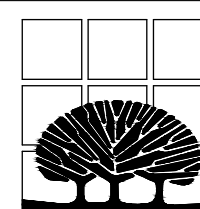
3 EXG. BUILDING - SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

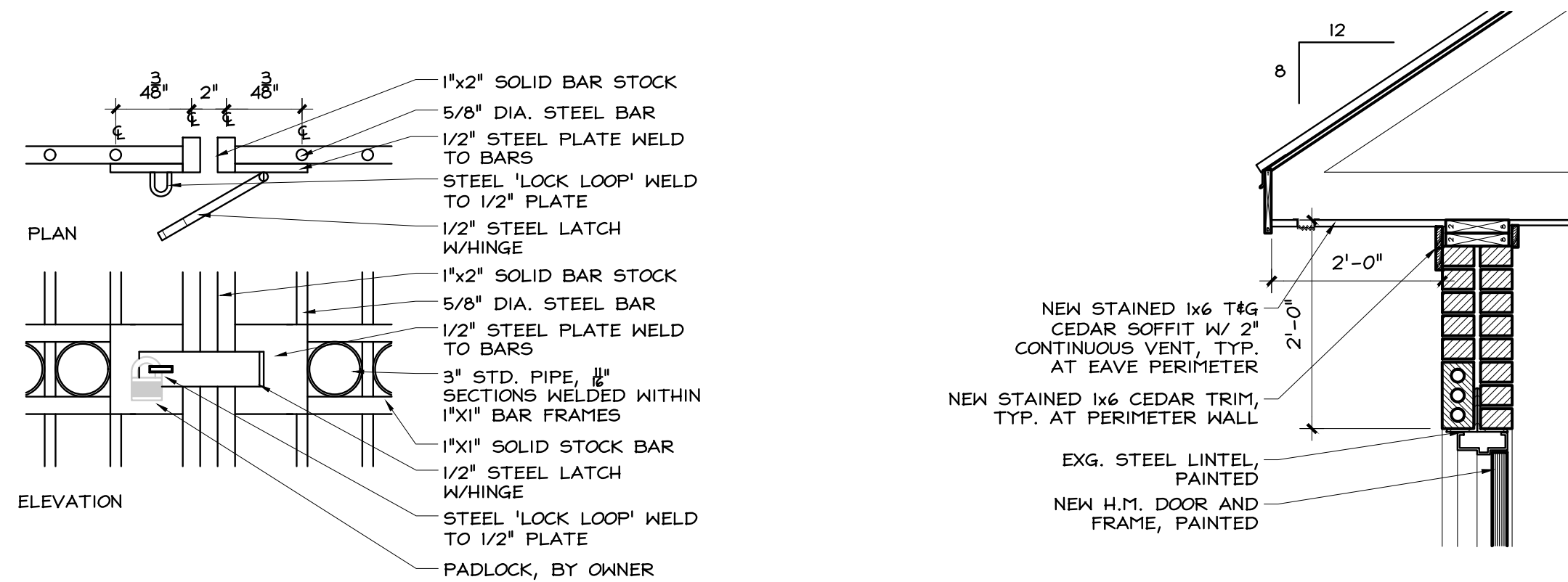


4 RESTROOM - EAST ELEVATION
SCALE: 1/4" = 1'-0"

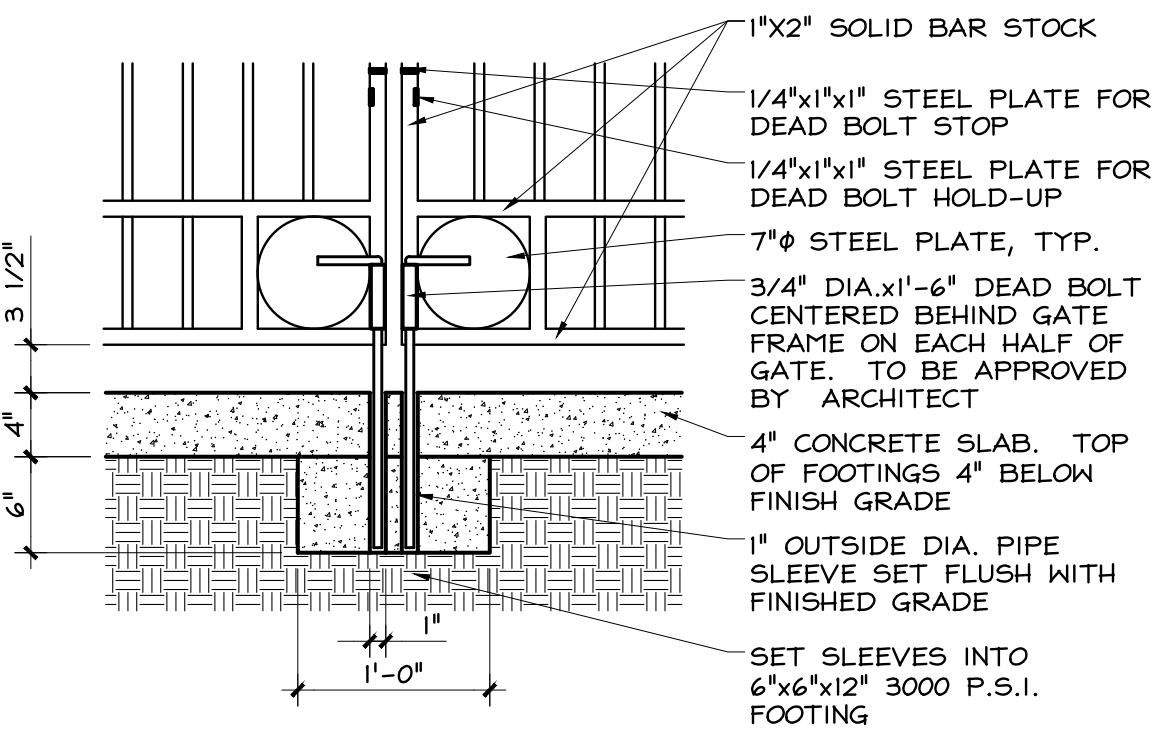


5 RESTROOM- SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

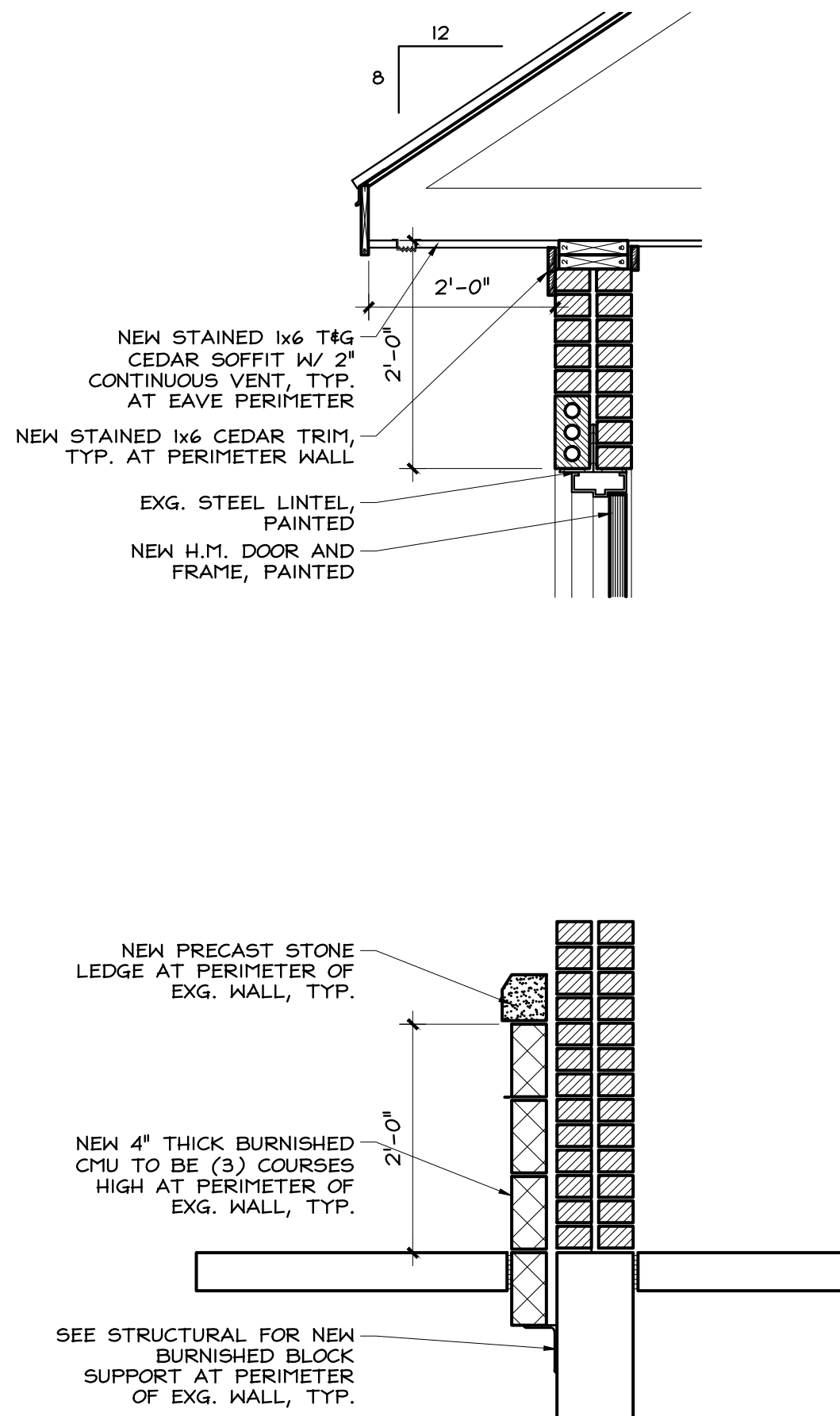




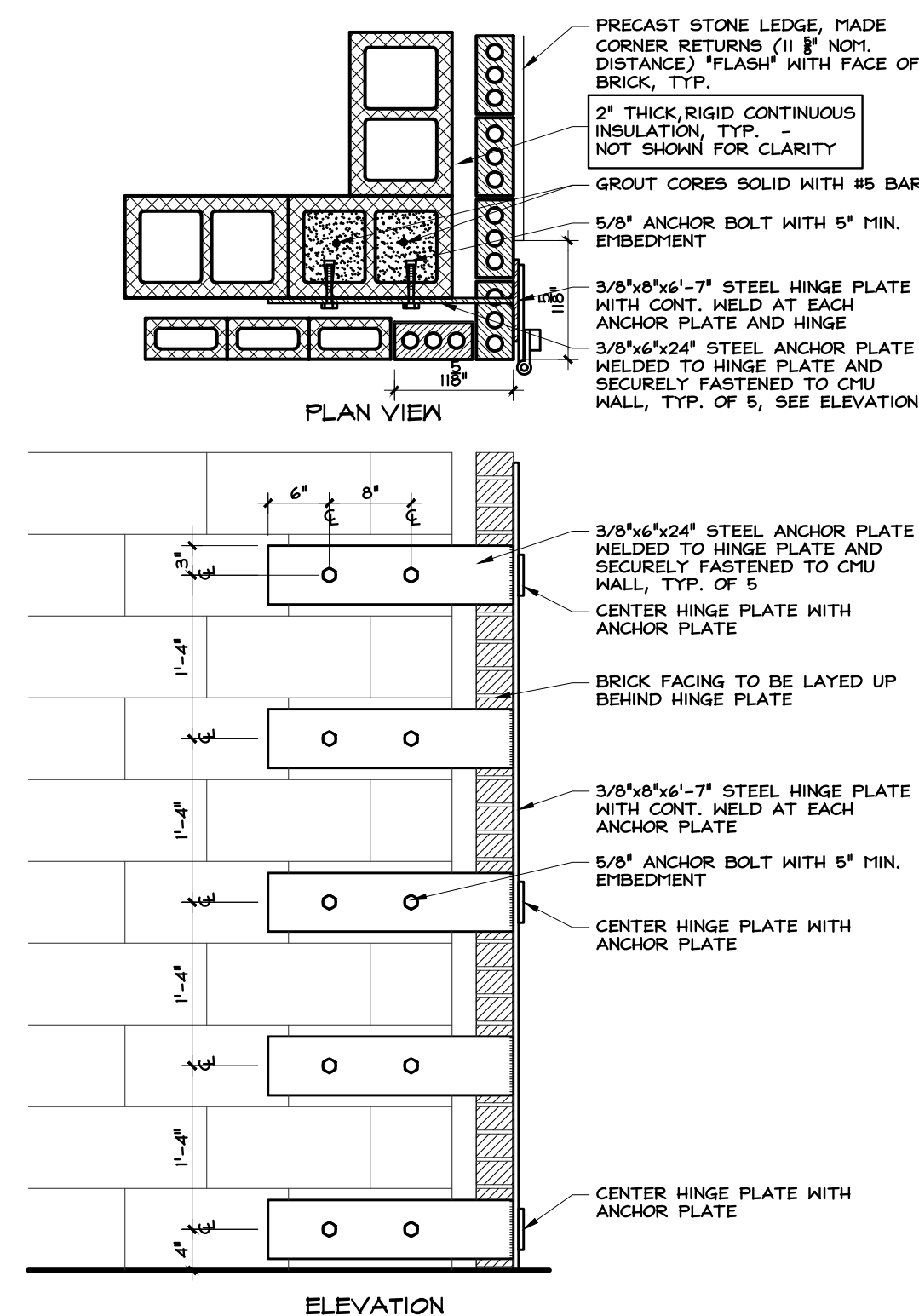
5 LATCH DETAIL
SCALE: 1 1/2" = 1'-0"



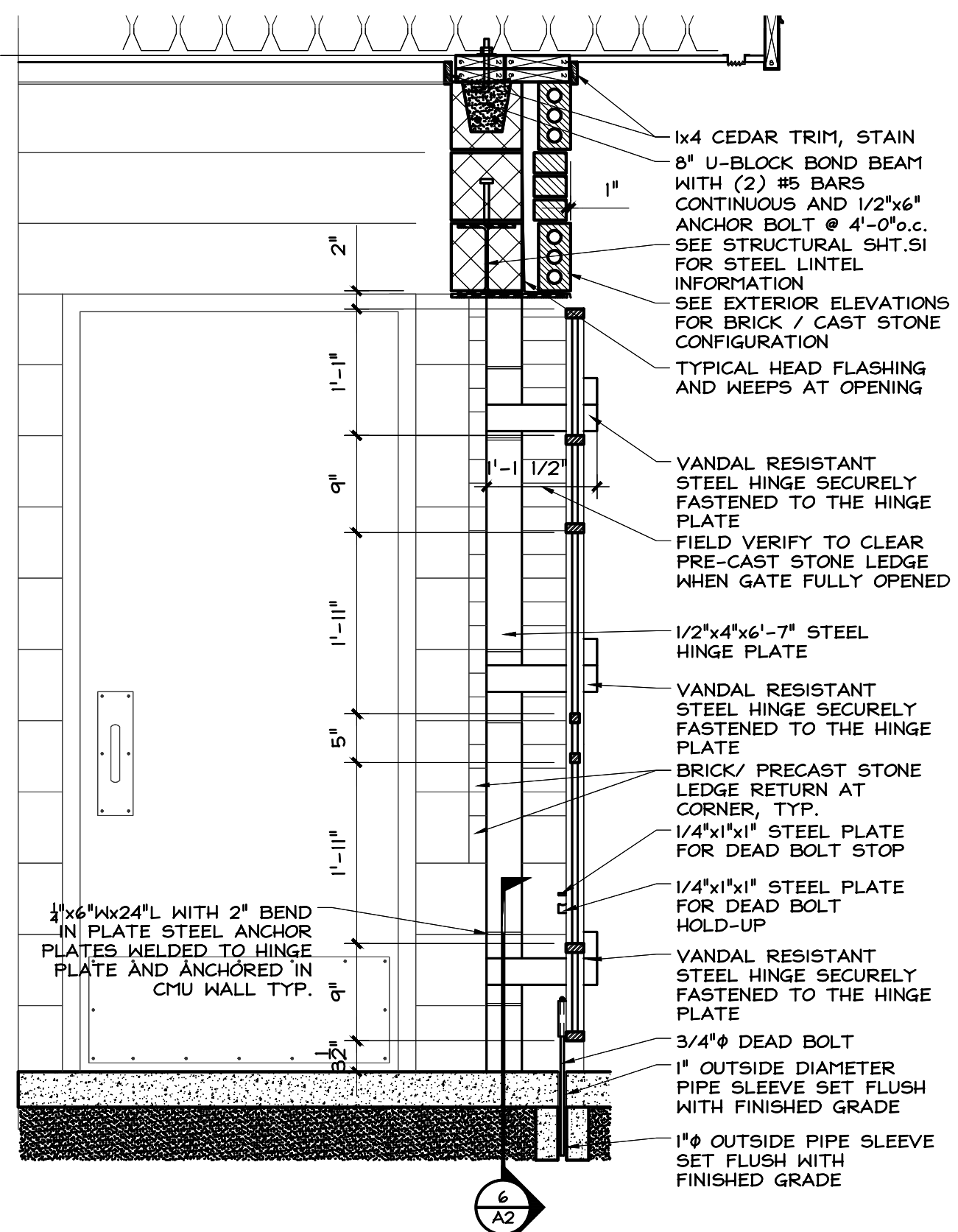
4 DEAD BOLT DETAIL
SCALE: 1" = 1'-0"



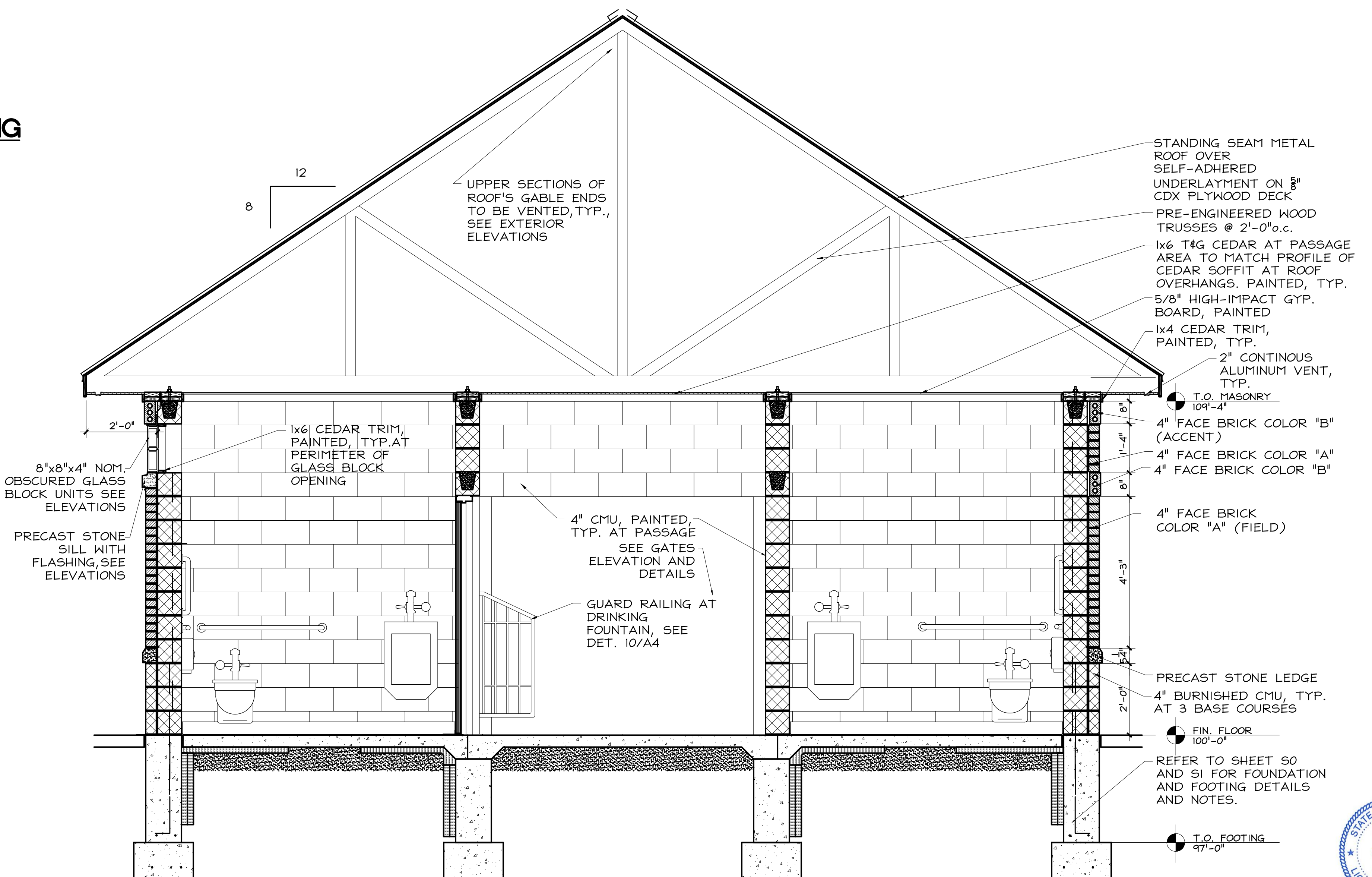
6 WALL SECTION AT EXG. BUILDING
SCALE: 3/4" = 1'-0"



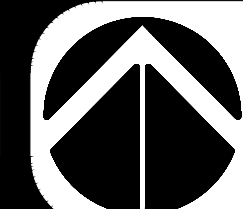
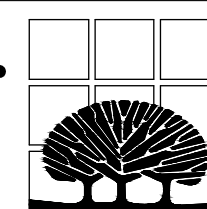
3 GATE ANCHORE PLATES DETAIL
SCALE: 1" = 1'-0"



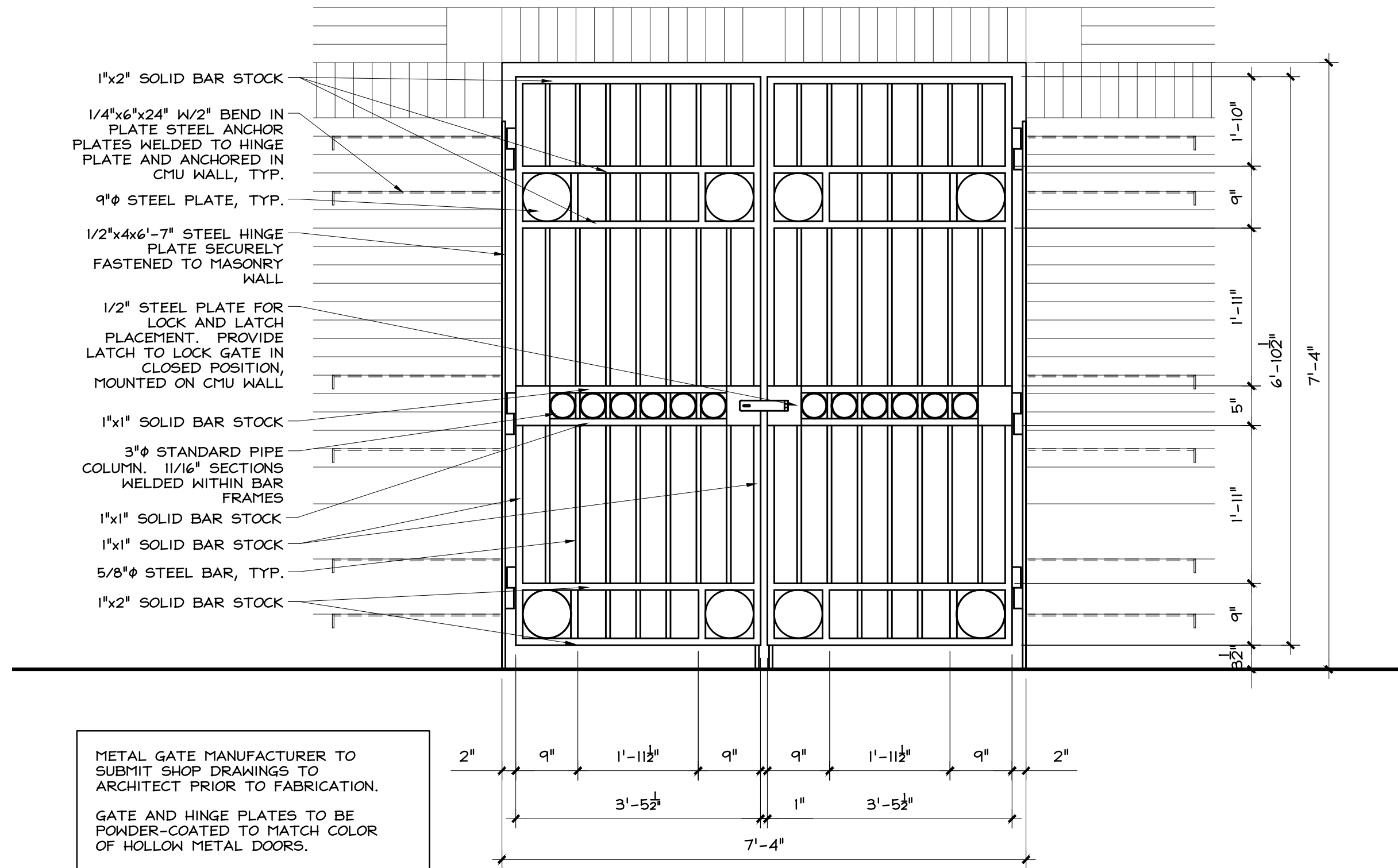
2 WALL SECTION AT GATE
SCALE: 3/4" = 1'-0"



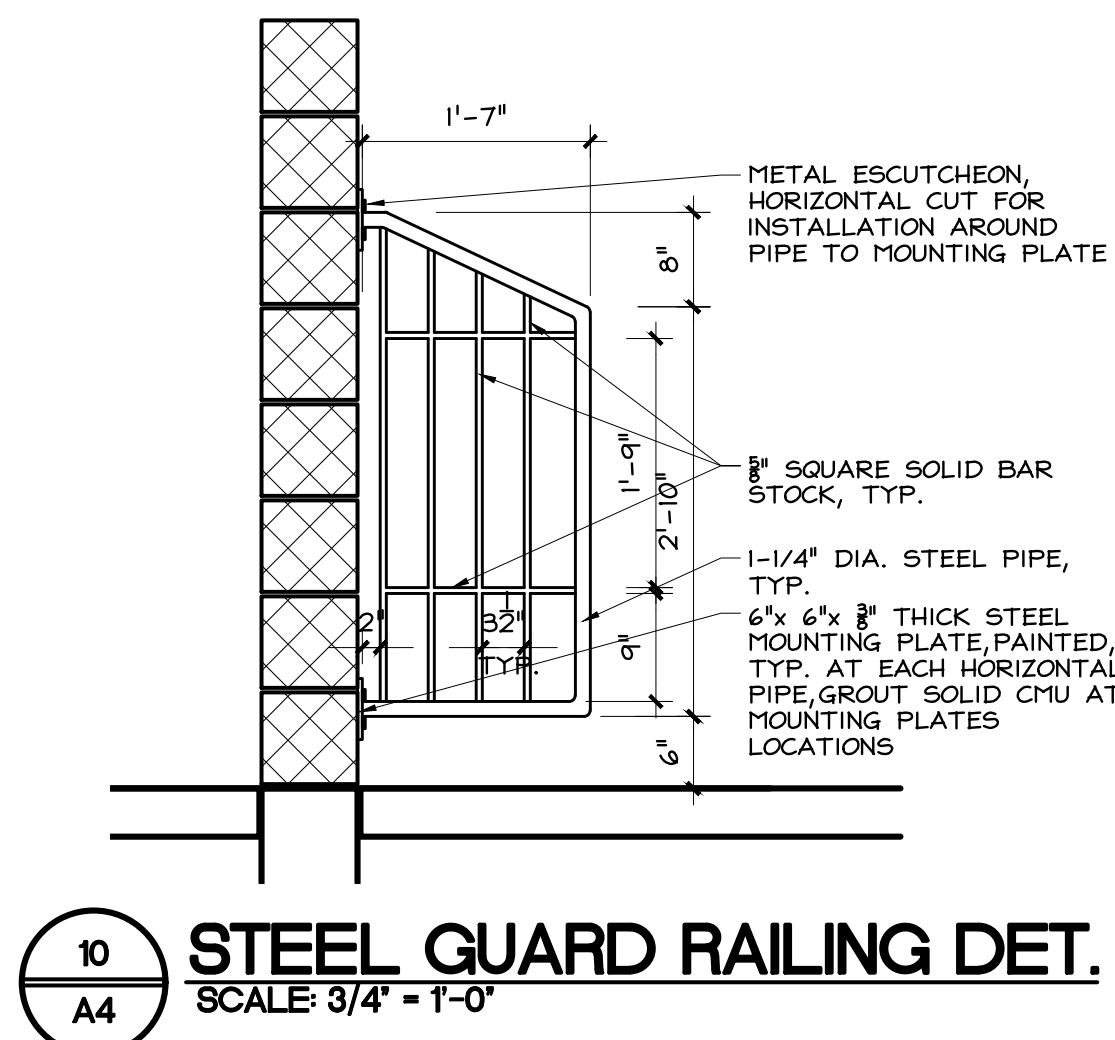
1 BUILDING SECTION
SCALE: 1/2" = 1'-0"



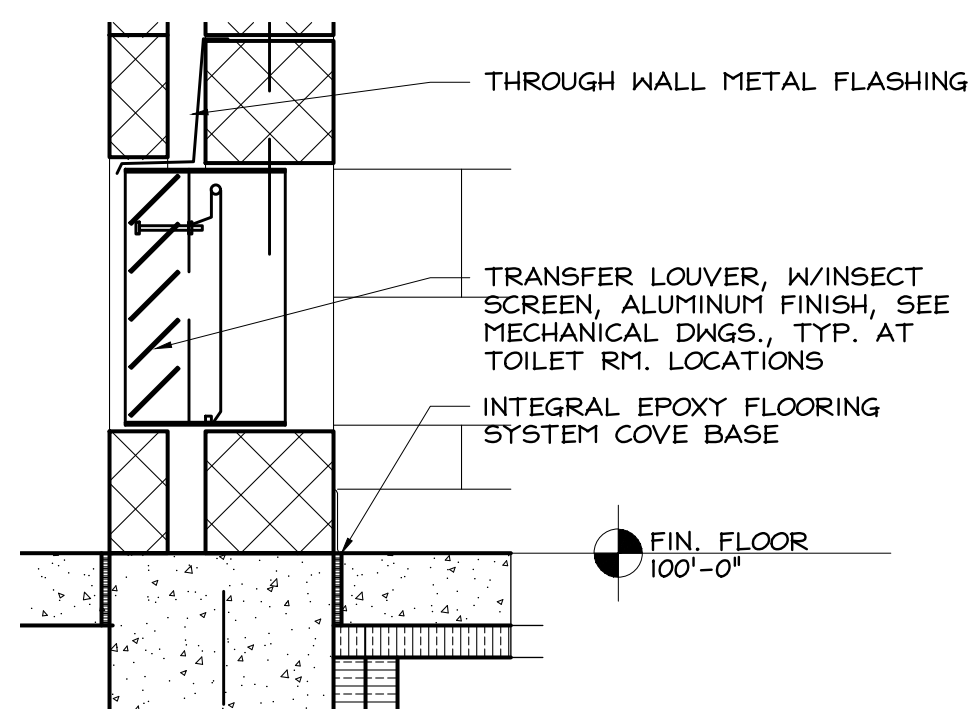
ACCESSORY SCHEDULE			
△	GRAB BARS HORIZONTAL BARS: TOP AT 33-36" AFF; VERTICAL BAR: CENTER LINE AT 39-41" AFF FROM BACK WALL & BOTTOM AT 39-41" AFF.	△	SOAP DISPENSER FURNISHED BY OWNER, INSTALLED BY GC. MOUNTING HEIGHT: 40" MAX.
△	TOILET TISSUE DISPENSER PROVIDED BY OWNER MOUNTING HEIGHT = 19" AFF (MIN.) 48" AFF MAX. TO CENTERLINE OF DISPENSER. REAR EDGE OF DISPENSER TO BE 8" IN FRONT OF WATER CLOSET (DISPENSER MUST BE 1 1/2" (MIN.) BELOW THE GRAB BAR)	△	MIRROR 18" WIDE X 36" HIGH MOUNTING HEIGHT: 38" AFF (MAX.)
△	SANITARY NAPKIN DISPOSAL MOUNTING HEIGHT = 34" AFF (TO TOP OF UNIT) B.F. MOUNTING HEIGHT = 27" AFF (TO TOP OF UNIT)	△	HAND DRYER MOUNTING HEIGHT: 40" MAX. TO CONTROL
△	COAT HOOK MOUNTING HEIGHT: 54" AFF	△	SOLID SURFACING WALL PANEL - AT HAND DRYER 15" W X 56" H, MOUNTING HEIGHT: TOP EDGE 3" ABOVE TOP OF HAND DRYER
△	BARRIER FREE SIGNAGE INSTAL: 60" AFF AND 9" FROM H.M. DOOR FRAME TO CENTER OF SIGN.	△	BABY CHANGING STATION MOUNTING HEIGHT: 34" AFF TO SHELF
NOTE INSTALL ALL TOILET FIXTURES AND ACCESSORIES IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE OF MICHIGAN BUILDING CODE (MBC 2015) AND ADOPTED ICC A117.1 - 2009 STANDARDS FOR BARRIER FREE ACCESSIBILITY STANDARDS.			



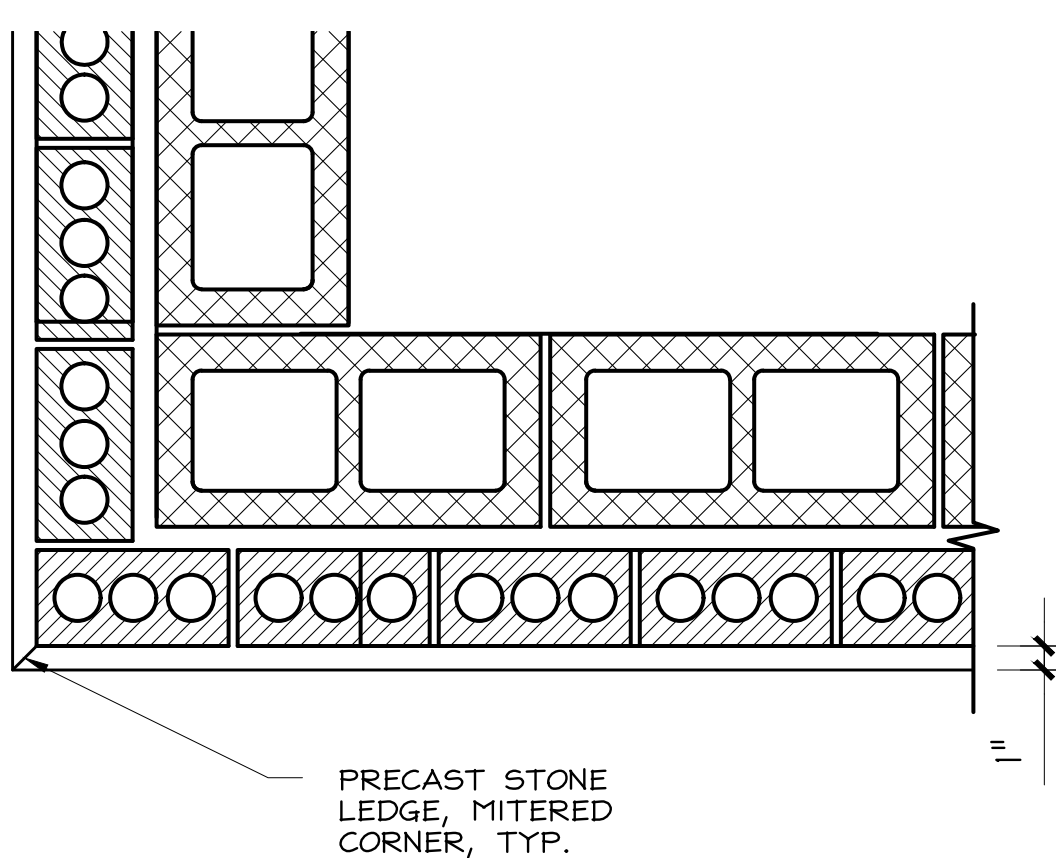
9 STEEL GATE ELEVATION DET.
SCALE: 3/4" = 1'-0"



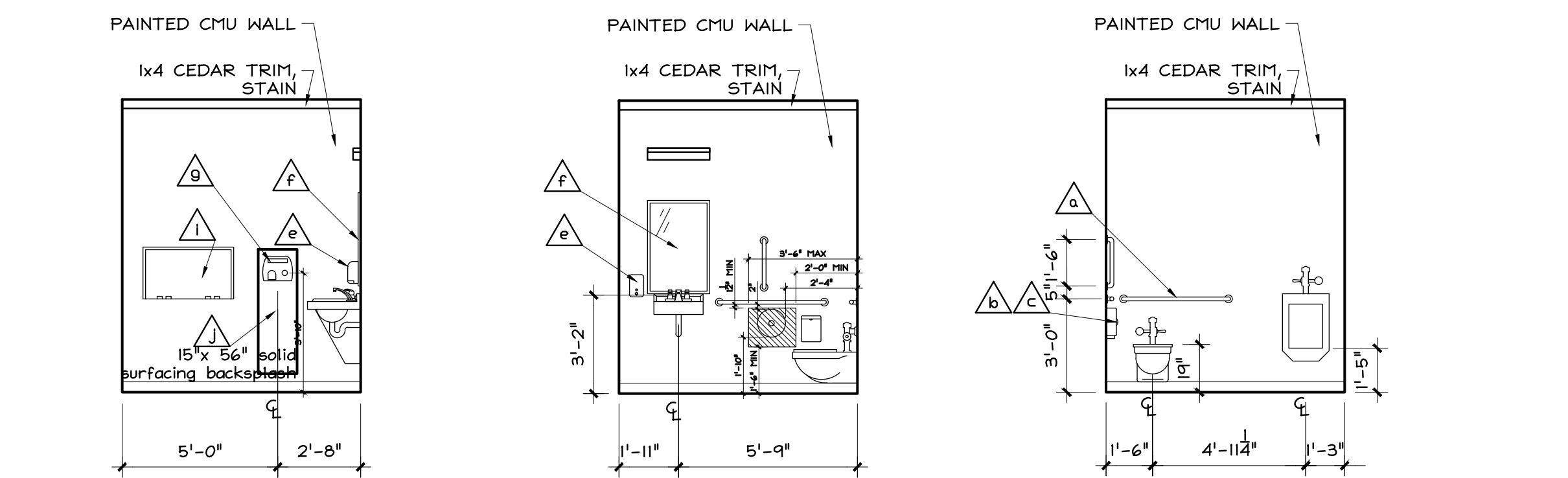
10 STEEL GUARD RAILING DET.
SCALE: 3/4" = 1'-0"



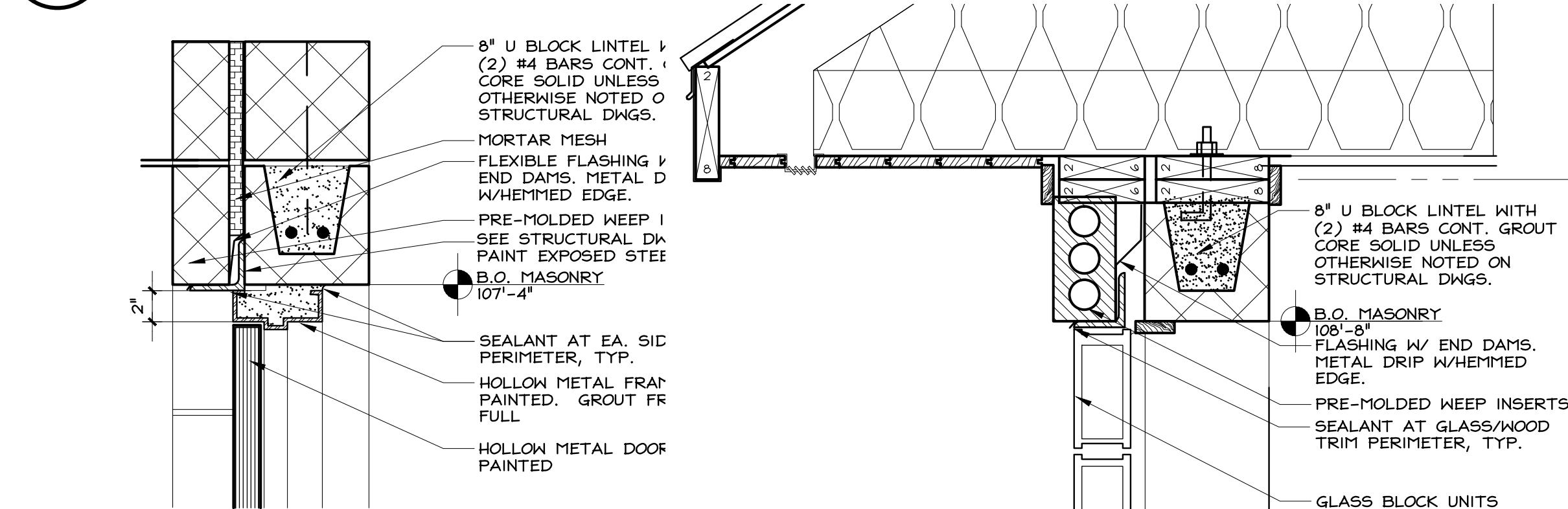
8 TRANSFER GRILLE DET.
SCALE: 1 1/2" = 1'-0"



7 WALL CORNER DET.
SCALE: 1 1/2" = 1'-0"

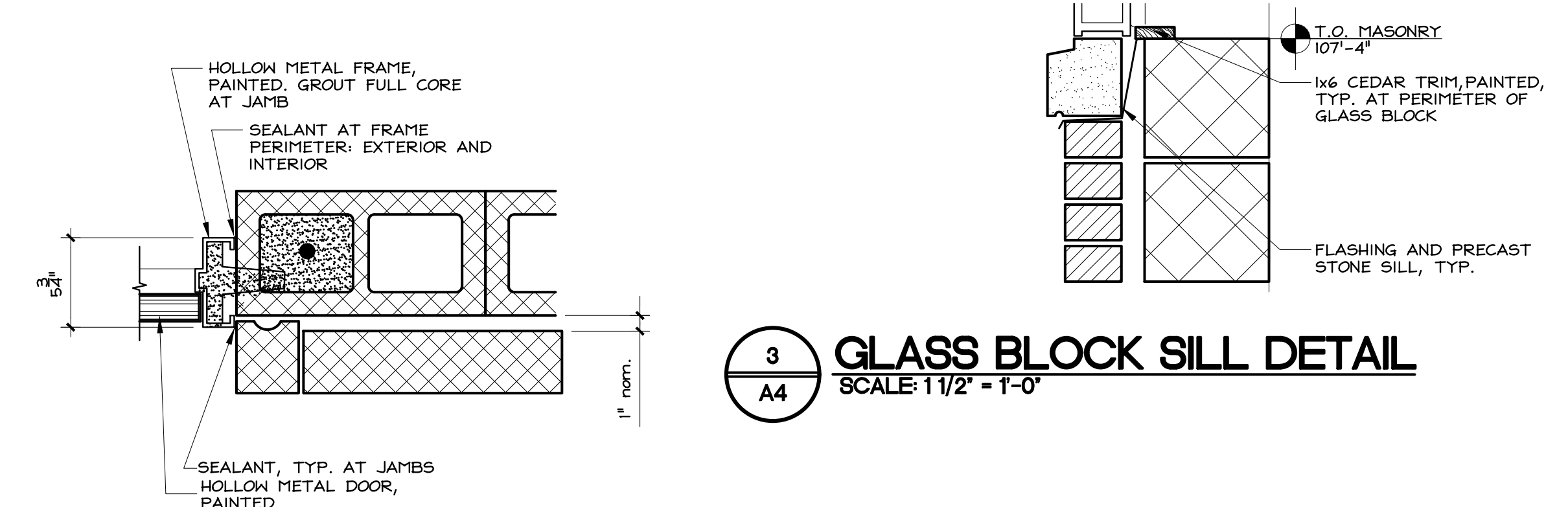


1 INTERIOR ELEVATIONS - TYPICAL TOILET
SCALE: 1/4" = 1'-0"



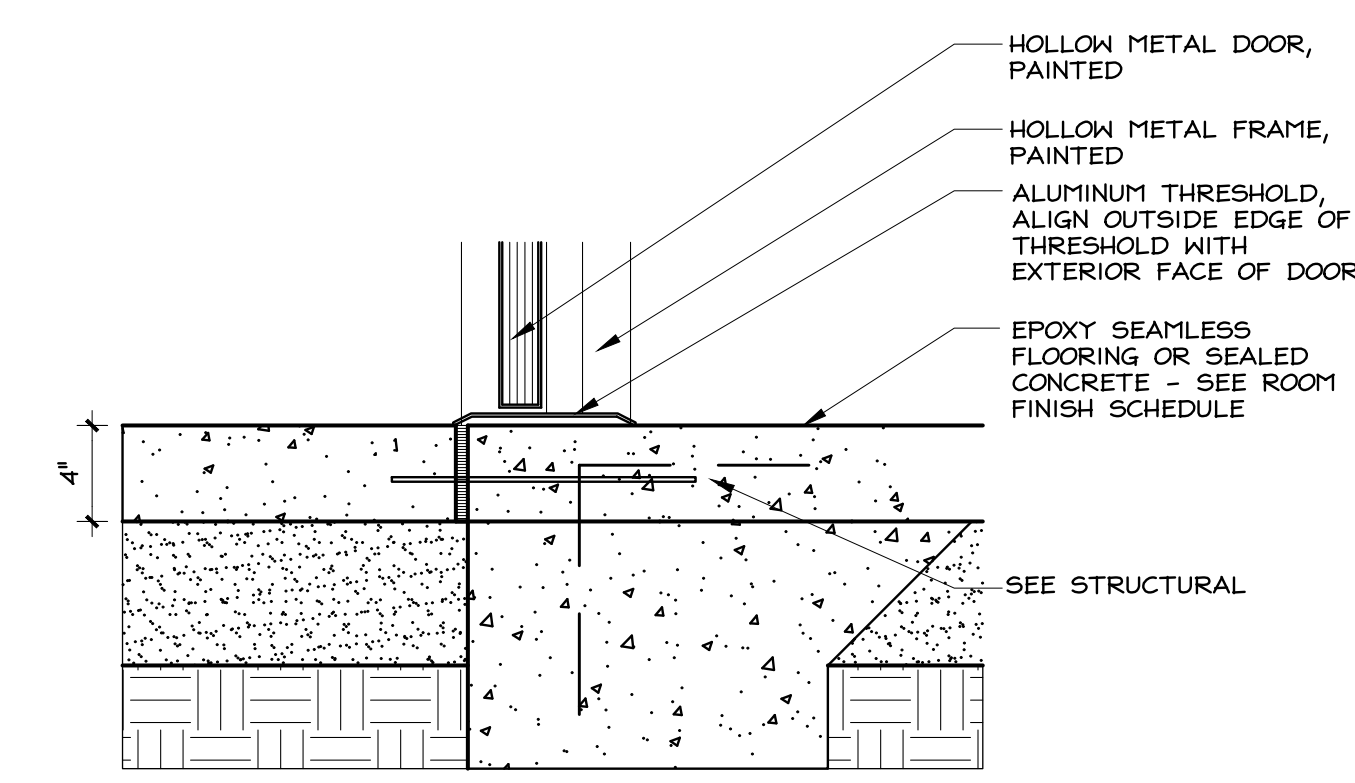
4 DOOR HEAD DETAIL
SCALE: 1 1/2" = 1'-0"

2 GLASS BLOCK HEAD
SCALE: 1" = 1'-0"



3 GLASS BLOCK SILL DETAIL
SCALE: 1 1/2" = 1'-0"

5 DOOR JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



6 DOOR THRESHOLD DET.
SCALE: 1 1/2" = 1'-0"



STRUCTURAL NOTES

GENERAL

- 1- CONSTRUCTION SHALL COMPLY WITH MICHIGAN BUILDING CODE [MBC] 2015 AND ALL OTHER APPLICABLE LOCAL CODES.
- 2- OSHA, AND OTHER APPLICABLE SAFETY CODE REQUIREMENTS ARE DETERMINED AND PROVIDED BY OTHERS. CLASSIC ENGINEERING IS NOT RESPONSIBLE FOR JOBSITE SAFETY.
- 3- THE STRUCTURAL DRAWINGS ARE FOR THE PLACEMENT AND SIZE OF STRUCTURAL COMPONENTS ONLY. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER IT IS FULLY COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCES, AND TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS, AND BRACING EXCAVATIONS TO PREVENT CAVE IN. SUCH MATERIAL SHALL REMAIN THE CONTRACTORS PROPERTY AFTER COMPLETION OF THE PROJECT.
- 4- USE OF ENGINEERING DRAWINGS AS ERECTION DRAWINGS BY THE CONTRACTOR IS STRICTLY PROHIBITED.
- 5- DETAILS OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME NATURE AS SHOWN FOR SIMILAR CONDCTIONS. ANY UNCLEAR CONDITIONS SHALL BE VERIFIED WITH ENGINEER PRIOR TO CONSTRUCTION OF THAT AREA.
- 6- IF ANY NOTE CONFLICTS WITH ANY DETAIL OR NOTE ON THE PLANS OR IN THE STRUCTURAL NOTES, THE STRICTEST PROVISION SHALL GOVERN.
- 7- DRAWINGS ARE NOT TO BE SCALED. ANY UNCLEAR DIMENSIONS OR DIMENSIONAL DISCREPANCIES BETWEEN DISCIPLINES SHALL BE VERIFIED WITH ARCHITECT.
- 8- ADDITIONS OF OPENINGS, PENETRATIONS OR EMBEDMENTS IN THE FIELD SHALL BE APPROVED BY THE CLASSIC ENGINEERING PRIOR TO FABRICATION.

FOUNDATIONS

- 1- FOOTINGS ARE DESIGNED TO BEAR ON SOIL OR ENGINEERED FILL ASSUMING AN ALLOWABLE BEARING CAPACITY OF 2000 PSF. IF MATERIAL OF THIS CAPACITY IS NOT CONFIRMED AT THE ELEVATIONS INDICATED, THE FOOTINGS SHALL BE LOWERED OR ENLARGED. NOTIFY AND CONSULT ENGINEER FOR ADJUSTMENTS. SEE GEOTECHNICAL REPORT, PREPARED BY 'SOILS & STRUCTURES' DATED 09 FEBRUARY 2024, FOR ADDITIONAL FOUNDATION CONSIDERATIONS.
- 2- ALL FILL UNDER SLABS AND ADJACENT TO WALLS SHALL BE CLEAN GRANULAR SOIL COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
- 3- EXERCISE CARE WHEN BACKFILLING WALLS. EXCEPT FOR WALLS WITH EQUAL FILL ON BOTH SIDES, NO BACKFILLING OF WALLS SHALL BE DONE UNTIL THE WALL HAS ATTAINED ITS FULL STRENGTH AND HAS BEEN PROPERLY SUPPORTED BY BRACING OR BY A COMPLETED FLOOR OR ROOF STRUCTURE. ALTERNATE FILL WHEN BACKFILLING WALLS WITH FILL ON BOTH SIDES.
- 4- COORDINATE FOUNDATION WORK WITH UNDERGROUND WORK BY MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTORS, IF ANY.
- 5- CONTRACTOR SHALL PROVIDE FOUNDATION DRAINS WITH APPROPRIATE FILTER MATERIAL AS RECOMMENDED BY SOILS REPORT.

CONCRETE

- 1- CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH AS FOLLOWS:
3000 PSI FOUNDATIONS [WALLS, FOOTINGS]
4000 PSI SLABS ON GRADE
- 2- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615. MAIN BARS TO BE GRADE 60. TIES AND STIRRUPS TO BE GRADE 40. WELDED WIRE MESH SHALL CONFORM TO ASTM A1064.
- 3- ALL ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 36.
- 4- MATERIAL AND WORKMANSHIP FOR ALL CONCRETE AND REINFORCING SHALL BE IN ACCORDANCE WITH THE ACI MANUAL OF STANDARD PRACTICE AND THE ACI BUILDING CODE REQUIREMENTS.
- 5- PROVIDE ENTRAINED AIR IN ALL EXPOSED EXTERIOR CONCRETE.
- 6- OTHER CONCRETE ADMIXTURES MAY BE USED AS NECESSARY, INCLUDING THE USE OF A PLASTICIZER TO IMPROVE WORKABILITY. HOWEVER, EXTRA WATER SHALL NOT BE ADDED BEYOND THAT WHICH IS REQUIRED FOR PROPER HYDRATION OF THE MIX DESIGN BEING USED.
- 7- FOR REINFORCING SPLICES, UNLESS OTHERWISE INDICATED, MAINTAIN A MINIMUM BAR LAP OF 30 BAR DIAMETERS AND A MINIMUM LAP OF 8" FOR WIRE MESH.
- 8- PROVIDE CORNER BARS TO MATCH ALL HORIZONTAL REINFORCING IN WALLS AND FOOTINGS. PROVIDE DOWELS AS REQUIRED TO MATCH VERTICAL WALL AND PIER REINFORCING. THIS INCLUDES DOWELS TO MATCH REINFORCED MASONRY WALLS ABOVE.
- 9- APPROPRIATE CURING MEASURES SHALL BE TAKEN FOR NEW CONCRETE. A MOIST CURE METHOD OR A CURING COMPOUND SHALL BE USED. COMMENCEMENT OF CURING OR APPLICATION OF A COMPOUND SHALL BE DONE IMMEDIATELY AFTER FINISHING OR REMOVING FORM WORK. THE CURING COMPOUND SHALL BE COMPATIBLE WITH FLOOR COVERINGS OR MANUFACTURERS INSTRUCTIONS.
- 10- APPROPRIATE PROCEDURES FOR COLD OR WARM WEATHER CONCRETE WORK SHALL BE FOLLOWED, AS NECESSARY, IN ACCORDANCE WITH ACI SPECIFICATIONS.
- 11- VERIFY AND COORDINATE ALL SLEEVES, OPENINGS, EMBEDDED ITEMS, ETC., AS NECESSARY, WITH THE APPLICABLE TRADE THAT MAY REQUIRE THEM.
- 12- SLABS ON GRADE SHALL HAVE CONSTRUCTION OR CONTRACTION JOINTS AT A MAXIMUM SPACING OF 10'-0" ON CENTER EACH WAY FOR 4" SLABS. MAINTAIN AN ASPECT RATIO OF LENGTH TO WIDTH OF NO MORE THAN 1.5.

CONCRETE MASONRY:

- 1- MASONRY UNITS SHALL CONFORM TO ASTM C90.
- 2- MORTAR FOR MASONRY SHALL CONFORM TO ASTM C270, TYPE M OR S. MINIMUM COMPRESSIVE STRENGTH OF BLOCK SHALL BE F'm = 2000 PSI.
- 3- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. HORIZONTAL JOINT REINFORCEMENT SHALL CONFORM TO ASTM A153.
- 4- GROUT FOR REINFORCED CORES SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF F'G = 3000 PSI.
- 5- PROVIDE ADDITIONAL #5 BARS, VERTICAL AT ALL CORNERS. PROVIDE #4 HORIZONTAL BARS ABOVE & BELOW OPENINGS, IN CLOSEST AVAILABLE CELL, EXTENDING 24" BEYOND OPENING.
- 6- HORIZONTAL JOINT REINFORCEMENT SHALL BE A MINIMUM OF TWO WIRES OF W1.7 AT 16" MAXIMUM VERTICAL.
- 7- FOLLOW COLD/HOT WEATHER CONSTRUCTION GUIDELINES PER ACI 530.1, 1.8C & 1.8D.

STRUCTURAL STEEL:

- 1- STEEL DESIGN, FABRICATION AND ERECTION TO BE IN ACCORDANCE WITH AISC 360-16, SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS.
- 2- STRUCTURAL STEEL ANGLES AND PLATE SHALL CONFORM TO ASTM A36. WIDE FLANGES SHALL CONFORM TO ASTM A992 GRADE 50. ALL LINTELS SHALL BE GALVANIZED.
- 3- EXPOSED STEEL AND LINTELS SHALL BE MINIMUM G-90 HOT-DIP GALVANIZED IN COMPLIANCE WITH ASTM A123.

STRUCTURAL WOOD FRAMING

- 1- TRUSSES SHALL BE DESIGNED FOR THE DESIGN LOADS INDICATED, APPROVED BY A REGISTERED PROFESSIONAL ENGINEER. SEALED SHOP DRAWINGS SHALL BE SUBMITTED TO CLASSIC ENGINEERING FOR REVIEW. DEFLECTIONS SHALL BE LIMITED TO [L=SPAN]:
L/240 - ROOF LIVE LOAD
L/180 - ROOF DEAD + LIVE LOAD
- 2- TRUSS MANUFACTURER SHALL PROVIDE ERECTION DRAWINGS INDICATING ALL BRIDGING AND BRACING REQUIRED BY DESIGN.
- 3- WOOD TRUSSES AND/OR OTHER STRUCTURAL FRAMING MEMBERS ARE SHOWN AS A GENERAL LAYOUT ONLY AND EXACT PLACEMENT SHALL BE VERIFIED IN THE FIELD. HOWEVER, FRAMING PLACEMENT SHALL NOT EXCEED THE SPACING SHOWN ON THE DRAWINGS. WOOD TRUSS PLACEMENT SHALL ALSO BE COORDINATED WITH THE TRUSS ERECTION DRAWINGS.
- 4- ALL ROOF SHEATHING SHALL BE MIN. 15/32" APA RATED 40/20 SHEATHING, EXPOSURE 1.
- 5- ROOF SHEATHING SHALL BE INSTALLED CONTINUOUS OVER TWO OR MORE SPANS WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS. SHEATHING SHALL BE NAILED WITH 10d COMMON NAILS AT 6" O.C. AT PANEL EDGES & INTERMEDIATE SUPPORTS UNLESS NOTED OTHERWISE. ALTERNATELY, BLOCK ALL PANEL EDGES AND NAIL AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. ALLOW 1/8" GAP AT PANEL EDGES AND ENDS.
- 6- ROOF TRUSS TIES INDICATED ON PLANS ARE AN ESTIMATED MINIMUM REQUIREMENT. TRUSSES AND GIRDER TRUSSES MAY REQUIRE ADDITIONAL TIES BASED ON UPLIFT REACTIONS PROVIDED IN TRUSS SUBMITTAL.
- 7- PROVIDE TEMPORARY AND PERMANENT BRACING OF ROOF TRUSSES PER BCSI (BUILDING COMPONENTS SAFETY INFORMATION) PUBLISHED BY THE WOOD TRUSS COUNCIL OF AMERICA & TRUSS PLATE INSTITUTE.

DESIGN CODES:

GENERAL - MICHIGAN BUILDING CODE 2015
WOOD - NATIONAL DESIGN SPECIFICATION 2015
MASONRY - ACI 530-15
CONCRETE - ACI 318-14

DESIGN CRITERIA:

RISK CATEGORY II BUILDING

ROOF LOADS:

EXPOSURE B, PARTIAL EXPOSURE
GROUND SNOW LOAD, P_g = 60 PSF
IMPORTANCE FACTOR, I_s = 1.0
EXPOSURE FACTOR, C_e = 1.0
THERMAL FACTOR, C_t = 1.2
SLOPE FACTOR, C_s = 1.0
BALANCED ROOF SNOW LOAD = 50.4 PSF
ATTIC LIVE LOAD = 40 PSF
TOP CHORD DEAD LOAD = 8 PSF
BOTTOM CHORD DEAD LOAD = 8 PSF

WIND LOADS:

ULTIMATE DESIGN WIND SPEED, V_{ult}= 115 MPH
NOMINAL DESIGN WIND SPEED, V_{asd}= 89 MPH
EXPOSURE CATEGORY D
IMPORTANCE FACTOR, I_w=1.0
INTERNAL PRESSURE COEFFICIENT, GC_{pi} = +/-0.18

SEISMIC LOADS:

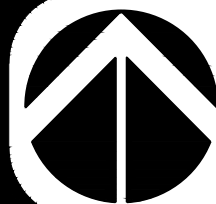
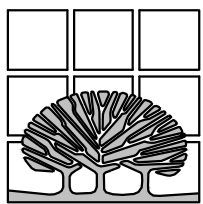
IMPORTANCE FACTOR, I_e = 1.0
SITE CLASS D
MAPPED SHORT PERIOD SPECTRAL RESPONSE ACCELERATION, S_s = 0.066g
MAPPED 1-SECOND SPECTRAL RESPONSE ACCELERATION, S₁ = 0.042g
SHORT PERIOD SPECTRAL DESIGN ACCELERATION, S_{ds}=0.071g
1.0 SEC. SPECTRAL DESIGN ACCELERATION, S_{d1}=0.067g
SEISMIC DESIGN CATEGORY B
RESPONSE MODIFICATION FACTOR, R=2
SEISMIC RESPONSE COEFFICIENT, C_s= 0.036
DESIGN BASE SHEARS [UNFACTORED] V=0.036W
ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE

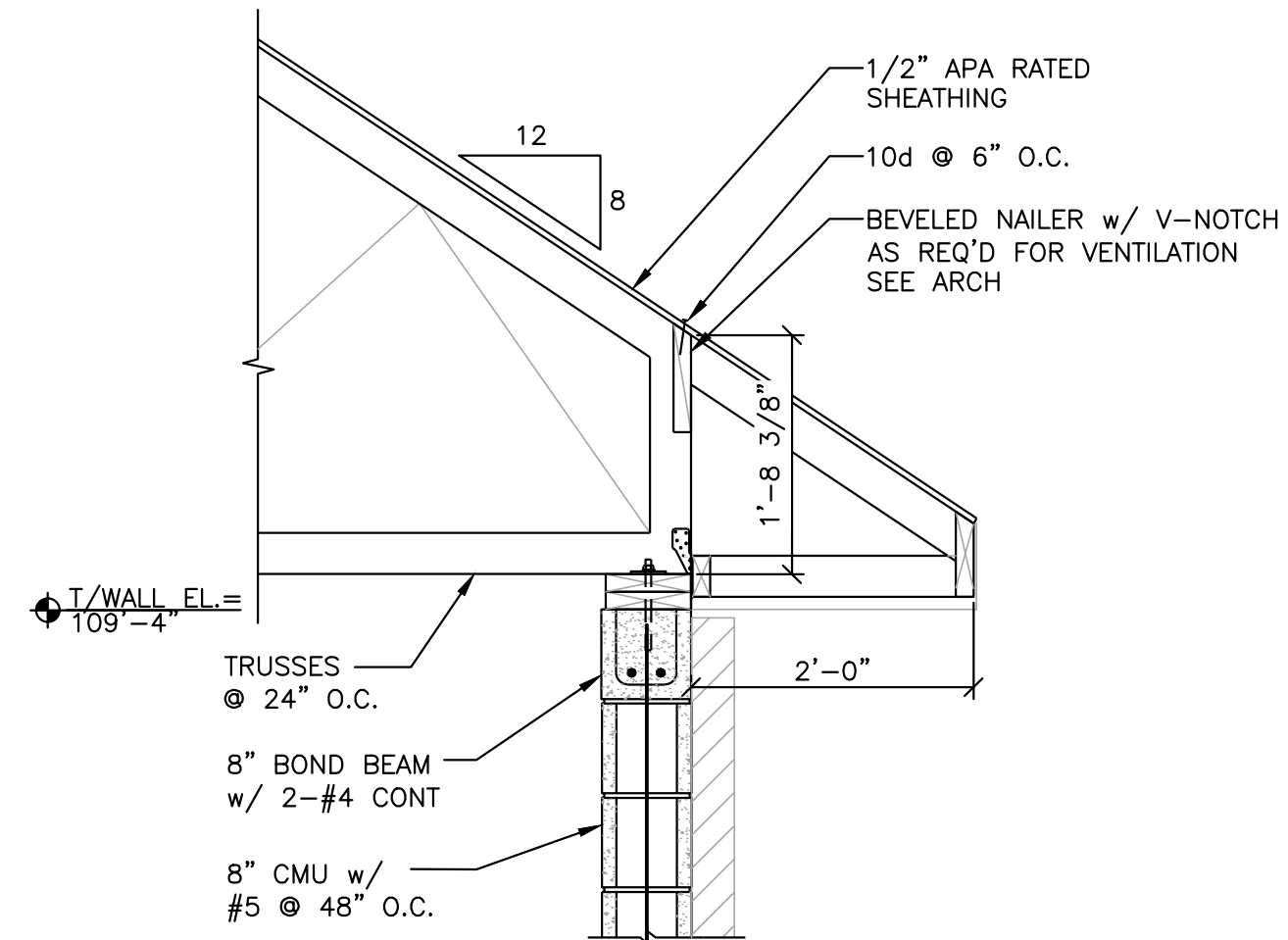
LATERAL FORCE RESISTING SYSTEM: ORDINARY REINFORCED MASONRY SHEAR WALLS

ABBREVIATIONS:

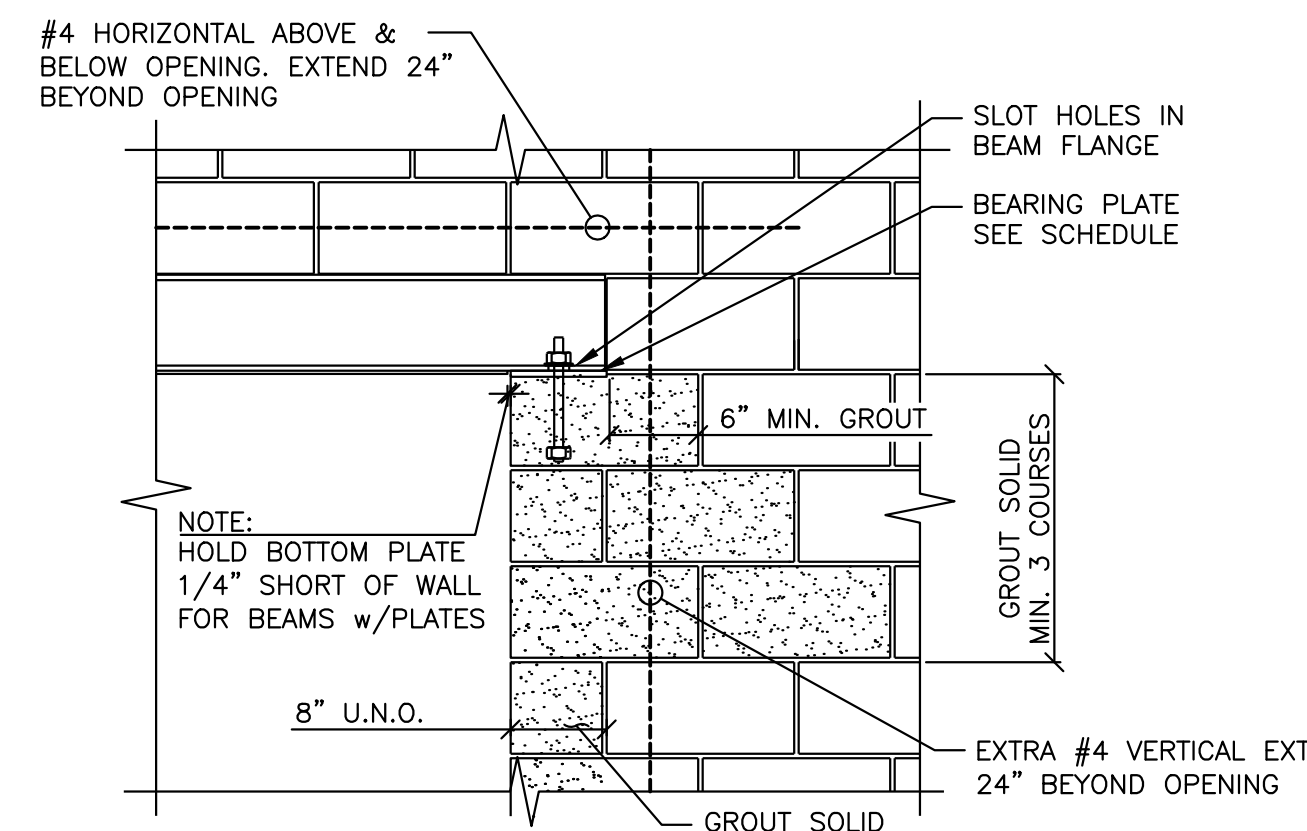
ARCH - ARCHITECTURAL
B/- BOTTOM OF
COL.- COLUMN
CONC.- CONCRETE
CONT.- CONTINUOUS
DIA.- DIAMETER
ELEV.- ELEVATION
EXT.- EXTERIOR
E.W. - EACH WAY
FNDR- FOUNDATION
HORIZ. - HORIZONTAL
MIN. - MINIMUM
O.C.- ON CENTER
PSF - POUNDS PER SQUARE FOOT
PSI - POUNDS PER SQUARE INCH
REINF. - REINFORCING
SIM. - SIMILAR
T & B - TOP AND BOTTOM
T/- TOP OF
TYP. - TYPICAL
UNO - UNLESS NOTED OTHERWISE
VERT.- VERTICAL
w/- WITH
WWF- WELDED WIRE FABRIC

REQUIRED VERIFICATION & INSPECTIONS [MBC 2015 CHAPTER 17]					
SYSTEM or MATERIAL	FREQUENCY		INSPECTION		REMARKS
	CONTINUOUS	PERIODIC	CODE or STANDARD REFERENCE	MBC REFERENCE	
SOILS, MBC 1705.6/ TABLE 1705.6					
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.		X			SEE GEOTECHNICAL REPORT IF AVAILABLE
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH & HAVE REACHED PROPER MATERIAL.		X			SEE GEOTECHNICAL REPORT IF AVAILABLE
PERFORM CLASSIFICATION & TESTING OF COMPACTED FILL MATERIALS.		X			SEE GEOTECHNICAL REPORT IF AVAILABLE
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT & COMPACTION OF COMPACTED FILL.	X				SEE GEOTECHNICAL REPORT IF AVAILABLE
PRIOR TO PLACEMENT OF COMPACTED FILL, OVSERVE SUBRADE & VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.		X			SEE GEOTECHNICAL REPORT IF AVAILABLE
CONCRETE. MBC 1705.3/ MBC TABLE 1705.3					
INSPECT REINFORCEMENT AND VERIFY PLACEMENT.		X	ACI 318 CHAPTER 10, 25.2, 25.3,26.6.1-26.6.3		
VERIFY USE OF REQUIRED DESIGN MIX.		X	ACI 318: CHAPTER 19, 26.4.3-26.4.4	1904.1,1904.2	
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X		ASTM C172, ASTM C31, ACI 318 : 26.4,26.12		
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE & TECHNIQUES.		X	ACI 318: 26.5.3-26.5.5		
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		X	ACI 318:26.11.1.2b		
MASONRY CONSTRUCTION. MBC 1705.2					
MASONRY - LEVEL B		X	TMS 402/ACI530 TABLE 3.1.3 TMS 602/ACI 530.1- TABLE 4	1705.4	MASONRY CONSTRUCTION SHALL BE INSPECTED AND VERIFIED IN COMPLIANCE WITH TMS 402-11/ ACI 530-11/ ASCE 5-11 AND TMS 602-11/ ACI 530.1-11/ ASCE 6 QUALITY ASSURANCE PROGRAMS.

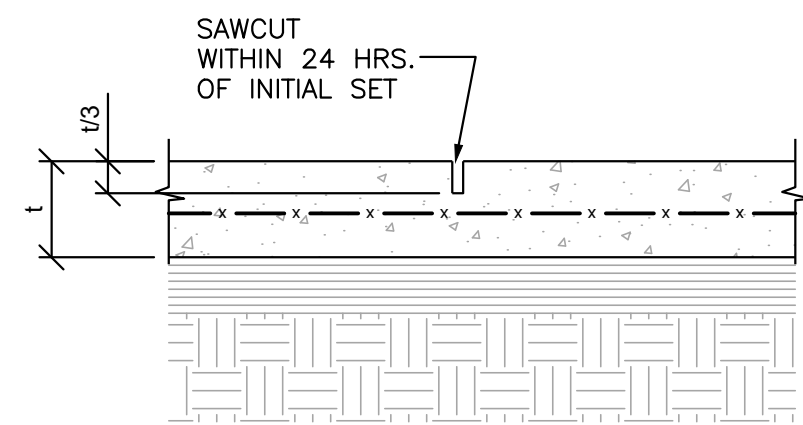




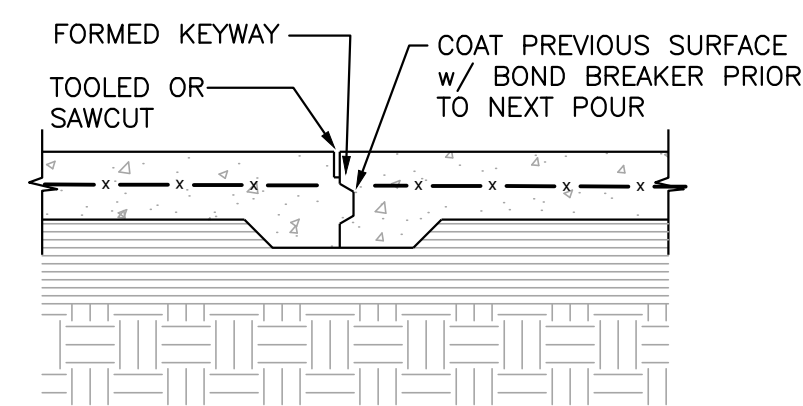
SECTION 5
S1 S1 SCALE: 3/4" = 1'-0"



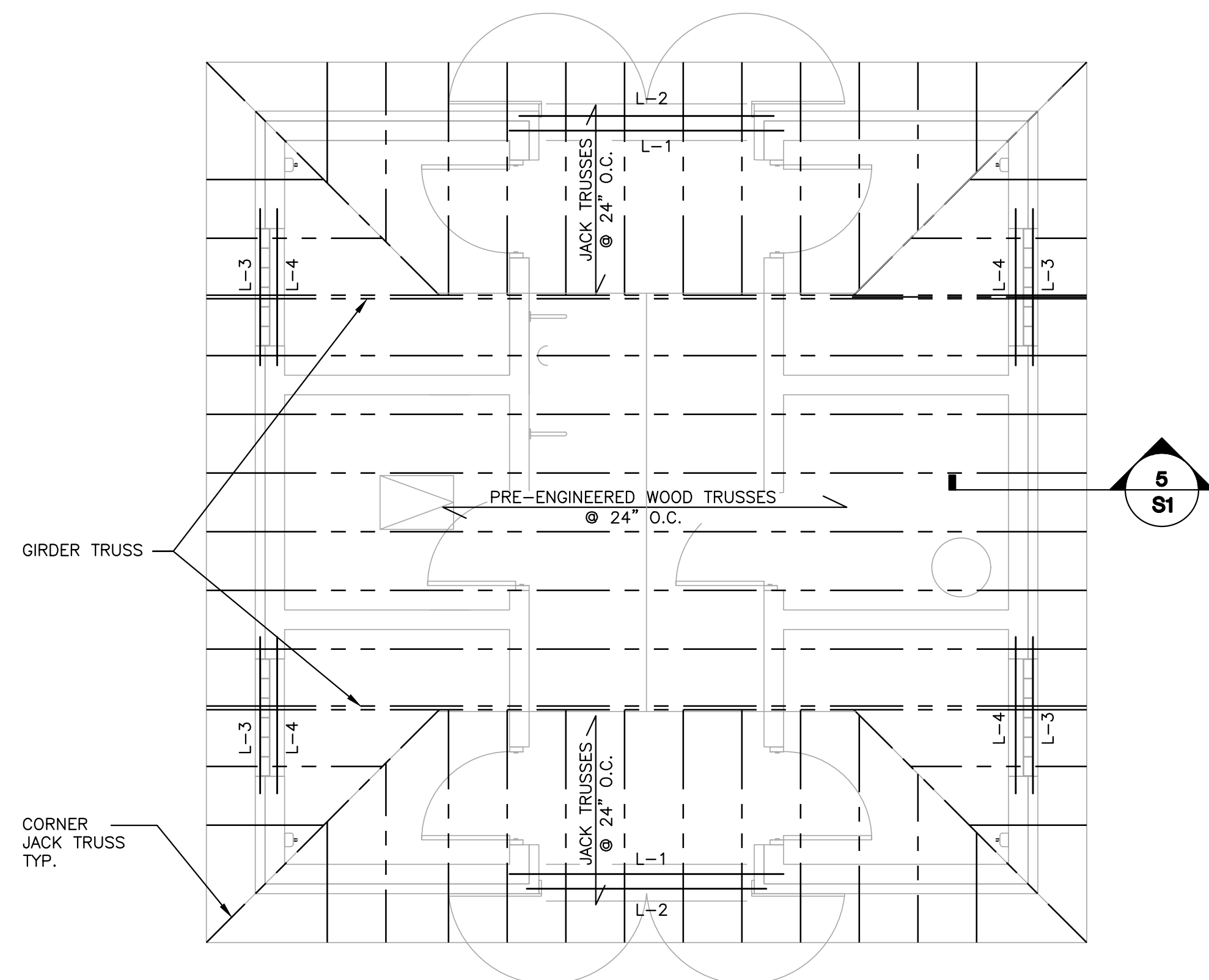
TYP. LINTEL BEARING DETAIL
S1 SCALE: NOT TO SCALE



TYP. CONTROL JOINT DETAIL
S1 SCALE: NOT TO SCALE

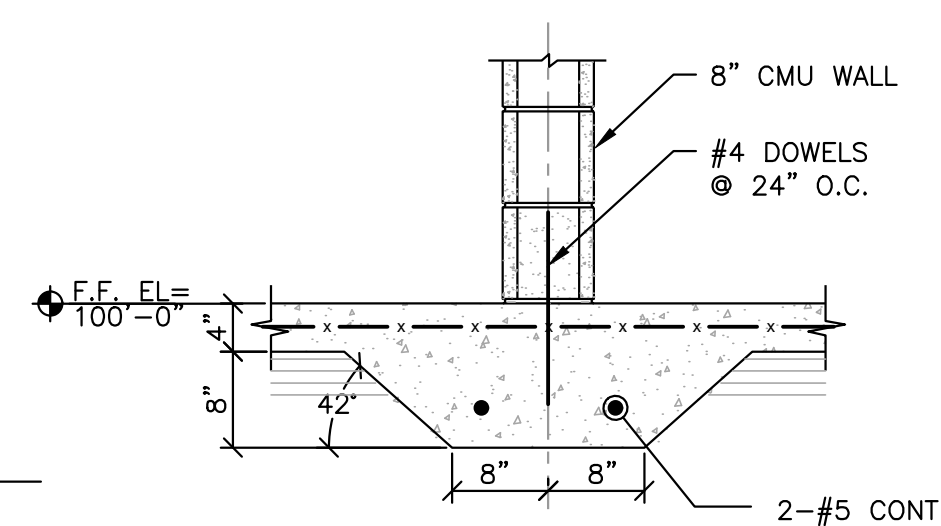


TYP. CONSTRUCTION JOINT DETAIL
S1 SCALE: NOT TO SCALE

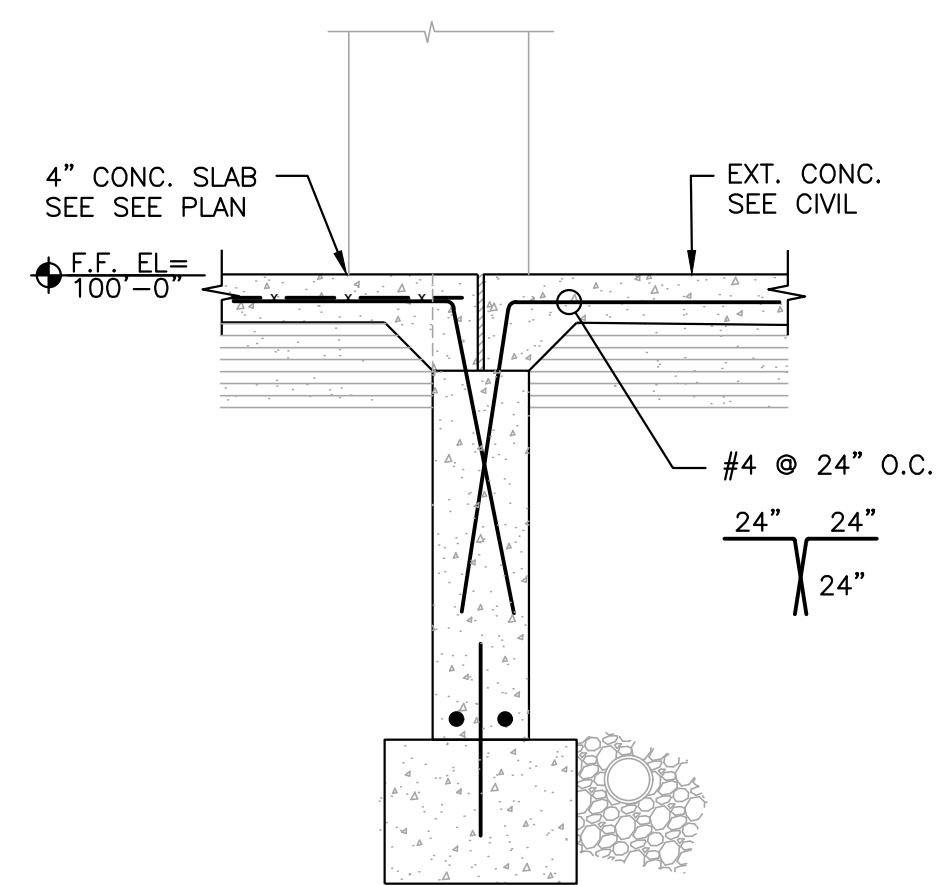


ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

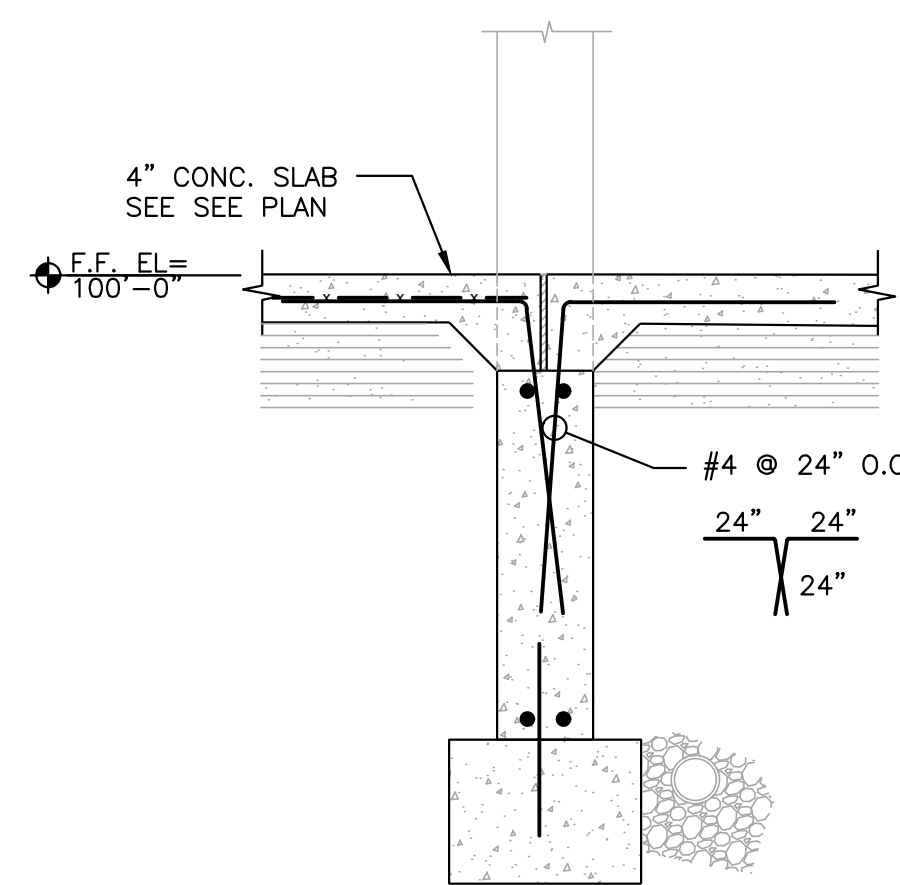
LINTEL SCHEDULE		
MARK	SIZE	BEARING PLATE/ BEARING LENGTH
L-1	W8x10 w/ 1/4"x7"	1/2"x8"x7" 1.2
L-2	L5x3 1/2x5/16	8"
L-3	L3 1/2x3 1/2x5/16	8"
L-4	8" BOND BEAM w/2-#4 CONT. BOTTOM 1-#4 TOP	CONT. BOND BEAM
1- SEE TYP. LINTEL BEARING DETAIL, THIS SHEET.		
2- WITH 2-1/2" ANCHOR RODS. SLOT HOLES @ BEAM FLANGE PARALLEL TO SPAN.		



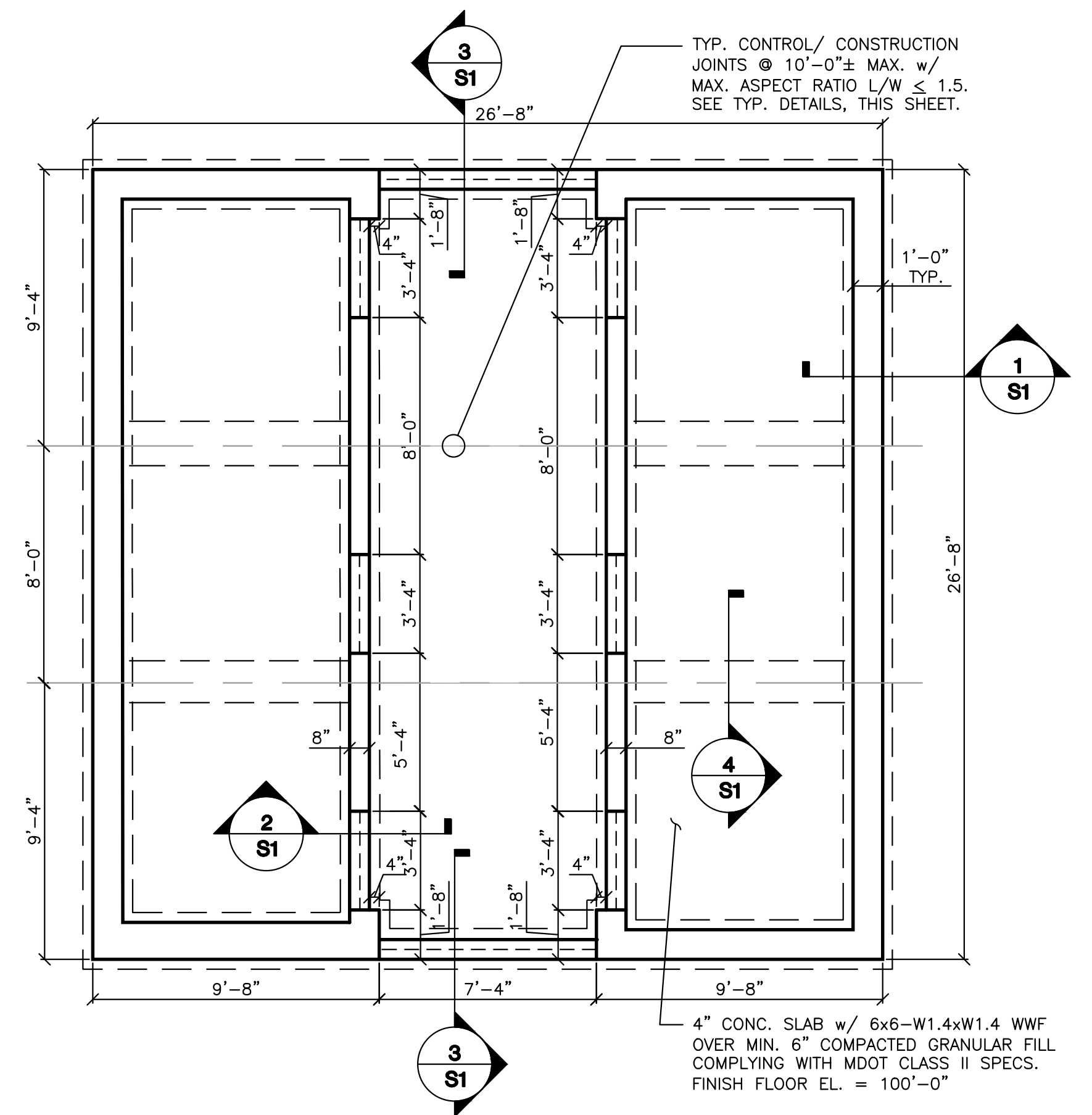
SECTION 4
S1 S1 SCALE: 3/4" = 1'-0"



SECTION 3
S1 S1 SCALE: 3/4" = 1'-0"

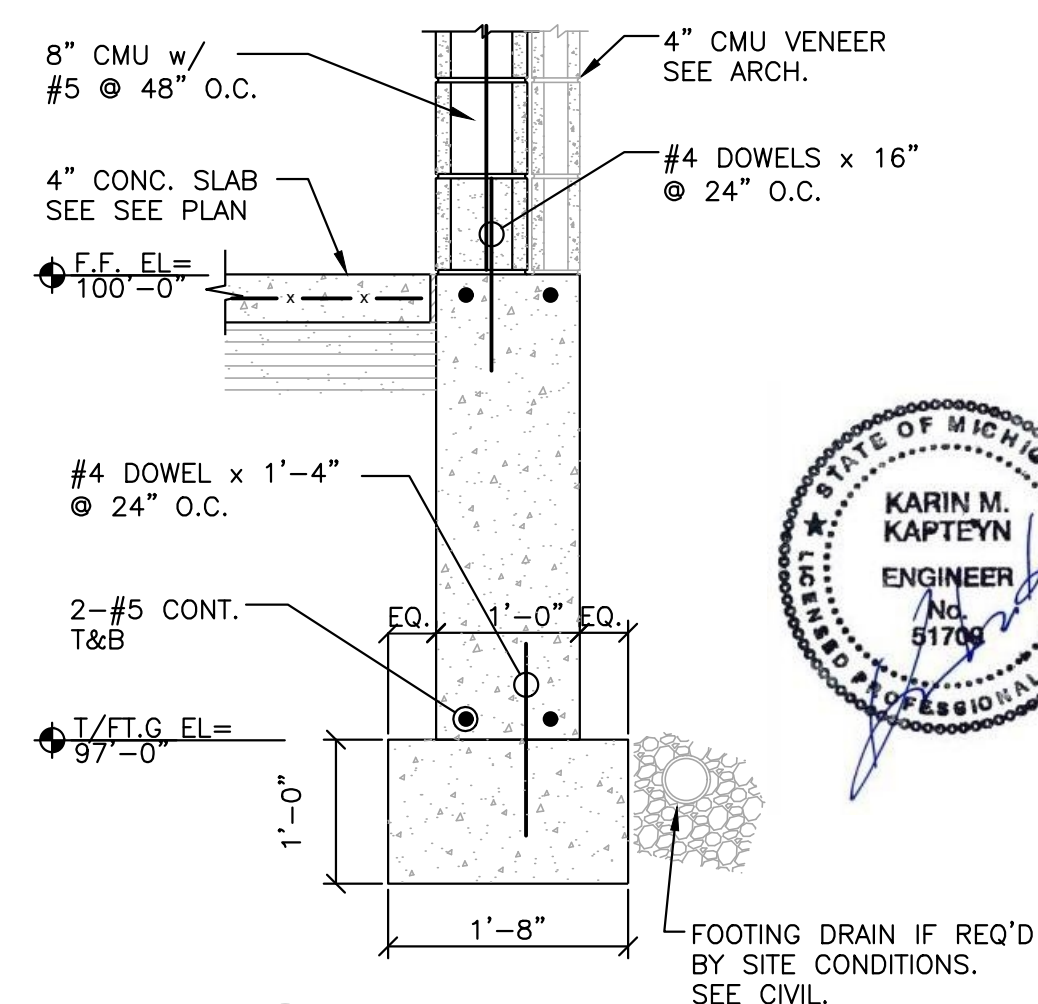


SECTION 2
S1 S1 SCALE: 3/4" = 1'-0"

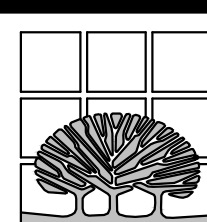


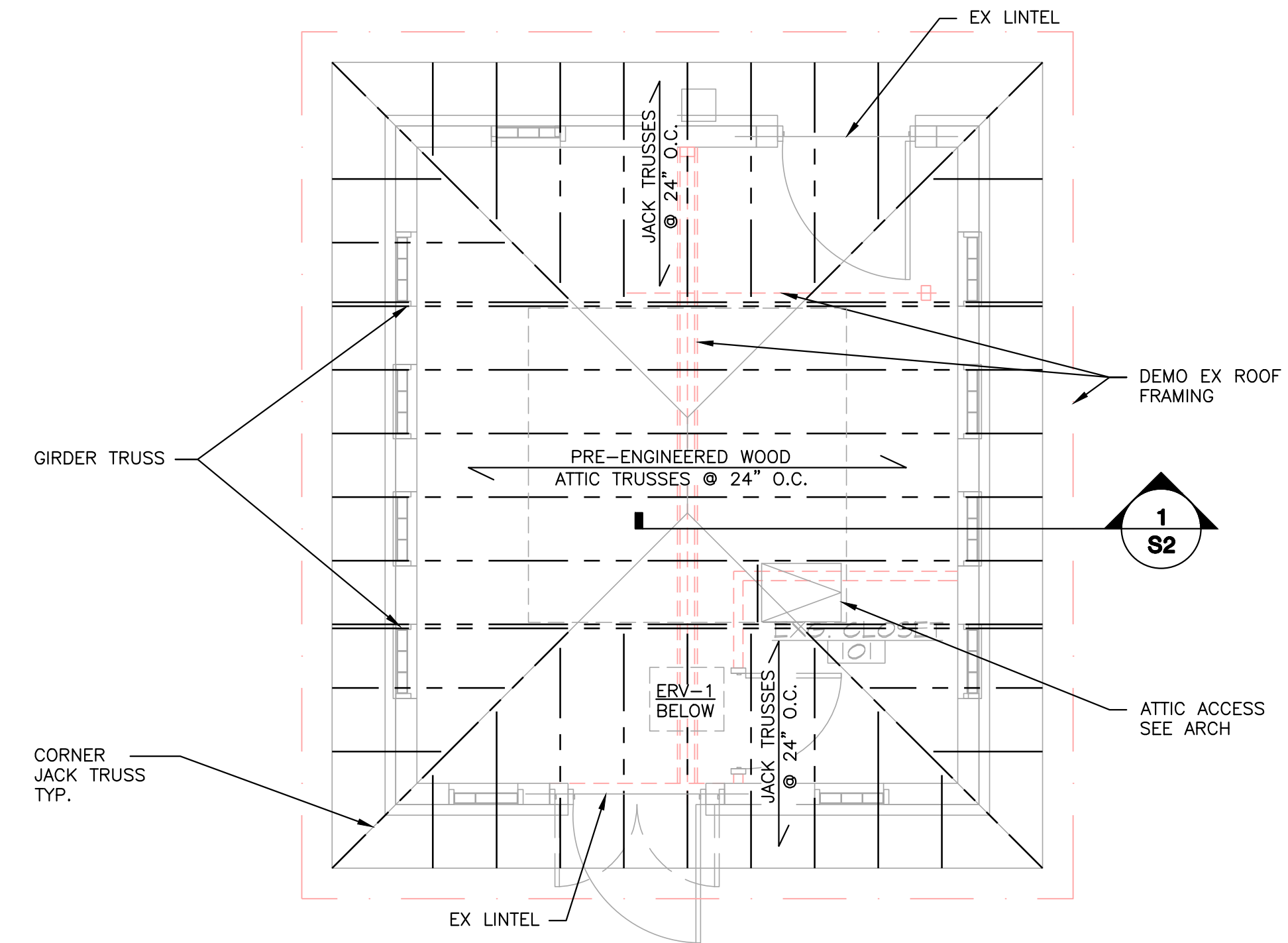
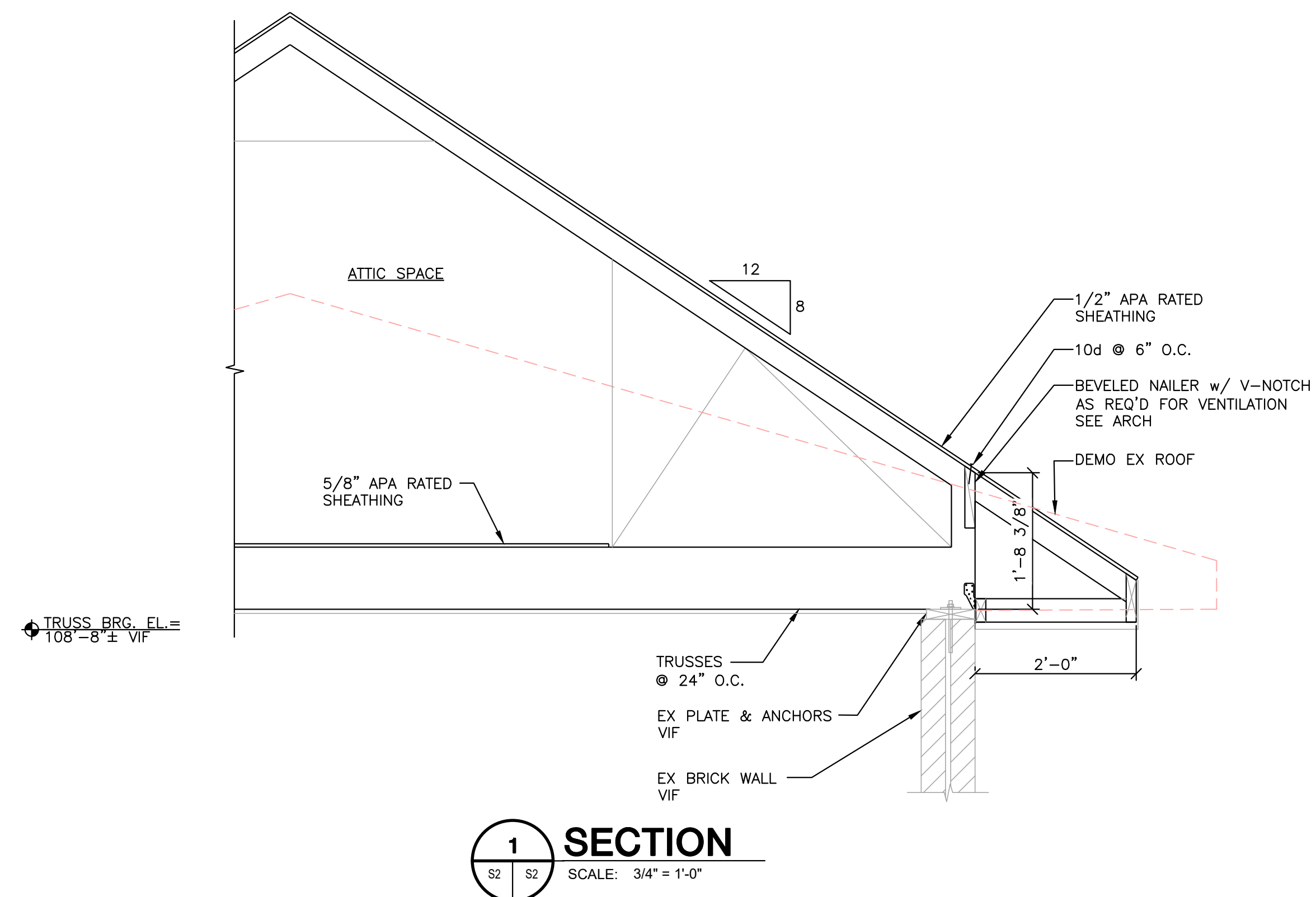
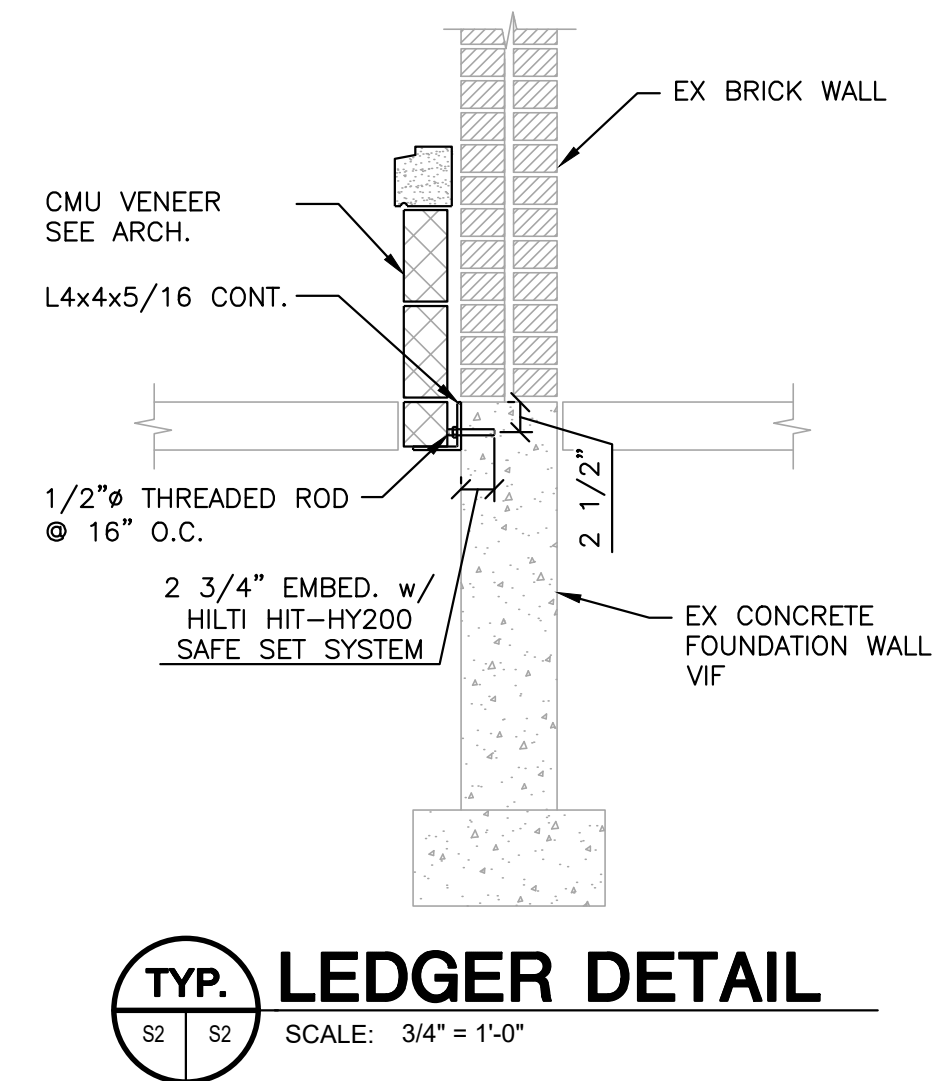
FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

FOUNDATION NOTES:
[SEE STRUCTURAL NOTES, SHEET S0]
1- TOP OF WALL ELEVATION = 100'-0" U.N.O.
TOP OF WALL ELEVATION = 99'-4" @ DOORS
TOP OF FOOTING ELEVATION = 97'-0"

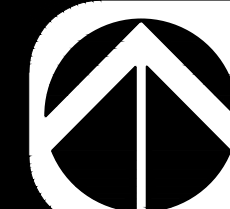
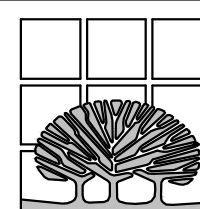


SECTION 1
S1 S1 SCALE: 3/4" = 1'-0"





ROOF FRAMING PLAN- EXISTING BUILDING
SCALE: 1/4" = 1'-0"



PLUMBING FIXTURE LIST

WC-1 WALL HUNG, VITREOUS CHINA, SIPHON JET, ELONGATED BOWL, BOLT CAPS, 16 1/8" RIM HEIGHT, 1 1/2" TOP SPUD. KOHLER MODEL K-4325. PROVIDE WITH SLOAN FLUSH VALVE, 1.6 GPF, AND WHITE SOLID PLASTIC OPEN FRONT SEAT, LESS COVER, BEMIS 1955CT. PROVIDE WITH JAY R SMITH ADJUSTABLE FIXTURE SUPPORT.

UR-1 WALL MOUNTED, VITREOUS CHINA, SIPHON JET, WITH 3/4" TOP SPUD AND 2" OUTLET. KOHLER 4991-ET-0 BARDON. PROVIDE WITH FLUSH VALVE SLOAN 186-1.0 SG REGAL, 1.0 GPF, AND CONCEALED WALL SUPPORT CARRIER. MOUNTING HEIGHT TO BE 15" MAXIMUM TO RIM OF FIXTURE.

L-1 WALL MOUNTED, VITREOUS CHINA, 20"x18", FRONT OVERFLOW, 4" BACK AND 4" CENTERS. KOHLER KINGSTON K-2005, WHITE FINISH. PROVIDE WITH METERING FAUCET, DELTAS MODEL 86T1153, ADA COMPLIANT TIP ACTION LEVER HANDLES, 0.5 GPM, TOTAL FLOW NOT TO EXCEED 0.25 GALLONS PER HANDLE ACTIVATION. 3/8" LOOSE KEY OPERATED ANGLE STOPS AND CHECK VALVES, PERFORATED DRAIN STRAINER, TRAP ASSEMBLY AND PROTECTIVE PIPE COVERS. CARRIER TO HAVE CONCEALED ARMS, LEVELING AND SECURING SCREWS. PROVIDE A TEMPERING VALVE AT ALL ACCESSIBLE HANDWASHING FIXTURES THAT CONFORMS TO ASSE 1070.

SS-1 FLOOR MOUNTED, PRECAST, ONE PIECE MOLDED STONE WITH BUMPER GUARD ON TWO SIDES, 24"x24"x10" MUSTEE 63M PROVIDE WITH WALL MOUNTED COMBINATION FITTING WITH INTEGRAL STOPS, VACUUM BREAKER, WALL BRACE, PAIL HOOK, MOP HANGER, HOSE AND HOSE BRACKET, CHICAGO FAUCET 897MPRCF.

DF-1 WALL MOUNTED, BARRIER FREE, BI-LEVEL DRINKING FOUNTAIN WITH BOTTLE FILLING STATION. MOST DEPENDABLE FOUNTAINS MODEL 10485 WM. NO OTHER MANUFACTURERS ARE ALLOWED. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

FD-1 CAST IRON FLOOR DRAIN WITH FLANGE, INTEGRAL REVERSIBLE COLLAR, SEEPAGE OPENINGS AND 5" ROUND ADJUSTABLE NICKEL BRONZE STRAINER TOP. JAY R SMITH MODEL 2031S. PROVIDE A TRAP SEAL CONFORMING TO ASSE 1018 OR ASSE 1044, ON ALL TRAPS SUBJECT TO LOSS BY EVAPORATION, EQUAL TO JAY R SMITH MODEL 2692.

HOSE BIBB FREEZE-PROOF HYDRANTS WITH CHROME FINISH, VACUUM BREAKER, 3/4" HOSE THREADED NOZZLE CAST INTEGRAL, KEY OPERATED BRASS VALVE, BRASS OPERATING PARTS WITH COMPOSITION WASHERS. WOODFORD MODEL 65.

WATER HEATER ELECTRIC TANK TYPE 30 GALLON, 4500W NON-SIMULTANEOUS HEATING ELEMENTS, 240V/1/60, EQUAL TO LOCHINVAR MODEL KTA030KD. WITH ALL OPERATING AND SAFETY CONTROLS, INCLUDING ASME P&T RELIEF VALVE.

1. IN CONCEALED LOCATIONS WHERE PIPING IS INSTALLED THROUGH STUDS, JOISTS, OR RAFTERS, PROVIDE A 1/16" THICK STEEL PROTECTIVE SHIELD TO PROTECT THE PIPE FROM PUNCTURES.

2. PROVIDE WATER HAMMER ARRESTERS WHERE QUICK CLOSING VALVES ARE USED, OR AS REQUIRED. ARRESTERS SHALL CONFORM TO ASSE 1010 AND ACCESS SHALL BE PROVIDED TO EACH ARRESTER.

3. ALL PLUMBING VENTS THROUGH THE ROOF TO BE INSTALLED A MINIMUM OF 10'-0" AWAY FROM ALL FRESH AIR INTAKE OPENINGS.

4. DO NOT INSTALL ANY PIPING AROUND ELECTRICAL EQUIPMENT TO INSURE ALL CODE REQUIRED CLEARANCES. SEE ELECTRICAL PLANS FOR THESE LOCATIONS.

5. REFER TO MINIMUM SIZE CONNECTION SCHEDULE FOR ALL PLUMBING FIXTURES BRANCH PIPING SIZES.

6. PROVIDE IDENTIFICATION ON ALL SHUT-OFF VALVES SERVING WALL HYDRANTS AND HOSE BIBBS. IDENTIFY ALL OTHER VALVES THAT ARE NOT ADJACENT TO THE FIXTURE THEY SERVE.

7. PROVIDE A TEMPERING VALVE AT ALL ACCESSIBLE HANDWASHING FIXTURES THAT CONFORMS TO ASSE 1070.

8. ALL DOMESTIC PIPING TO BE TYPE 'L' COPPER, INSULATED TO MEET CODE.

9. ALL SANITARY PIPING TO BE SCHEDULE 40 PVC.

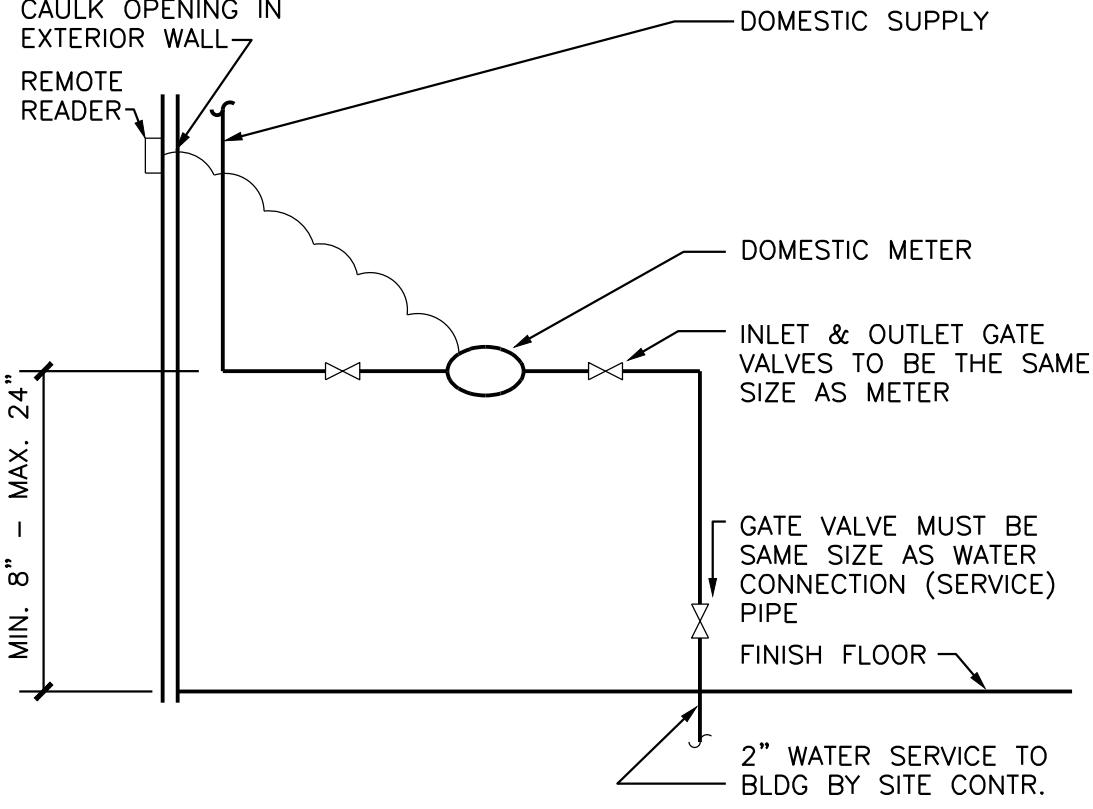
10. VENTING SHALL BE INSTALLED IN ACCORDANCE WITH CODE.

11. PROVIDE DRAIN VALVES AT ALL LOW POINTS OF PIPING SYSTEM TO ALLOW FOR FULL DRAINDOWN AND WINTERIZATION OF DOMESTIC PIPING. ALL PIPING TO SLOPE IN DIRECTION OF DRAIN VALVES.

PLUMBING NOTES

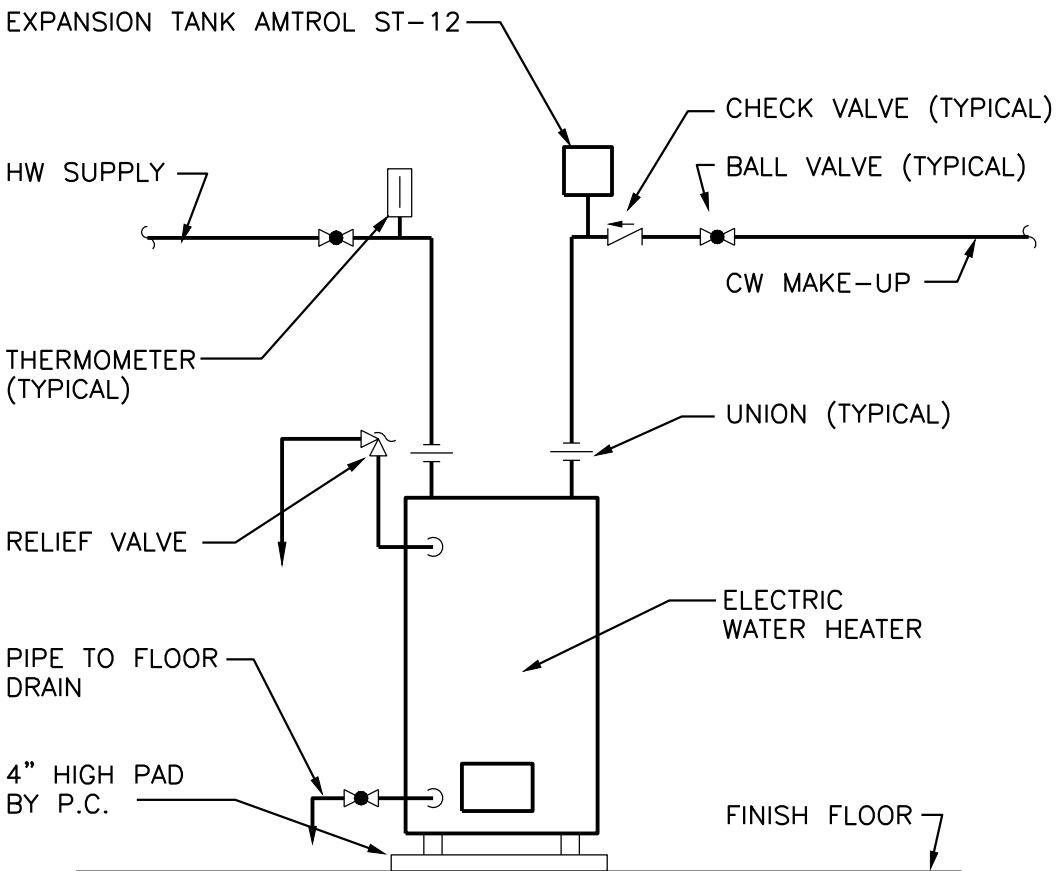
MINIMUM SIZE CONNECTION					
FIXTURE	SAN.	C.W.	H.W.	VENT	REMARKS
W.C.	4"	1"		2"	
URINAL	2"	3/4"		1 1/2"	WALL MTD.
LAV.	1 1/2"	1/2"	1/2"	1 1/2"	
SERVICE SINK	3"	3/4"	3/4"	1 1/2"	
DF	1 1/2"	1/2"		1 1/2"	
HOSE BIBB		3/4"			

NOTE:
ALL PIPING AND NIPPLES IN THE METER SETTING MUST BE BRASS WITH THREADED ENDS, OR CAST IRON PIPE. GALVANIZED TEES AND BENDS ARE NOT PERMITTED.



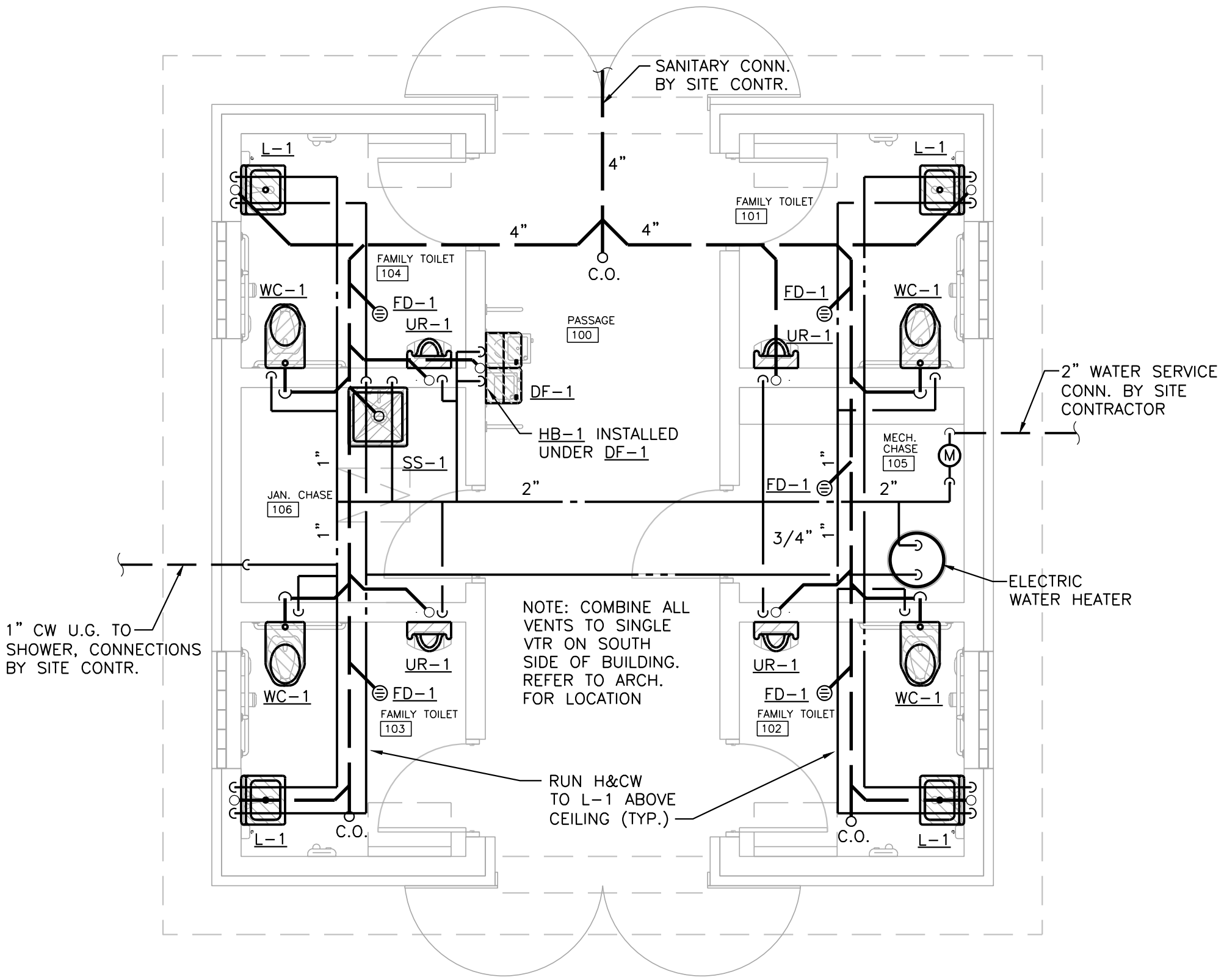
WATER METER INSTALLATION DETAIL

NOT TO SCALE

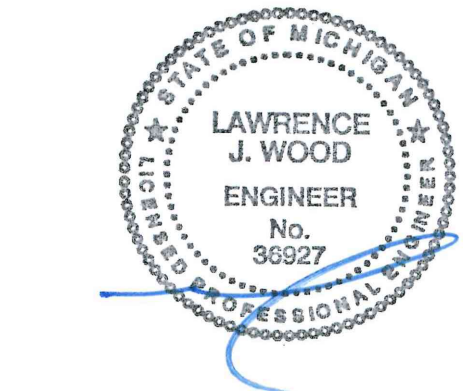
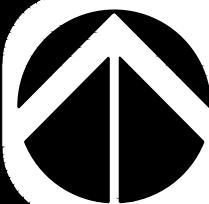
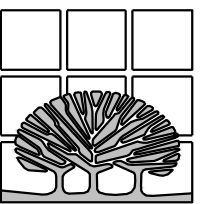


ELECTRIC WATER HEATER DETAIL

NOT TO SCALE



RESTROOM FLOOR PLAN - PLUMBING
SCALE: 1/4" = 1'-0"



FAN SCHEDULE										
MARK	SERVICE	MODEL	CFM	S.P.	HP/ WATTS/ AMPS.	RPM	WHEEL DIA.	SONES	VOLTAGE	REMARKS
EF-1	SEE PLANS	A700-VG	350	.375"	4.1A	992	--	0.5	115/1/60	①
EF-2	SEE PLANS	A700-VG	350	.375"	4.1A	992	--	0.5	115/1/60	①

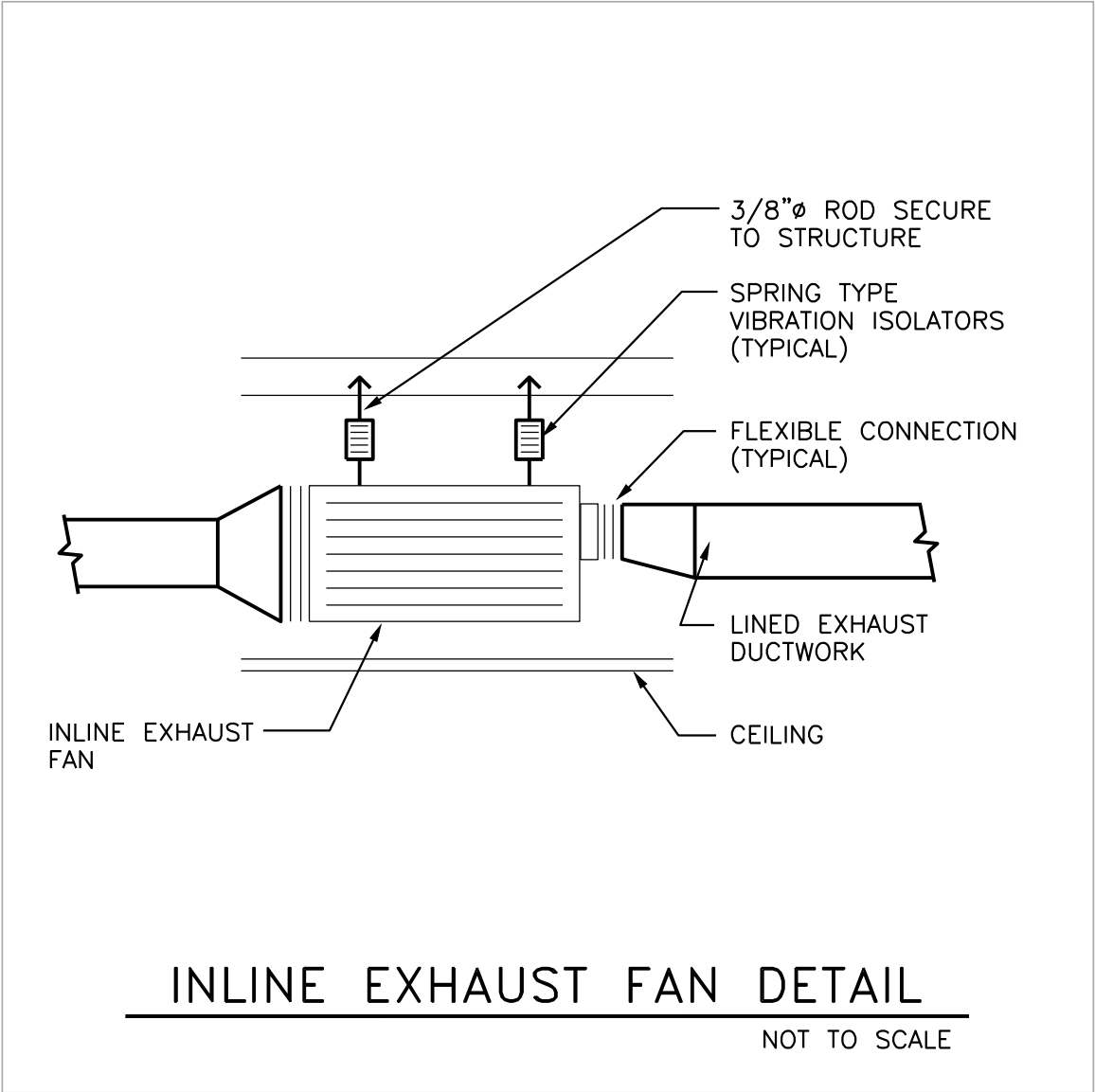
① BASED ON GREENHECK DIRECT DRIVE CABINET FAN. CONTROL BY E.C.

GRILLE, REGISTER AND DIFFUSER SCHEDULE					
MARK	SERVICE	MODEL	VOLUME DAMPER	FINISH	REMARKS
D-1	SUPPLY DIFFUSER - SURFACE MOUNT	SMD - 12x12	--	WHITE	①
EG-1	LOUVERED EXHAUST GRILLE	530D	YES	WHITE	①
TG-1	TRANSFER GRILLE	96	--	WHITE	①
EG-1	EGGCRATE EXHAUST REGISTER	80 - 12x12	YES	WHITE	①

① BASED ON PRICE

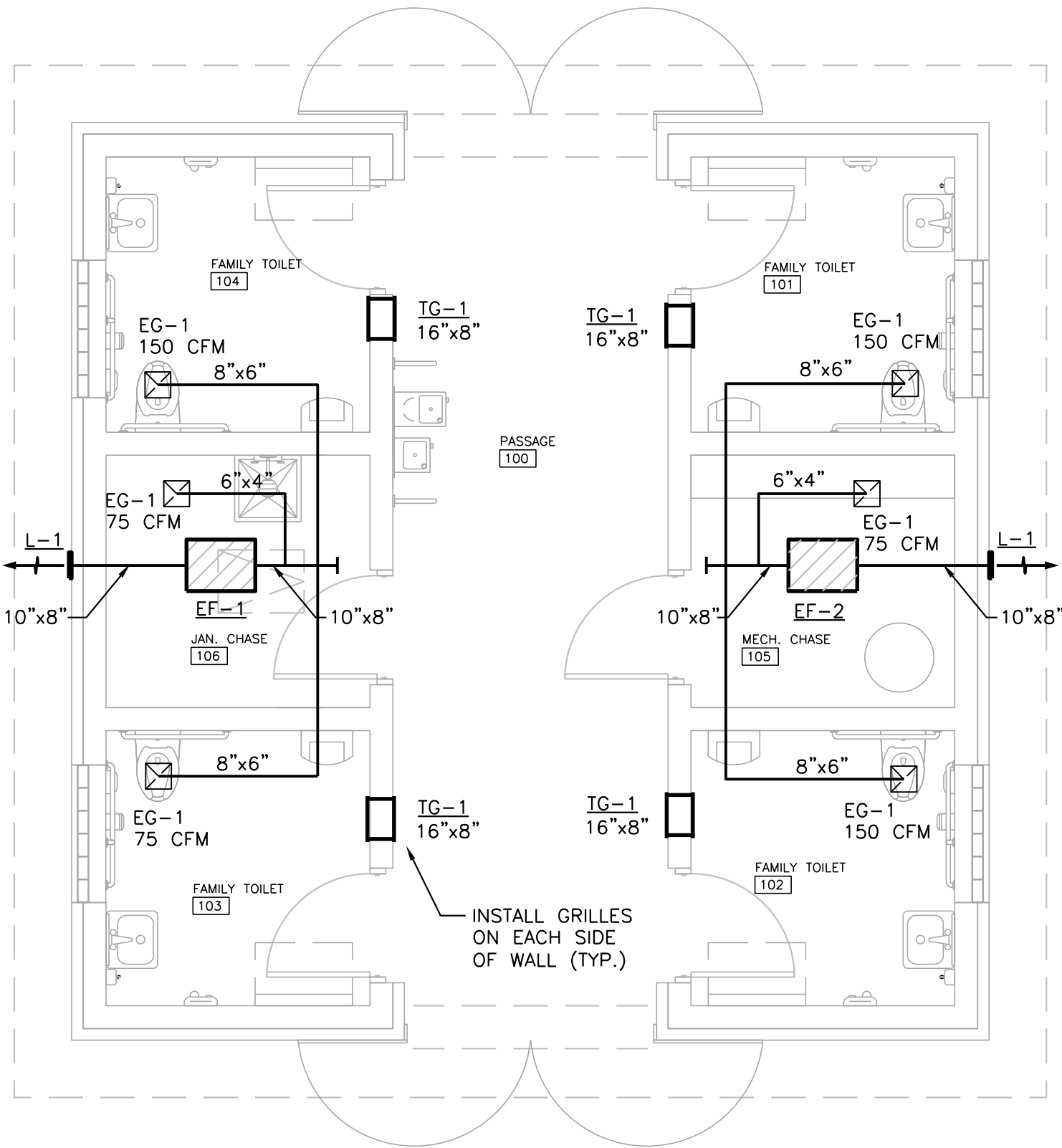
LOUVER SCHEDULE								
MARK	SERVICE	DIMENSIONS		CFM	FREE AREA SQ. FT	S.P. IN W.G.	AIR VELOCITY FPM	REMARKS
		LENGTH	HEIGHT					
L-1	EXHAUST	18"	12"	350	.50	.10	700	② ①

① BASED ON HART & COOLEY MODEL I545ZF, EXTRUDED ALUMINUM CONSTRUCTION
② FLANGE FRAME WITH BIRD SCREEN

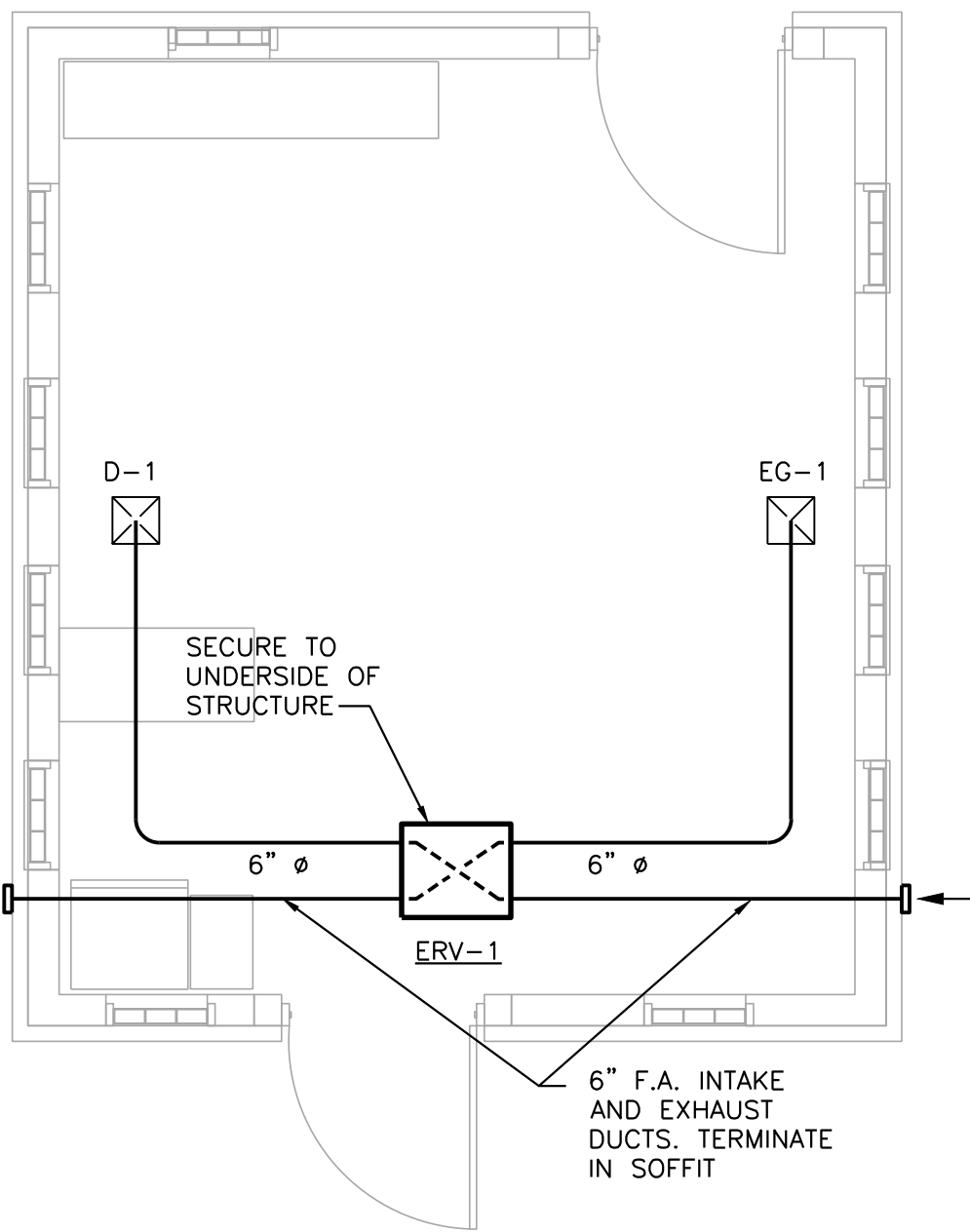


ENERGY RECOVERY VENTILATOR SCHEDULE										
MARK	SERVES	MODEL	CFM EA/OA	S.P.	EFFECTIV.	MOTOR HP	MCA	MOPD	VOLTAGE	REMARKS
ERV-1	SEE PLANS	FV-10VEC2	100/100	0.10"(EA.) 0.10"(SA.)	80%	81W	--	--	115/60/1	① ②
DESIGN CONDITIONS: SUMMER INDOOR: 72°F DB, 50% RH SUMMER OUTDOOR: 88°F DB, 74°F WB WINTER INDOOR: 72°F DB, 35% RH WINTER OUTDOOR: 0°F DB										

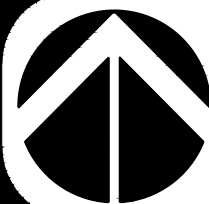
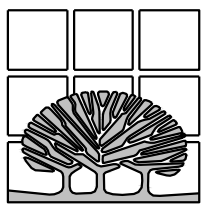
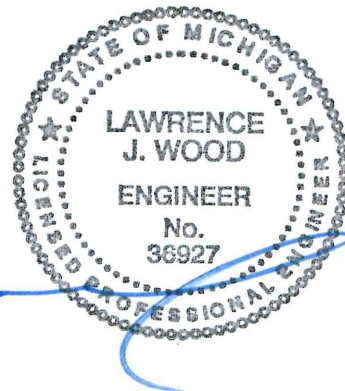
① BASIS OF DESIGN: PANASONIC. WITH WALL OR ROOF CAPS AS REQUIRED, MERV 8 FILTERS
② UNIT TO RUN CONTINUOUSLY DURING OCCUPIED HOURS

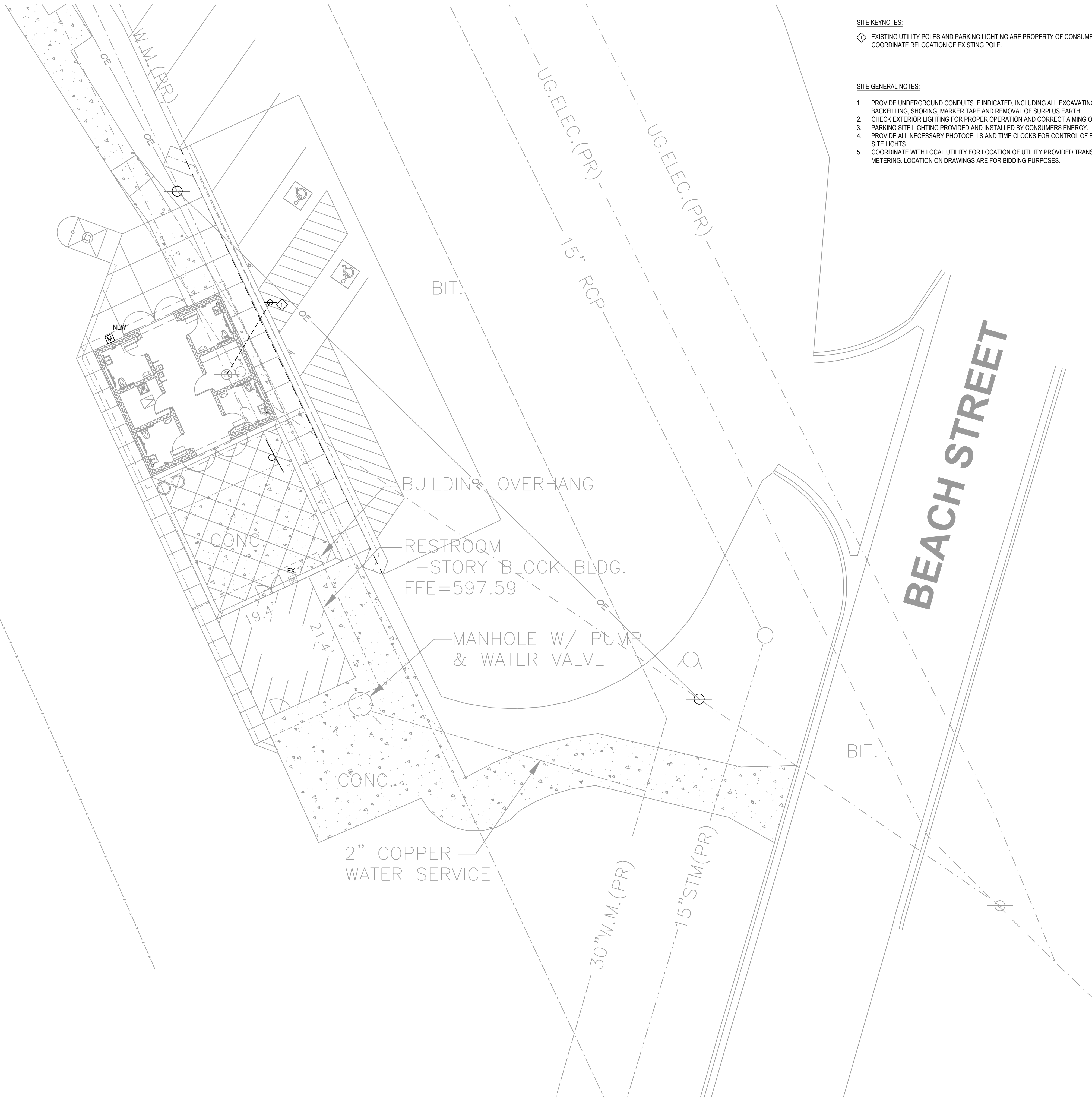


**RESTROOM
FLOOR PLAN - MECHANICAL**
SCALE: 1/4"=1'-0"

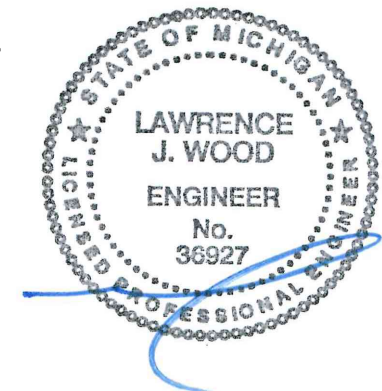


**KITE SHACK
FLOOR PLAN - MECHANICAL**
SCALE: 1/4"=1'-0"



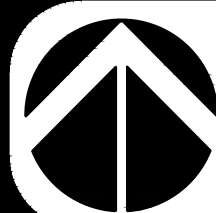
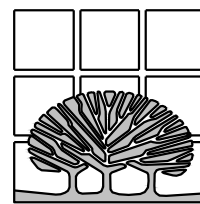


- SITE KEYNOTES:**
- EXISTING UTILITY POLES AND PARKING LIGHTING ARE PROPERTY OF CONSUMERS ENERGY. COORDINATE RELOCATION OF EXISTING POLE.
- SITE GENERAL NOTES:**
- PROVIDE UNDERGROUND CONDUITS IF INDICATED, INCLUDING ALL EXCAVATING, PUMP, BACKFILLING, SHORING, MARKER TAPE AND REMOVAL OF SURPLUS EARTH.
 - CHECK EXTERIOR LIGHTING FOR PROPER OPERATION AND CORRECT AIMING OF FIXTURES.
 - PARKING SITE LIGHTING PROVIDED AND INSTALLED BY CONSUMERS ENERGY.
 - PROVIDE ALL NECESSARY PHOTOCELLS AND TIME CLOCKS FOR CONTROL OF BUILDING MOUNTED SITE LIGHTS.
 - COORDINATE WITH LOCAL UTILITY FOR LOCATION OF UTILITY PROVIDED TRANSFORMER AND METERING. LOCATION ON DRAWINGS ARE FOR BIDDING PURPOSES.



Pere Marquette Park South Restroom
Muskegon, MI

MCSA GROUP, INC.
Landscape Architecture • Park & Recreation Planning • Architecture
Downtown Planning • Interior Design • Sports Facility Planning
529 Greenwood Avenue S.E. • East Grand Rapids, MI 49506
616-451-3346 • FAX: 616-451-1935 • EMAIL: tas@mcsagroup.com



SCALE:
1"=10'-0"

Site Plan

DATE	REVISIONS
7.22.2024	

PROJECT NO.
2215
SHEET NO.
E1

GENERAL LIGHTING NOTES:

- CONNECT EMERGENCY LIGHTING TO CIRCUIT FEEDING GENERAL LIGHTING IN THAT AREA.
- EXIT SIGNS TO BE CONNECTED TO UNSWITCHED LIGHTING CIRCUIT OR EMERGENCY LIGHTING CIRCUIT FEEDING THAT AREA.
- REFER TO DRAWING E4 FOR LIGHT FIXTURE SCHEDULE.

LIGHTING KEY NOTES:

- ◇ PROVIDE OCCUPANCY SENSOR WALL SWITCH IN ALL TOILET ROOMS WITH VANDAL RESISTANT LENS - ACUITY: WSXA OR EQUAL.
- ◇ PROVIDE CEILING OCCUPANCY SENSOR WITH PROPER COVERAGE IN CORRIDOR - ACUITY NCM OR EQUAL. AUTO ON AND PARTIAL AUTO OFF AFTER 20 MINUTES. PROVIDE WIRE GUARD OVER SENSOR - ACUITY: WG1 OR EQUAL.
- ◇ CONTROL EXTERIOR LIGHTS WITH PHOTOCELL AND 7-DAY PROGRAMMABLE TIME CLOCK.

GENERAL POWER NOTES:

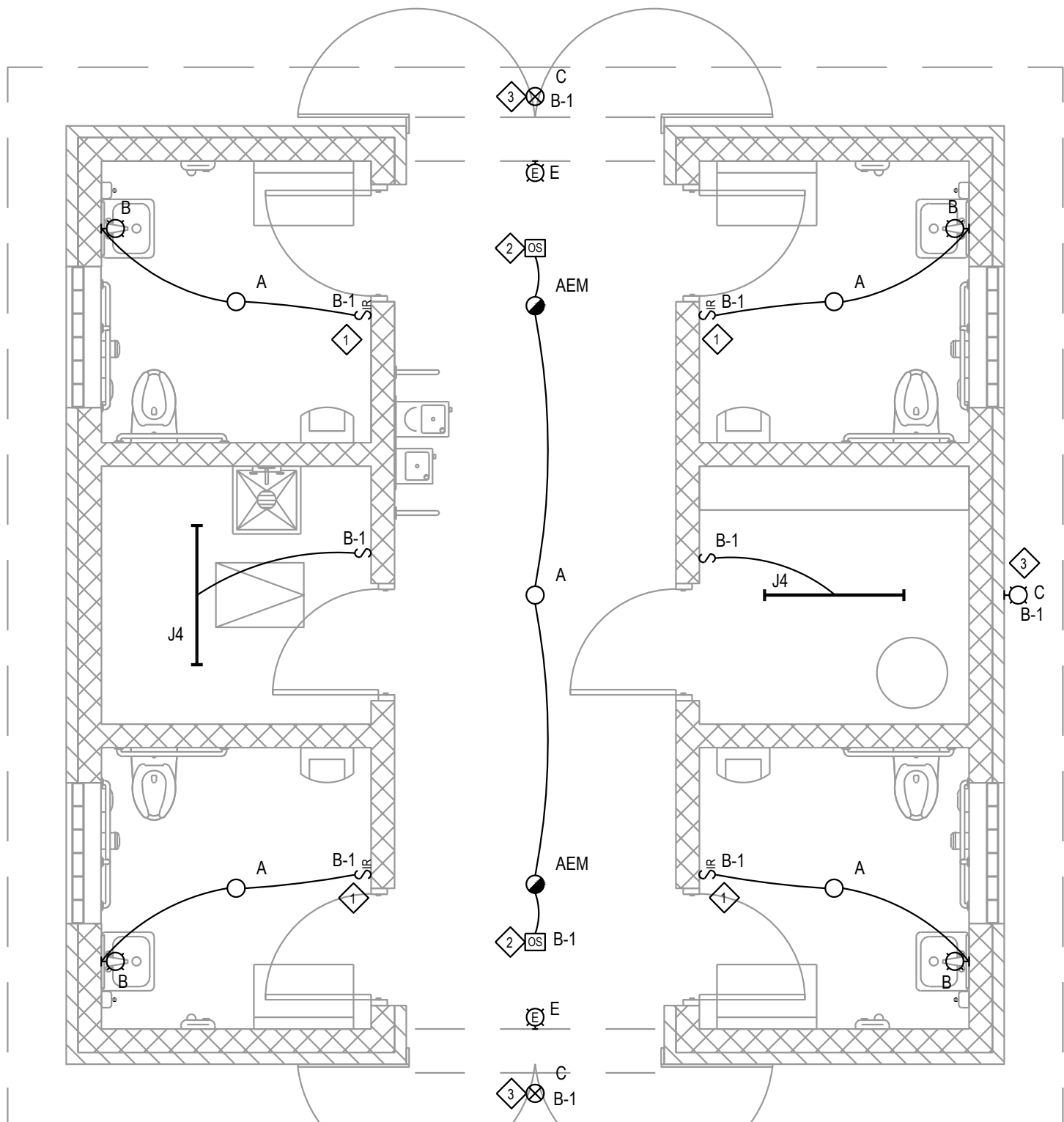
- MOUNT PANELS, TRANSFORMERS, DISCONNECT SWITCHES, AND COMBINATION MOTOR STARTERS WITH ADEQUATE CLEARANCES IN ACCORDANCE WITH NEC 110.

POWER KEYNOTES:

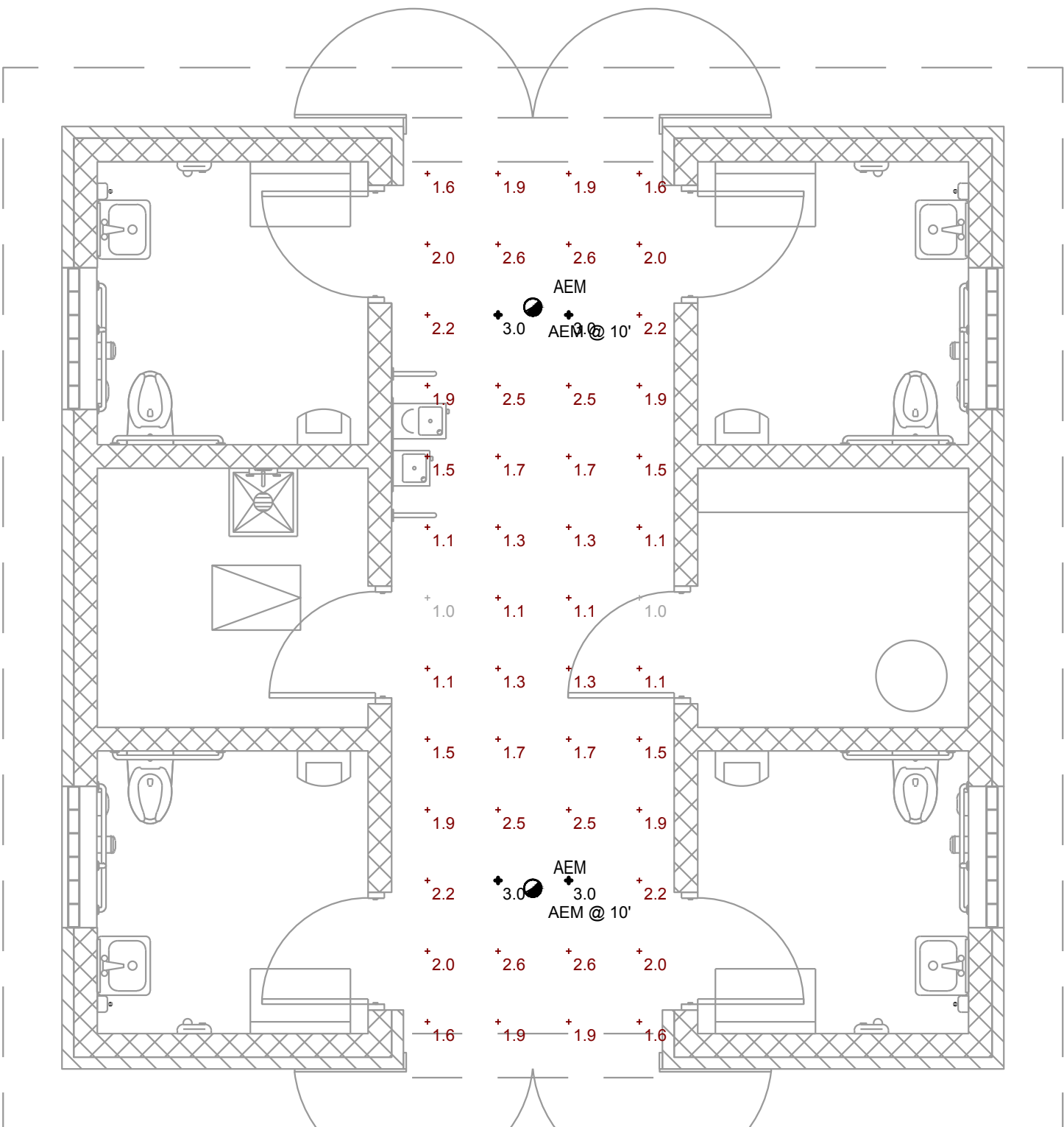
- ◇ ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL HAND DRYERS, EXCEL - XLERATOR MODEL XL-W SURFACE MOUNT, NO-TOUCH CONTROL, WHITE COVER, 115V 20A 1450 W.
- ◇ EXHAUST FAN AND LIGHT FIXTURE(S) IN ROOM SHALL BE CONTROLLED TOGETHER. PROVIDE SENSOR RATED FOR MOTOR AND LIGHTING LOAD. REFER TO LIGHTING PLAN FOR CIRCUIT INFORMATION.
- ◇ ROUGH-IN FOR FUTURE SECURITY CAMERA. PROVIDE WEATHER-TIGHT BLANK COVER AND MOUNT AT 72" AFF TO BOTTOM OF BOX.

Schedule										
Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
⊙	AEM		2	THE KIRLIN COMPANY	LRC-08VND-3000L-RWF-MFL	FABRICATED METAL HOUSING, FABRICATED DIFFUSE METAL HEAT SINK MOUNTING BRACKET, EXTRUDED BLACK FINISHED FINED METAL HEAT SINK, 1 CIRCUIT BOARD WITH ONE LED, MOLDED WHITE PLASTIC LED SURROUND, FABRICATED SEMI-SPECULAR METAL OPTIC MOUNTING RING, MOLDED SEMI-DIFFUSE TIERED MULTI-FACETED PLASTIC UPPER REFLECTOR, CAST WHITE PAINTED METAL REFLECTOR TRIM WITH CLEAR FLAT PLASTIC LENS WITH FROSTED PLASTIC OVERLAY OVER UPPER APERTURE, OVERLAY FROSTED SIDE UP FOR THIS TEST.	1	2374	0.13	27.6

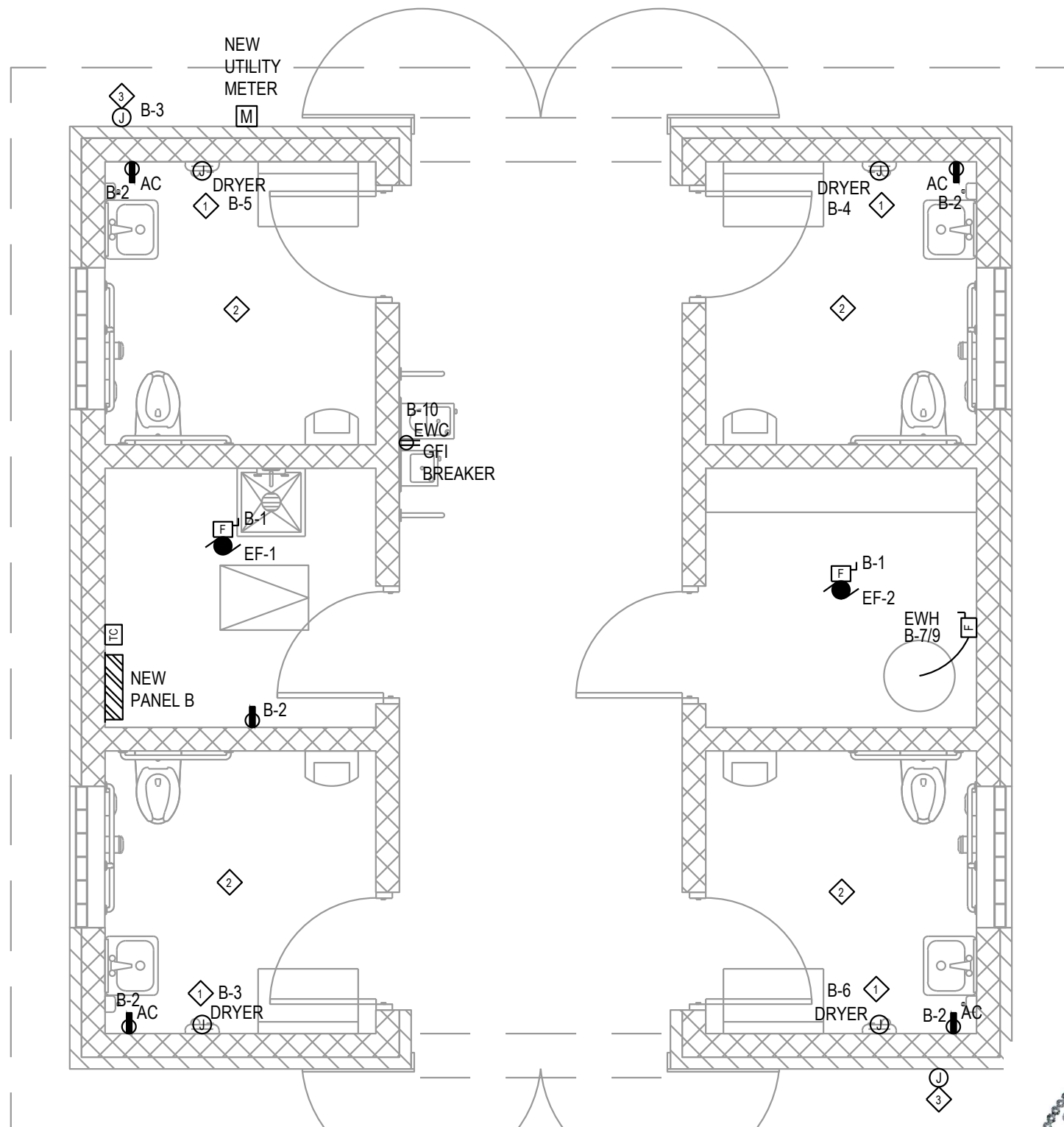
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
RESTROOM CORRIDOR	+	1.9 fc	3.0 fc	1.0 fc	3.0:1	1.9:1



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



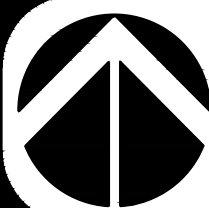
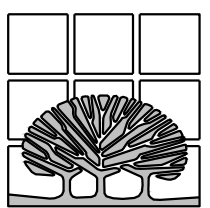
RESTROOM
FLOOR PLAN - PHOTOMETRICS
SCALE: 1/4" = 1'-0"



RESTROOM
FLOOR PLAN - POWER
SCALE: 1/4" = 1'-0"

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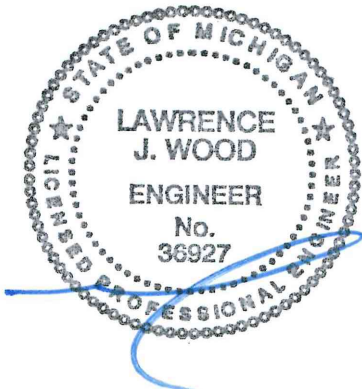


SCALE:
1/4"=1'

Restroom Floor Plan

DATE
7.22.2024
REVISIONS

PROJECT NO.
2215
SHEET NO.
E2



DEMOLITION POWER/LIGHTING KEYNOTES:

1. REMOVE EXISTING LIGHT FIXTURES AND SWITCHES IN THAT AREA. DISPOSE OF EXISTING FIXTURES AND LAMPS IN A PROPER AND LEGAL MANNER.
2. EXISTING WIRING DEVICES TO REMAIN.
3. EXISTING METER TO BE REPLACED. REFER TO ONE-LINE DIAGRAM ON SHEET E4.
4. EXISTING PANEL A TO BE REPLACED.
5. EXISTING PADDLE FAN TO BE REMOVED.
6. EXISTING WEATHER CONTROL PANEL AND CHANGE MACHINE TO REMAIN.

ELECTRICAL DEMOLITION REQUIREMENTS:

1. REFER TO SYMBOL LEGEND FOR DEVICE AND EQUIPMENT TYPES.
2. ELECTRICAL ITEMS WHICH ARE REMOVED AND NOT REUSED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION DESIGNATED BY THE OWNER. ITEMS NOT ACCEPTED BY OWNER WILL BE PROPERLY DISPOSED OF BY CONTRACTOR.
3. E.C. TO REMOVE ALL WIRING IN RENOVATED AREA BACK TO THE SOURCE, IF NOT DESIGNATED TO BE REUSED.
4. ALL EXISTING CIRCUITS IN AREAS OF WORK THAT REMAIN SHALL BE LEFT IN FULL WORKING ORDER AT END OF PROJECT.

GENERAL LIGHTING NOTES:

1. CONNECT EMERGENCY LIGHTING TO CIRCUIT FEEDING GENERAL LIGHTING IN THAT AREA.
2. EXIT SIGNS TO BE CONNECTED TO UNSWITCHED LIGHTING CIRCUIT OR EMERGENCY LIGHTING CIRCUIT FEEDING THAT AREA.
3. REFER TO DRAWING E4 FOR LIGHT FIXTURE SCHEDULE.

LIGHTING KEY NOTES:

- ◇ MOUNT NEW LIGHT AT ATTIC LEVEL, REUSE EXISTING CIRCUIT. CONTROL WITH OCCUPANCY SENSOR.
- ◇ PROVIDE NEW LIGHT, UTILIZE EXISTING CIRCUIT.
- ◇ CONTROL EXTERIOR LIGHTS WITH PHOTOCELL AND 7-DAY PROGRAMMABLE TIME CLOCK.

GENERAL POWER NOTES:

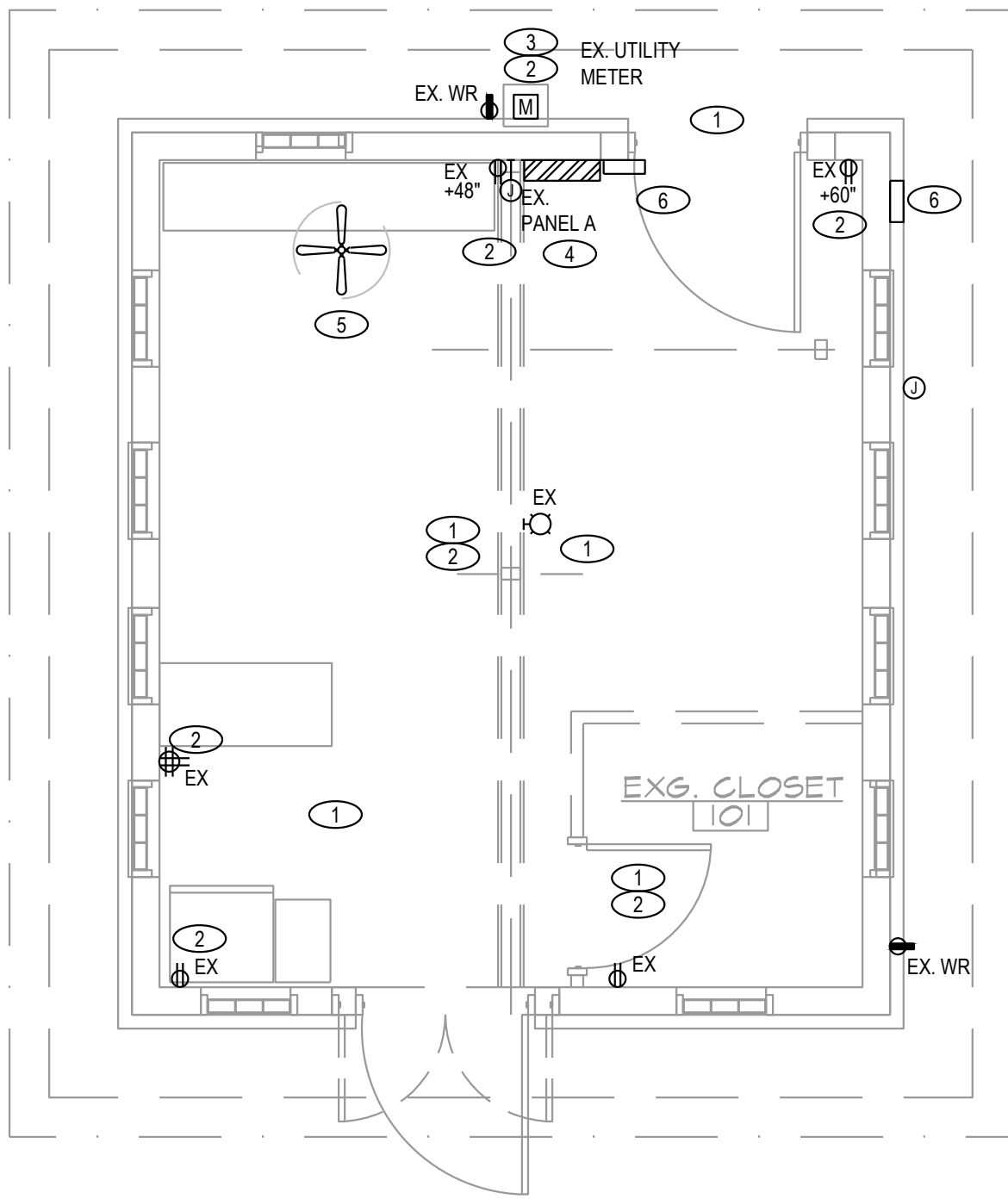
1. MOUNT PANELS, TRANSFORMERS, DISCONNECT SWITCHES, AND COMBINATION MOTOR STARTERS WITH ADEQUATE CLEARANCES IN ACCORDANCE WITH NEC 110.

POWER KEYNOTES:

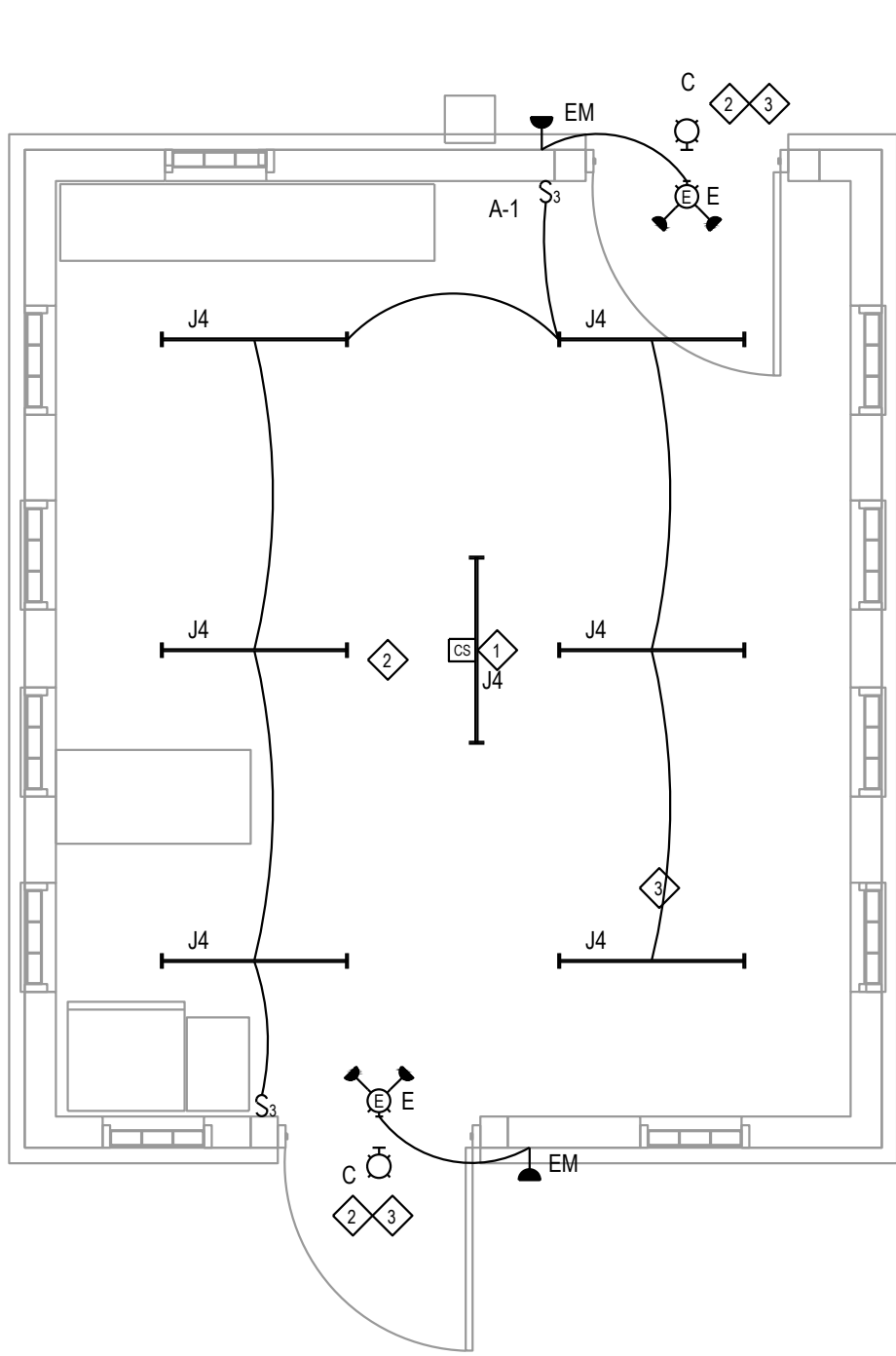
- ◇ UTILIZE EXISTING POWER CIRCUITS AND DEVICES. EXTEND CIRCUITS TO NEW PANEL.
- ◇ PROVIDE ROUGH-IN FOR FUTURE WEATHER MONITOR SYSTEM. MOUNT GFI RECEPTACLE WITH WEATHERTIGHT COVER AND SEPARATE 4" JUNCTION BOX. MOUNT AT 72" AFF. COORDINATE LOCATION WITH PARK MANAGER.
- ◇ ERV-1 TO BE CONTROLLED WITH LIGHTS.

Schedule										
Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamp(s)	Lamp Output	LLF	Input Power
□	E		4	SECURITY LIGHTING	CC Series, CU2, CIR, COR	Compass LED EMERGENCY LUMINAIRE	1	52	1	0.6
□	EM		2	SECURITY LIGHTING	CC Series, CU2, CIR, COR	Compass LED EMERGENCY LUMINAIRE	1	52	1	0.6

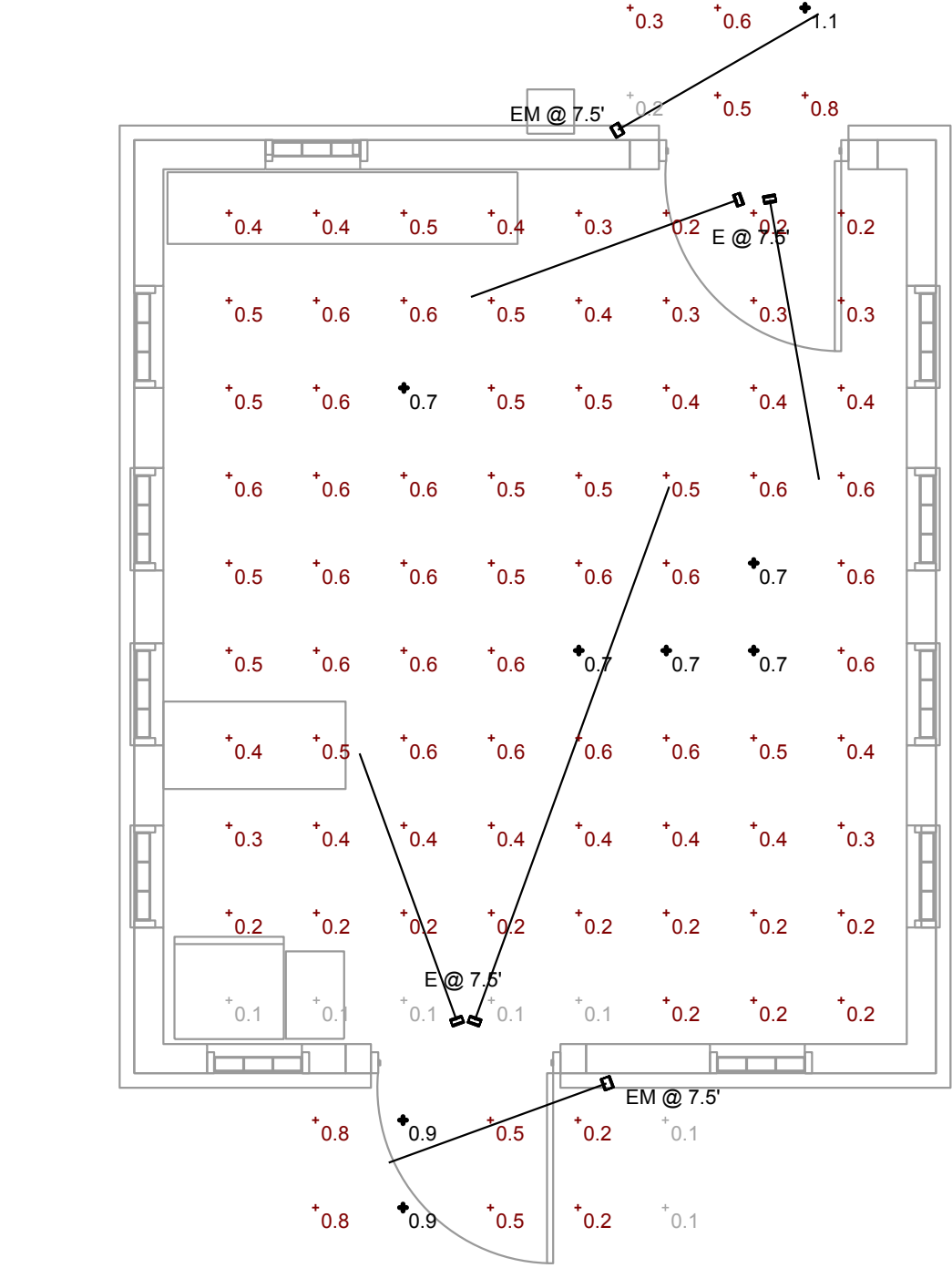
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
KITE SHACK	+	0.4 fc	0.7 fc	0.1 fc	7.0:1	4.0:1
KITE WEST EXTERIOR	+	0.6 fc	1.1 fc	0.2 fc	5.5:1	3.0:1
KITE EAST EXTERIOR	+	0.6 fc	0.9 fc	0.1 fc	9.0:1	5.0:1



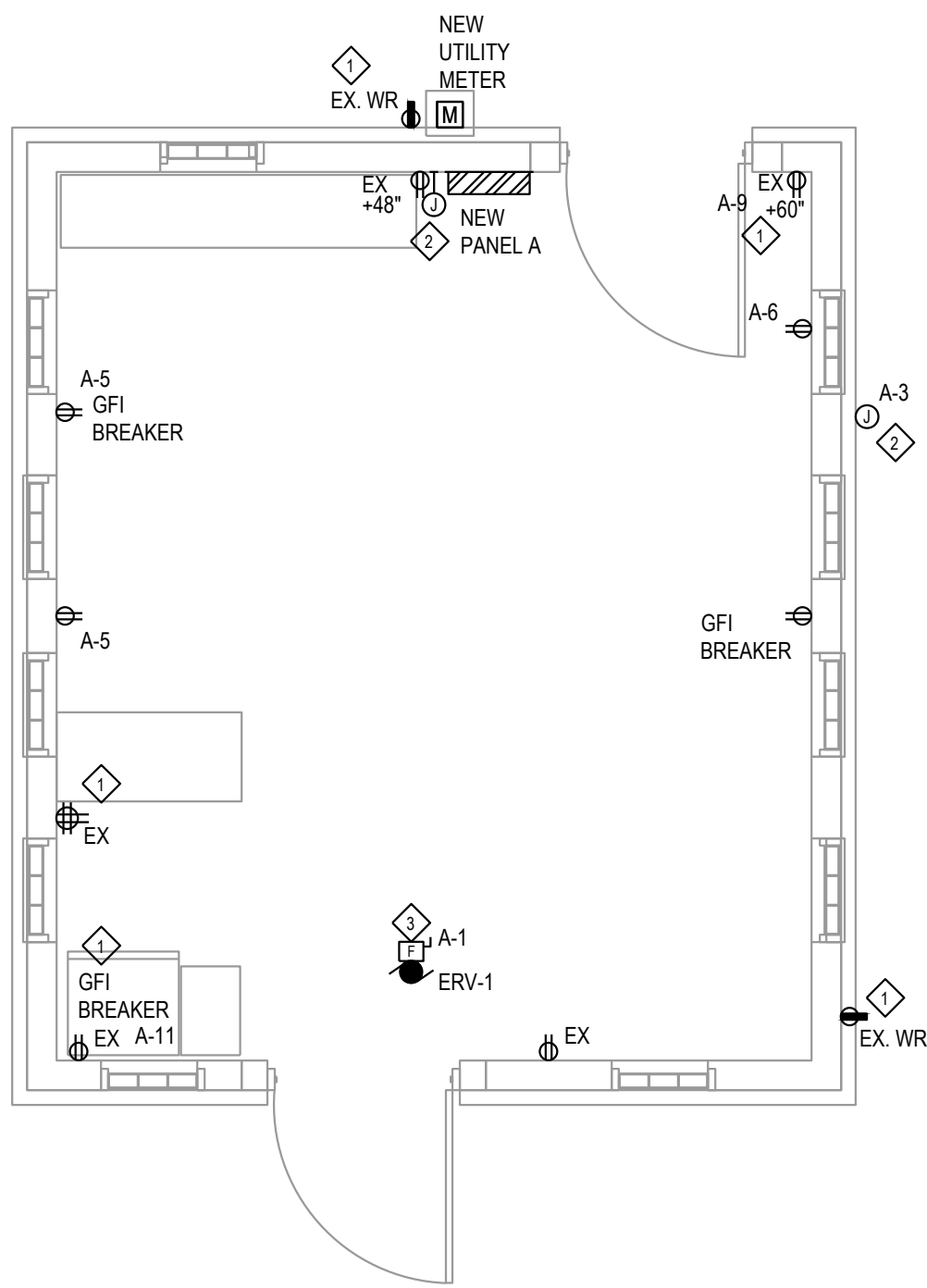
**KITE SHACK FLOOR PLAN -
LIGHTING-POWER DEMOLITION**
SCALE: 1/4" = 1'-0"



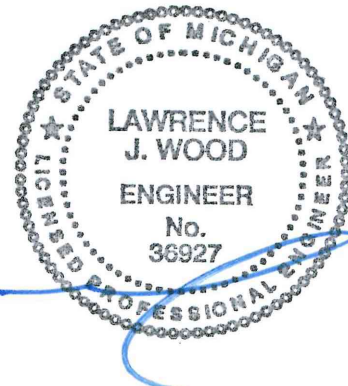
**KITE SHACK
FLOOR PLAN - LIGHTING**
SCALE: 1/4" = 1'-0"



**KITE SHACK
FLOOR PLAN - PHOTOMETRICS**
SCALE: 1/4" = 1'-0"



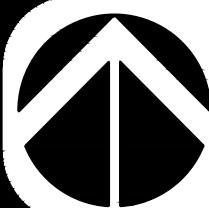
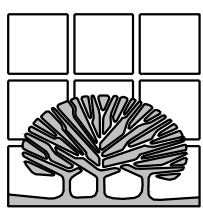
**KITE SHACK
FLOOR PLAN - POWER**
SCALE: 1/4" = 1'-0"



Pere Marquette Park South Restroom
Muskegon, MI

MCSA GROUP, INC.

Landscape Architecture • Park & Recreation Planning • Architecture
Downtown Planning • Interior Design • Sports Facility Planning
529 Greenwood Avenue S.E. • East Grand Rapids, MI 49506
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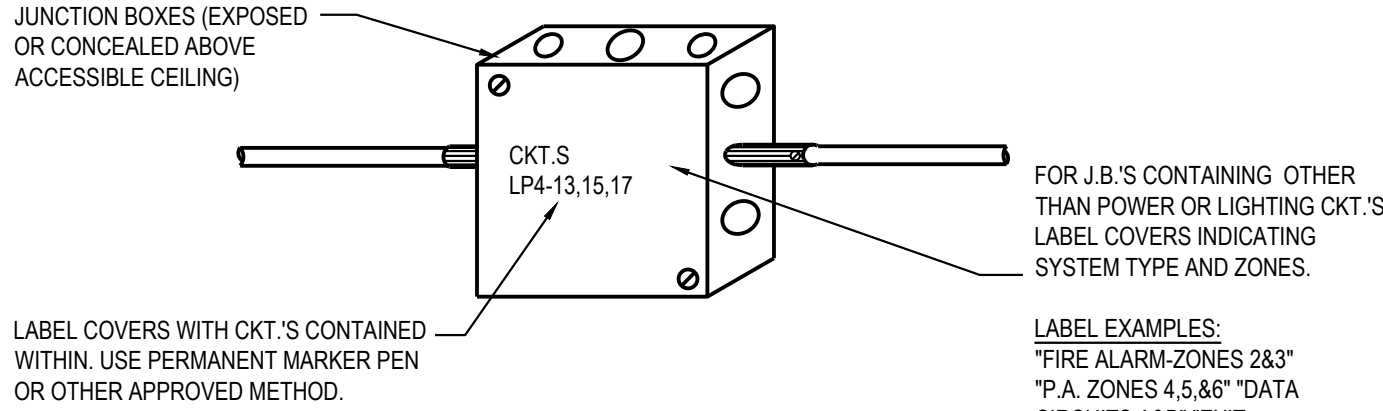
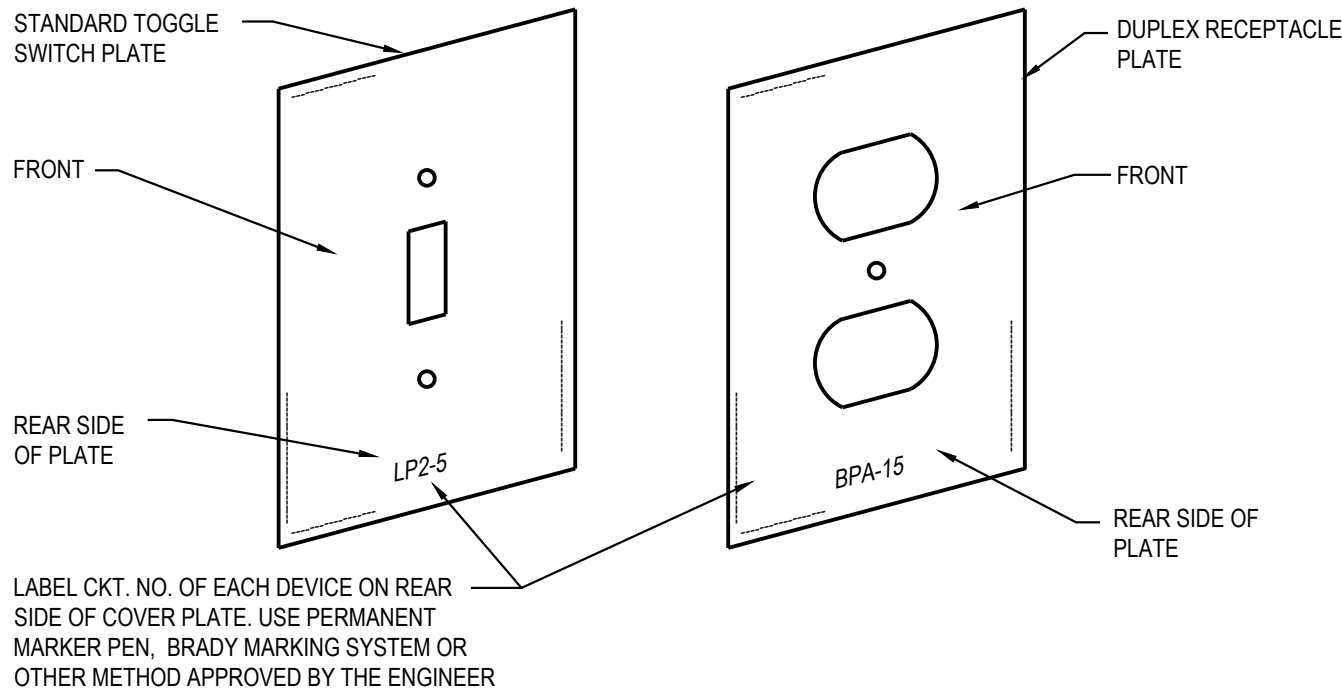
SCALE:
1/4"=1'

Kite Shack Floor Plan

DATE
7.22.2024
REVISIONS

PROJECT NO.
2215
SHEET NO.
E3

LIGHT FIXTURE LEGEND								
FIXTURE TYPE	DESCRIPTION	MANU.	CATALOG PART#	FINISH	VOLTAGE	LAMPS	Wattage	REMARKS
A	6" VANDAL-RESISTANT DOWNLIGHT POLYCARBONATE LENS IC RATED	KIRLIN	LRC-07VND-IC-1500L-120-RWF-MFL-80CRI-35K	WHITE	120	LED 35000K	15W	
AEM	6" VANDAL-RESISTANT DOWNLIGHT POLYCARBONATE LENS IC RATED	KIRLIN	LRC-06VND-IC-1000L-120-RWF-MFL-80CRI-35K EM	WHITE	120	LED 3500K	10W	
B	4" VANDAL-RESISTANT LED STRIP LIGHT POLYCARBONATE LENS WITH BATTERY BACK UP	ACUITY	LVP524-4FT-NODIM-50W-35K-MVOLT-CLP-WHT	WHITE	120VOLT	LED 35000K	50W	MOUNT ABOVE MIRROR
C	6" VANDAL-RESISTANT DOWNLIGHT POLYCARBONATE LENS	KIRLIN	LRC-07VND-1000L-120-RWF-MFL-80CRI-35K	DARK BRONZE	120VOLT	LED 4000K	10.7W	CONTROL WITH PHOTOCELL MOUNT ABOVE DOOR
J4	4" STRIP	ACUITY METALUX HUBBELL	FEM-L48-6000LM-LPPCL-MD-MVOLT-40K-80CRI	WHITE	120VOLT	LED 4000K	34.8	
E	EXIT VANDAL-RESISTANT COMBO	HUBBELL	COMPASS CORSD	WHITE	120VOLT	LED		
EM	REMOTE HEAD WITH WIREGUARD	HUBBELL	COMPASS CIRS WGL	WHITE	120VOLT	LED		



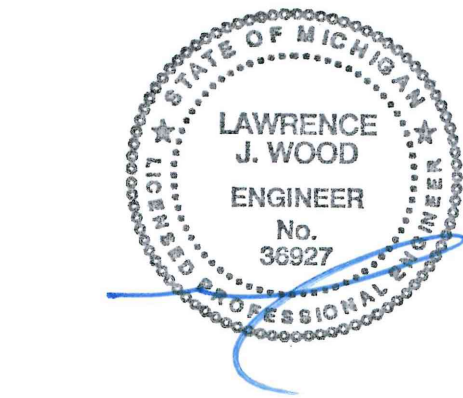
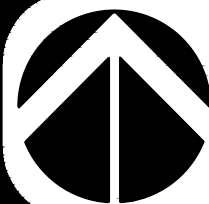
LABEL COVERS WITH OKT.'S CONTAINED WITHIN. USE PERMANENT MARKER PEN OR OTHER APPROVED METHOD.

LABEL EXAMPLES:
"FIRE ALARM-ZONES 2&3"
"F.A. ZONES 4,5,8P"
"DATA CIRCUITS A&B"
"EXIT SIGNS-EMI&2"
"EMERG. CKTS. BPEM-3.4"



ELECTRICAL SYMBOL LEGEND		
SYMBOL	DESCRIPTION	MTG. HT. TO Q.
S S3	SINGLE POLE OR 3-WAY SWITCH-SPECIFICATION GRADE	46"
S D	DIMMER SWITCH	46"
S IR	IR SWITCH	46"
OS	OCCUPANCY SENSOR	---
PC	PHOTO CELL	---
TC	TIMECLOCK	---
WR	WATER RESISTANT GROUND FAULT CIRCUIT INTERRUPTER WITH WEATHERPROOF WHILE IN USE COVER	18"
φ	SPECIAL SINGLE RECEPTACLE	18"
●	SPECIAL OUTLET CHARACTERISTICS AS NOTED ON PLANS	AS NOTED
○	JUNCTION BOX - 4" SQ. BOX W/ 2 GANG RAISED COVER, 1" C. UP WALL TO CLG. SPACE UNLESS OTHERWISE NOTED	AS NOTED
F	FUSED DISCONNECT SWITCH-FDS-HEAVY DUTY	46"
□	NON-FUSED DISCONNECT SWITCH-NFDS-HEAVY DUTY	46"
F	SW. AND PLUG FUSE HOLDER- BUSSMANN "SSU" & FUSESTAT FUSE	AT EQUIP.
⦿	SINGLE PHASE ELECTRIC MOTOR	---
⦿	SURFACE OR FLUSH MTD. BRANCH CIRCUIT PANELBOARD	72" TO TOP
□	TRANSFORMER	---
⬢	PUSH BUTTON	46"
⊖	THERMOSTAT - E.C. TO ROUGH-IN SINGLE GANG BOX AND 1/2" C. TO ACCESSIBLE CEILING SPACE.	46"
⊖	HUMIDISTAT - E.C. TO ROUGH-IN SINGLE GANG BOX AND 1/2" C. TO ACCESSIBLE CEILING SPACE.	46"
⊗	RECESSED DOWNLIGHT LUMINAIRE	---
○	SURFACE LUMINAIRE	---
⦿	PENDANT LUMINAIRE	---
⦿	WALL MOUNTED LUMINAIRE	---
⦿	SITE LIGHTING LUMINAIRE	---
▬	STRIP LUMINAIRE	---
⊗	RECESSED LUMINAIRE 2'x4' OR 2'x2'	---
□	SURFACE LUMINAIRE 2'x4' OR 2'x2'	---
▬	PARTIALLY SHADED LUMINAIRE OR WITH "E" SUFFIX ARE EMERGENCY	---
⦿	EXIT SIGN - WALL MOUNTED OR CEILING MOUNTED ARROWS INDICATE PATH OF EGRESS	---
⦿	REMOTE EMERGENCY HEAD	---
⦿	BATTERY EMERGENCY LUMINAIRE	---
⦿	CEILING SPEAKER	---
⦿	CARD READER	46"
⦿	SECURITY DOOR CONTACT	AT DOOR HEAD
⦿	SECURITY INTERCOM	46"
⦿	SECURITY CAMERA - "W" DENOTES WALL MOUNTED CHEVRON INDICATES AIM LINE	TYPICALLY CLG MOUNTED
⦿	SECURITY DOOR REQUEST TO EXIT	AT DOOR HEAD

SYMBOL NOTES:
1. "AC" DENOTES ABOVE COUNTER. COORDINATE HEIGHT WITH ARCHITECT.
2. "H" DENOTES HORIZONTAL MOUNTING OF DEVICE.
3. "B" DENOTES MOUNTED IN BASE.
4. "F" DENOTES MOUNTED IN FACE OF CABINETS.



BASED ON SQ D NQO OR EQUAL																		B (NEW)									
CKT NO.		KVOLT AMPS					DESCRIPTION		CKT BRKR	L	CKT BRKR	DESCRIPTION		KVOLT AMPS					CKT NO.								
1	NO.	LTG	MTRS	HVAC	REC	OTHER							LTG	MTRS	HVAC	REC	OTHER										
	1						LIGHTING	20	A	20		REST RM						2									
	3						HAND DRYER	20	B	20		HAND DRYER						4									
	5						HAND DRYER	20	A	20		HAND DRYER						6									
	7						ELEC WATER HEATER	30x2	B	20		F-1						8									
	9						\	\	A	*20		ELEC WATER COOLER						10									
	11						SPARE	20	B	20		SPARE						12									
	13						SPARE	20	A	20		SPARE						14									
	15						SPARE	20	B	20		SPARE						16									
	17						TVSS	30x2	A	20		SPARE						18									
	19						\	\	B	20		SPARE						20									
SUBT		0	0	0	0	0						0					0	SUBT									
TOTAL LOAD		0					DIVERSITY					VOLTS:					120/240										
LTG =		0					125%					PHASE:					1										
MOTORS =		0					0%																				
HVAC =		0					100%																				
RECEPT =		0					0%																				
OTHER =		0					100%																				
TOTAL DIV. LOAD=		0					0					MAIN BRKR:					100A										
LINE AMPS=		0										MOUNTING:					SURFACE										
LINE AMPS X 1.25=												LOCATION:					STORAGE										
NOTES:																											
10KAIC RATED																											
* GFCI CIRCUIT BREAKER																											

